



**Pharmalutions Pte Ltd - German-owned, Singapore-based** - is a regional Project Management company and Distributor. With 15+ years experience, we are specialised in all technologies surrounding the topic of Product Serialisation and Track & Trace - with a distinct focus on the Tobacco, Pharma & FMCG industry.

Based on **CODENTIFY® serialisation**, we deliver complete T&T-projects - starting in Production, through the IT & Logistics all the way to Product Authentication at Retail-level. In fact, our portfolio of hardware, software and services is so complete that you won't miss a thing in our portfolio.

However, unless you are deeply involved in today's Tobacco-, Pharma- or FMCG industry AND Track & Trace business, it might be difficult to understand Pharmalutions' strategy and why we do things the way we do.

Therefore, we have dedicated this page to those who are curious about our background and approach.

#### **From PHARMA...**

As the company's firm Pharmalutions suggests, pharmaceutical packaging is our home ground. All Pharma(so)lutions we deliver fulfil the stringent requirements of pharmaceutical production environments. Good Manufacturing Practices (cGMP) are of evolving nature beyond national reach. And they are an important driver towards your consumer safety, your production efficiency - your state-of-the-art packaging.

To us, pharma-grade is not simply manifested in international standards. Nor does hard- and software itself earn that name. It is a comprehensive term we use to cover the total scope of our turn-key solutions. For a company derived from the world of pharma, we therefore spare no mention that Validation Documents and related services are an important part of our business.

#### **... to-BACCO PACKAGING**

**To the outsider, Pharmaceutical & Tobacco packaging may look like two different worlds - incompatible with each other. To the insider Pharmalutions, these industries have so much in common that they are a strategic imperative. We combine our decade of experience in these industries to express our strategy, with due respects to the industry's specifics. Under the narrow focus of Pharmalutions' portfolio, those industries show more similarities than differences. Coding & inspection systems being used are of similar technologies. And if regulatory requirements for packet coding & inspection are in play: Here you are!**

**Today, the regulatory demands on coding & inspection, especially in The Pharma- and Tobacco-industry are not synchronised - probably they never will. However, having experienced the evolution of the regulatory landscape over a long period of time, there is a clear pattern visible, which ultimately leads into the same direction: Track & Trace!**

## STRATEGY

So why is that? Well, for one, the regulatory bodies (e.g. US-FDA) and main drivers (private & governmental) towards product serialisation and Track&Trace are the same. And so are the demands on the respective technologies. Now you might see a pretty big wave coming your way. To ride it, you need to speed up yourself before it hits you. Putting Pharmalutions into the equation and you have the pace it takes to ride this wave. And we have formulated our strategy.

That simple!

## PHARMALUTIONS PTE. LTD.

**Source:** ACRA / BizFile **Updated On:** 12-06-2016 SGT 14:38:52

**Registration No. (UEN):** 201006964M **Status:** LIVE

**Incorporation Date:** 1 April 2010 📍 57 MOHAMED SULTAN ROAD #03-05 SULTAN-LINK SINGAPORE 238997

<b>UEN:</b> 201006964M	<b>Entity Name:</b> PHARMALUTIONS PTE. LTD.
<b>Entity Type:</b> LOCAL COMPANIES	<b>UEN Status:</b> REGISTERED
<b>UEN Issuance Agency:</b> Accounting and Corporate Regulatory Authority	<b>Previous Entity Registration No.:</b>
<b>Address:</b> 57, MOHAMED SULTAN ROAD, #03-05, SULTAN-LINK, SINGAPORE 238997	

# Pharmalutions Pte Ltd Machinery 1-10 employees

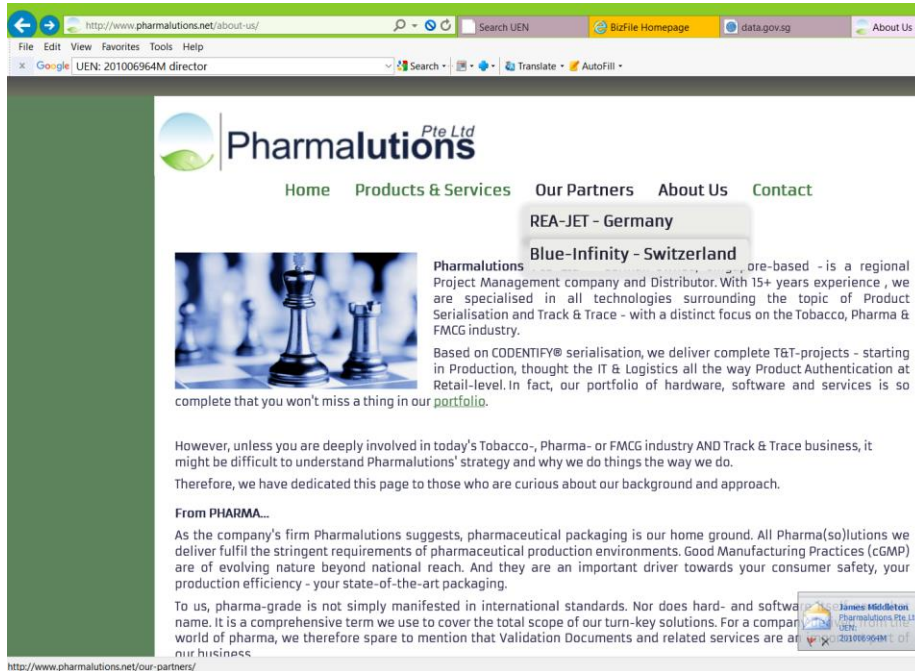
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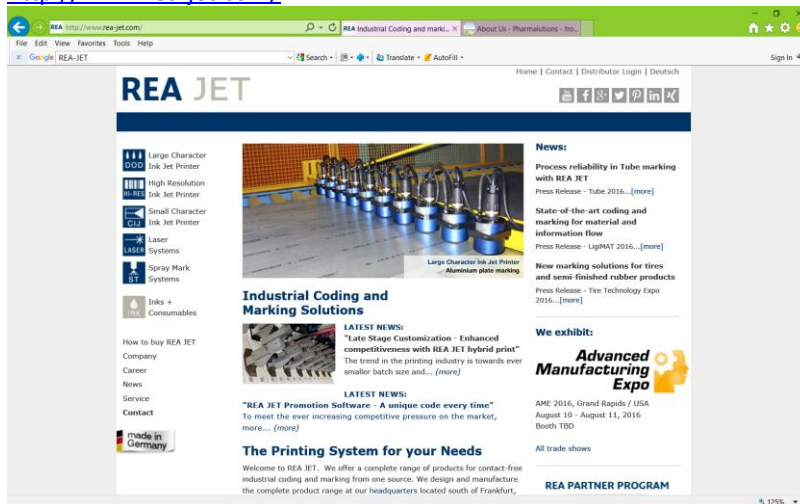
Singapore-based Pharmalutions Pte Ltd is a Sales & Service Centre for pharmaceutical-grade packaging machinery & equipment specialized in project consulting, management & execution for multi-national companies (MNCs) and small & medium-sized enterprises (SMEs) alike. Pharmalutions has a distinct focus on pharmaceutical applications. Due to the similarities in respect of technical requirements & speeds, **Pharmalutions is also valued partner of the multi-national tobacco industry.** The sales & service covers the Southeast Asian region and selected sectors in the European machine & equipment industry. Projects are served through a sophisticated network of local subagents & partners, thereby answering to the diverse regional distinctions. **Specialties** packaging machinery & equipment, blister inspection, vision inspection, **track & trace solutions**

- **Website** <http://www.pharmalutions.net>
- **Industry** Machinery
- **Type** Self Owned

- **Headquarters** 1 North Bridge Road #15-03 High Street Centre Singapore, Singapore 179094 Singapore
- **Company Size** 1-10 employees
- **Founded** 2010



<http://www.rea-jet.com/>



<https://www.blue-infinity.com/expertise/digital-tracking>

# Digital Tracking

Protect your brand, secure your supply chain and fight illicit trade through our suite of solutions that is currently used to track and trace over 10 billion items across the globe.

*Guaranteed since 10 years.*

blue-infinity's AIT Central team is the only team providing end-to-end track and trace integration worldwide with a fully packaged solution. With new legislation being enforced within the tobacco industry, blue-infinity's AIT Central helps ensure full compliance and brings over 10 years' experience in helping preserve brand integrity. Since 2004 we have deployed our solution in 105 countries, on 400 production lines, across 1,600 tracking locations.

AIT Central comes in four flavours, as well as **fully packaged services** to deploy, operate and manage AIT Central track and trace technology:

- AITCentral **Tobacco** offers a **Codentify®-based** solution to help ensure the latest product regulations are met and deployed by the only end-to-end integrator worldwide.
- AITCentral **Luxe** is an easy-to-deploy range of mobile applications for digital warranty activation to reassure discerning customers with robust authentication solutions and zero-tolerance counterfeit measures.
- AITCentral **Pharma** offers end-to-end serialization, tracking and authentication for pharmaceutical companies including integration with existing production lines, data security and reliability.
- AITCentral **FMCG** ensures production line uptime on a large scale, leveraging our experience of big data compression tracking billions of items worldwide.

“Tracking and tracing down to pack level from manufacturing site to the first retail outlet is a vast challenge; having the right partner to deliver the solution is paramount to success. blue-infinity's expertise, solutions and packaged services really make it happen.”

Source:

**Patrick Chanez, Senior Manager Anti-Illicit Trade Technology R&D at Philip Morris International**

Our expertise includes

Application development, data migration, change management, ITIL service management, integration, training, and more.

Frequently-used technologies/tools

**Codentify, CodiTrack and CodiCheck**, Microsoft Windows Server, .Net, Oracle, Xamarin, and others.

Brands we work with include

**Philip Morris International (PMI), Imperial Tobacco Group (ITG), Japan Tobacco International (JTI)**, Landewyck Group, Tag Heuer, VideoJet, Accellos, Motorola, FractureCode, Domino, Hermos, SAP and Highjump Software.

Read our [case study](#).

# Digital track and trace with AIT Central

Fighting illicit trade **together** for over 10 years

The 2014 Tobacco Products Directive (TPD) and WHO Framework Convention on Tobacco Control (FCTC) enforces a new set of traceability requirements for tobacco products. blue-infinity AIT Central suite of solutions addresses the challenges of this new regulatory framework with digital serialisation, track and trace, and authentication to help ensure compliance and supply chain integration from A - Z.

AIT Central has a strong industry presence and is deployed across over 400 production lines across 1,600 tracking locations in 105 countries, with over 10 billion items tracked.

## New compliance requirements

Under the Tobacco Products Directive (TPD2) manufacturers are now forced to monitor the movement of goods across the entire supply chain, from the factory, warehouse and 3rd party logistics provider, right up to the first retail outlet.

Complying with these new regulations poses new challenges for supply chain management that impact all stakeholders of the supply chain, a modification of current business processes, the management of massive data volumes, multiple systems integration such as Master data, ERP and all requiring new expertise and know-how. For this, you need a global view of the solution from the beginning.

## Compliance with AIT Central by blue-infinity

**Based on Codentify® technology**, AIT Central responds to compliance concerns and covers the full product lifecycle from digital serialisation to track and trace, right through to authentication.

**We provide Codentify® for digital serialisation, CodiTrack for track and trace, and CodiCheck for authentication.**

**blue-infinity is an official reseller of these three technologies.**

## Overcome the challenges

In projects large or small, manufacturers often focus on their production line, but from blue-infinity's experience, 80% of the focus is actually related to the remainder of the supply chain.

To ease implementation, AIT Central is packaged in a modular way, to help secure timelines and costs. blue-infinity understand the challenges of tobacco manufacturers and have developed an efficient time to market approach, allowing rapid evaluation and deployment of the solution.

To overcome significant supply chain impact, phased approach retro-planning integration activities are strongly advised. Some tobacco manufacturers started track and trace activities several years ago, and are still rolling out the solution across their entire supply chain. Tracking

and tracing is not only about systems. Packaging, engineering, factory, warehouse processes and IT are all concerned.

We thus encourage the securing of timelines, and scope sooner rather than later, to allow manufacturers to continue to manage their core business with minimum downtime.

The only experienced end-to-end integrators worldwide  
blue-infinity has worked with industry leaders to develop this technology and a specifically designed service package for over 10 years. We are today the sole experienced integrators of the full solution worldwide. Our unrivalled experience means unmatched business, legislative and technical understanding, lower cost and quicker turn around for our clients.

We deliver a fully integrated and automated authentication solution that is adapted to the specific industry or market and that conforms to their regulatory requirements. Clients demand on-time and cost-efficient delivery, with full understanding of their business imperatives.

AIT Central is forward-looking as it learns and continually evolves with experience. Manufacturers benefit from sharing implementation knowledge between each other, such as print technology on pack to meet aggregation performance, and retro line fitting for timely implementation.

Bespoke services for all industries

Our dedicated team comprises experts who work with clients and stakeholders, providing packaged services in analysis, implementation, project management, architecture design, security, development, integration, hosting, training and support.

blue-infinity's service packages have been designed to allow businesses to seamlessly deploy our solution. We work together with your teams to impart knowledge and expertise throughout your project to ensure faster autonomy.

Trusted by brand owners

"We strongly recommend blue-infinity as an integrator."

*Senior Manager, Anti-Illicit Trade*  
*Philip Morris International*

"blue-infinity made JTI feel comfortable and well equipped to deal with any challenges."

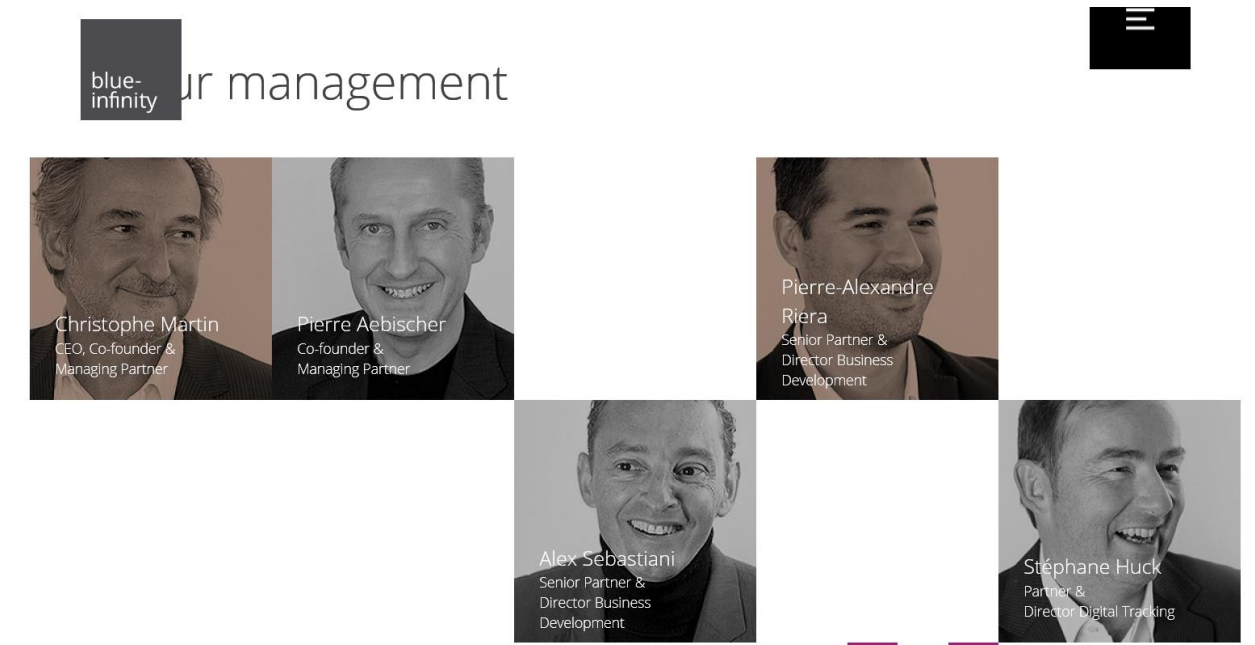
*Track and Trace Director*  
*Japan Tobacco International*

To find out more, please call +41 58 307 6813

"We are in collaboration with blue-infinity for many years on our Tracking & Tracing solution. Their excellent support services ensuring responsiveness and quality of back-up service are remarkable."

Source:

Senior Manager, Anti Illicit Trade Technology R&D at Philip Morris International



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## ABOUT US



Our member companies ...move billions of finished goods across international supply chains every year



**The Digital Coding & Tracking Association represents some of the world's largest manufacturers of tobacco products.**

Our members include British American Tobacco, Imperial Tobacco Group, Japan Tobacco International and Philip Morris International.

Together, our member companies produce over 75% of the world's tobacco products (excluding China) and move billions of finished goods across international supply chains every year, undertaking millions of cross-border transactions in the process. As we do so, we help national governments raise over US\$150 billion in taxes annually.

Our member companies are actively involved in the fight against illicit trade. We work with international organisations and national governments on every continent to implement rigorous controls and procedures to secure manufacturing and distribution processes to the highest of standards.

### See also

[Latest news](#)

## LATEST NEWS

Welcome to our latest news section.

Here you will find information and resources about the recent activities of the Digital Coding & Tracking Association.

### Press and media

**1st June 2016: DCTA technology ownership transferred to Inexto, an affiliate of Impala Group**

 [DCTA Press Release 1st June 2016](#)

### See also

[Contact us](#)

### Download our app

In search of solutions for securing supply chains? Then download our '[Tackle it' app](#) from the App Store to find a list of the questions that need to be asked first.

[Download our app](#) >

## DCTA technology ownership transferred to Inexto, an affiliate of Impala Group

1<sup>st</sup> June 2016 – The Digital Coding & Tracking Association (DCTA) and its member companies – British American Tobacco, Imperial Tobacco Limited, Japan Tobacco International and Philip Morris International – have signed and completed an agreement by which Inexto, an affiliate of the French Group Impala, has acquired the DCTA's track & trace and product authentication technology.

Because developing technologies is not part of the core business of the DCTA member companies, the DCTA decided to divest it. The technology was developed by the DCTA and DCTA member companies to further secure the legitimate supply chain of their products and comply with tracking and tracing requirements under their agreements with the European Union and governments in the EU.

A DCTA spokesperson said: "The DCTA is proud of the cutting edge track and trace and authentication solution we developed which is proven to work on high speed manufacturing lines and to be effective for law enforcement purposes. We believe that a specialised and independent technology company is now best placed to further develop this technology to ensure it remains state-of-the-art and fit for purpose."

This divestment will not impact existing projects, cooperation agreements between the DCTA, its members and third parties.

The DCTA will continue to advocate for the use of open standards in the fields of track & trace and product authentication. The DCTA remains open to working with any technology to comply with regulatory requirements, provided that their solutions are effective, cost efficient, based on open standards and that they will work with existing tobacco manufacturing and distribution infrastructures.

For further information please contact:

[info@dcta-global.com](mailto:info@dcta-global.com)

- [HOME](#)
- [Group](#)
- [Investments](#)
- [News](#)
- [Contact](#)

<http://www.impala-sas.com/en/participations/arjo-systems>

## Arjo Systems, Arjo Solutions, Inexto

**ARJO SYSTEMS** is a global system integrator for the implementation of official identity documents. Its innovative solutions, currently deployed on 4 continents, enable to secure national e-ID documents, and tickets sold for concerts, sport events and transport. With over 20 years of experience in e-Passports, smart cards, security systems and complex projects for the public sector, Arjo Systems asserted its position thanks to an unrivaled in-house expertise and to its adaptation capability to local needs.

=>[Link to the official website](#)

**ARJO SOLUTIONS**, security expert, designs and delivers solutions for physical and digital identification, authentication and traceability of products to enable its customers to fight against fraud, counterfeiting and parallel markets.

Serving governments and private companies for over 15 years, Arjo Solutions is a major player in the protection of brands and their products as well as securing the collection of taxes for governments.

=> [Link to the official website](#)

**INEXTO**, develops and supplies serialization and track and trace solutions for governments, private and companies and consumers enabling them to secure and optimize their supply chain and to fight against illicit trade. **Inexto has over 10 years of experience in the field of traceability** and its solutions have been widely implemented in several sectors: **tobacco, luxury, pharmaceutical industry.**

### Key figures

- **€ 80 million** turnover
- **250 employees**
- **+15%** growth in 2015
- **+500 million** ID documents protected with Arjo Systems' solutions
- **+15 billion** products protected with Arjo Solutions' authentication solutions

- of **+300 billion** products tracks
- **ISO 9001, 14001 & OHSAS 18001**

## Locations

- **Paris**, headquarters
- **Hong-Kong**, operational center, R&D center
- **Naples**, sales office, R&D center
- **Lausanne**, operational center track and trace
- **Chambéry**, R&D center
- **Indonesia**, plant
- **Sao Paulo**, sales office
- **Manilla**, sales office
- **Abidjan**, regional office
- **Nairobi**, regional office
- **Dubai**, regional office

## Corporate governance

- Vincent **Revol**, Chairman Arjo Systems
- Jean-Pierre **Ting**, Managing Director Arjo Systems
- Aurélien **Tignol**, Chief Executive Officer Arjo Solutions
- **Philippe Chatelain**, Managing Director Inexto

<http://www.zoominfo.com/p/Philippe-Chatelain/2094329031>

Philippe Chatelain

Philip Morris International Inc.

HQ Phone: (917) 663-2233

Email: [p\\*\\*\\*@\\*\\*\\*.com](mailto:p***@***.com)

[https://www.contexte.com/article/pouvoirs/meps-declare-war-on-tobacco-lobby\\_39630.html](https://www.contexte.com/article/pouvoirs/meps-declare-war-on-tobacco-lobby_39630.html)

### **MEPs declare war on tobacco lobby**

Santé 04 mars 2015 à 13 h 50 — Sophie Petitjean

They set up a working group to prevent renewal of cooperation agreements and industry-managed traceability

A group of MEPs has just « declared war, » as they put it, on tobacco manufacturers. On 3 March, ten or so members of the European Parliament convened the press to announce the creation of a working group that aims to prevent interference by the tobacco industry. « Tobacco is the only legal consumer product that kills its users when they follow the manufacturer's instructions, » explained Gilles Pargneaux (S&D, France), who is behind the initiative. « The tobacco industry's interference is premeditated and constant. It occurs at every level of the tobacco production chain, from planting to processing and marketing, » he added.

The group has set five priorities : to monitor transposition of the tobacco directive ; to ensure compliance with the transparency principles of the WHO Framework Convention on Tobacco Control ; to encourage ratification of the WHO protocol on illicit trade in tobacco products ; to prevent the renewal of cooperation agreements between the EU and manufacturers : and to establish a connection between plain packs and independent traceability of tobacco products. At this stage, the group's membership is still a bit vague. Around 40 MEPs have seemingly expressed an interest, even though only ten or so have so far confirmed their participation (mainly French, Belgian and Italian MEPs from all the political groups except the ECR and the non-attached). In principle, there will be several meetings a year and they will be open to the public. The practical working arrangements will be decided at the group's first meeting, on 30 April, to coincide with the EP plenary session in Strasbourg.

Tobacco products are regulated by a new EU [directive](#) since mid-2014. But the issue has not been taken off the EU agenda now that the text is in place. The Commission is drafting a set of [secondary legislative texts](#) (priority list of additives, treatment of flavourings, etc). It is also examining the possibility of prolonging the anti-fraud cooperation agreement with Philip Morris International (PMI). Under this agreement, which has served as a model for others with Japan Tobacco International, British American Tobacco and Imperial Tobacco, the firm pays the Union US\$1.25 billion to contribute to efforts to stamp out smuggling and counterfeiting of tobacco products.

### **Cooperation agreements**

For the new working group, the non-renewal of such cooperation agreements is a priority. « It is very hard to imagine that cigarette manufacturers would be willing to pay such large amounts if they were innocent or irreproachable, » said Pargneaux. The group will therefore encourage the Commission to replace the existing cooperation deals with the WHO Protocol to Eliminate Illicit Trade in Tobacco Products, signed in late 2013 by the EU.

### **Traceability**

Another objective is the creation of an « independent and neutral » body charged with ensuring the traceability of tobacco products. Manufacturers are opposed to the idea of abandoning their code-generation technology, Codentify. « What we have set up has been shown to work. We have been developing this system for more than 12 years. Codentify was patented in 2004 and will cover all products manufactured in Europe from the end of 2015. I find it hard to understand why this is being called into question, » **responded Philippe Chatelain, product traceability director for Philip Morris.**

### **Plain packs**

The working group also supports plain packs. It will encourage member states to introduce this type of logo-free pack simultaneously with an effective traceability system to prevent

counterfeiting (manufacturers' main argument). Plain packs are scheduled to appear in Ireland in May 2017. The UK, France and Norway are expected to follow.

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## Pharmalutions Pte Ltd Contact details

**Business Address** 259882, Singapur Singapore

Mr Tilman Jörß

**Managing Director**

[Pharmalutions Pte Ltd](#) Singapur, Singapore Executive

Tilman Jörß

- Managing Director
- [Pharmalutions Pte Ltd](#) Singapur, Singapore

## Professional experience

- 6 years 3 months **04/2010 - present**

**Managing Director** [Pharmalutions Pte Ltd](#)

[www.pharmalutions.net](http://www.pharmalutions.net)

Previously: 4 years 6 months 10/2005 - 03/2010

**Chief Representative (Asia-Pacific)**

[Uhlmann VisioTec GmbH](#)

[www.uhlmann-visiotec.com](http://www.uhlmann-visiotec.com)

Track and Trace

[http://www.uhlmann.de/fileadmin/Redakteure\\_Website/02\\_Solutions/05\\_Automation\\_and\\_software/04\\_Track\\_Trace/Brochure\\_Track\\_Trace\\_EN.pdf](http://www.uhlmann.de/fileadmin/Redakteure_Website/02_Solutions/05_Automation_and_software/04_Track_Trace/Brochure_Track_Trace_EN.pdf)

## Educational background

- 08/1996 - 11/2001

## Languages German English

Uhlmann

# Process and quality assurance par excellence

State-of-the-art automated systems are necessary for appropriate monitoring and controlling of the pharmaceutical packaging process. SCADA solutions for comprehensive quality assurance or production data acquisition and evaluation are just as important as Track & Trace applications that meet the legislative requirements in terms of serial numbering and the unique marking of products. Uhlmann also offers tailored solutions in these fields: for reliable, traceable, and cost-optimized production.

## Track & Trace



### For the seamless traceability of pharmaceutical products

Track & Trace by Uhlmann is the solution for comprehensive protection against counterfeiting as well as product and process reliability. Every packaging unit can be marked with a unique, serialized 2D code. The code data stored in the Uhlmann tracking database links the

information from one packaging unit to that of the next largest unit. This ensures seamless transparency of the complete supply chain from production to the pharmacy.

**Track & Trace by Uhlmann covers three options:**

- Codification
- Label tracking
- Full serialization

**Highlights**

- Integration of diverse printing technologies and label applications into Uhlmann machines or those of other manufacturers
- Intelligent OCR/OCV inspection systems as well as the application of coordinated printing/marking systems
- Solutions for primary, secondary, and tertiary packaging as well as for inventory and distribution processes
- Seamless marking and serialization solutions from the packaging line to the corporate IT system
- Turnkey project management

**Optimally tailored solutions. Integrated, from a single source:**

- For Uhlmann packaging lines:  
Uhlmann undertakes full integration for the respectively required Track & Trace functionality into the packaging line – including all hardware and software components. If desired, also including turnkey project management from the line to the corporate IT database.
- For machines and lines from other manufacturers:  
Uhlmann realizes tailored Track & Trace solutions that meet identical functionality and performance standards as for Uhlmann machines and lines. As an example, an integrated serialization solution for the application of variable data to cartons in the ongoing cartoning process.
- For manual tasks:  
Even in this case, Uhlmann offers special hardware and software solutions, such as standalone units of different configuration levels, as the Uhlmann Serialization Platform, for use wherever machine or line revalidation is not foreseen. Furthermore, Uhlmann

offers manual aggregation stations with straightforward operator guidance for use during manual packaging and palletizing, as well as for use in the warehouse or distribution center.

## Tilman Joerss

Owner & Director of Pharmalutions

Location

[Singapore](#)

Industry

[Pharmaceuticals](#)

Websites • [Company Website](#)

- Public Profile  
<https://sg.linkedin.com/in/tilman-joerss-74b58820>

[Contact Info](#)

## Background

### Experience

#### [Owner & Director](#)

[Pharmalutions Pte Ltd](#)

April 2010 – Present (6 years 3 months)Singapore

Owner & Director of Singapore-based Pharmalutions Pte Ltd. Pharmalutions is specialized in the transfer of know-how and technologies for product serialization and **Track & Trace** within the Pharmaceutical & Tobacco packaging industry.

#### [Chief Representative \(Asia-Pacific\)](#)

[Uhlmann VisioTec GmbH](#)

October 2005 – March 2010 (4 years 6 months)Singapore

Competence Center of Uhlmann Pac-Systeme GmbH & Co. (Germany) specialized in pharmaceutical in-line **inspection & printing systems, Track & Trace** and high-speed In-line NIR-Analysis.



Innovative machines for your pharmaceutical packaging | Uhlmann Group

**Sales & Service Manager (Asia-Pacific)**

**Focke (Singapore) Pte Ltd**

March 2002 – December 2004 (2 years 10 months) Singapore

**Focke & Co GmbH & Co. (Germany) is market-leader in cigarette packaging machinery and the benchmark as such in the global tobacco industry.**



English Site - FOCKE & Co.

# Does the tobacco industry have a tracking and tracing system that governments can use?

## Introduction

The illicit trade in tobacco products is a threat both to government finances and to public health. It robs governments of much needed revenues, and it undermines efforts to reduce tobacco consumption, particularly through the imposition of high levels of tobacco taxation.<sup>1</sup>

Although by definition the global illicit trade in tobacco products is hard to measure with accuracy, it is known to be very substantial. A 2009 study estimated that 11.6 percent of the global cigarette market was illicit.<sup>2</sup> This is equivalent to 657 billion cigarettes a year, and means a loss of tax revenues of about US\$40.5 billion.

## What is Codentify?

Codentify is a coding system that the tobacco industry wants governments to adopt as a solution to their obligations to fight the illicit tobacco trade, under the WHO Protocol to Eliminate Illicit Trade in Tobacco Products (commonly known as the Illicit Trade Protocol, or ITP) and in the European Union under the revised EU Tobacco Products Directive. Both the Protocol and Directive require a “tracking and tracing” system for tobacco products, which

*The tobacco industry's secretive behaviour means that there has been no full independent assessment of the security of the Codentify system. Without such an assessment, governments could be opting for a “black box” system, with features and possible weaknesses that only the tobacco industry is aware of.*

should help law enforcement agencies identify illicit products in their countries.

Codentify was first developed by Philip Morris International (PMI). However in November 2010, PMI licensed the system, at no cost, to the other three major tobacco manufacturers: British American Tobacco (BAT), Imperial Tobacco Group and Japan Tobacco International (JTI). These four companies have now formed the Digital Coding and Tracking Association (DCTA), based in Zurich, to promote the system to governments and independent agencies.<sup>3</sup>

Codentify is a system based on alphanumeric codes, which are visibly printed on tobacco packaging. Each Codentify code is a unique, unpredictable set of 12 letters or numbers. According to PMI, “Codentify avoids the requirement to store the codes by encrypting the information contained within them prior to printing through a patented combination of multiple keys and digital signatures”.<sup>4</sup>

The system is based on machine-generated codes created at factory level and printed on packaging. Factory level “secret keys” are stored on company (or third party) computer servers. Each key allows the production of a specified number of Codentify codes.

<sup>1</sup> Illicit tobacco products fall into four broad categories: **Smuggling**. This covers the unlawful movement of tobacco products from one jurisdiction to another, without applicable tax being paid. Therefore, smuggling may involve the movement of otherwise lawfully manufactured tobacco products. **Counterfeiting**. This covers the illegal manufacturing of an apparently lawful and well-known product, with apparent “trademarks”, but without the owners’ consent. **Bootlegging**. This covers cases where tobacco products are legally bought in one country and then transported to another with a higher tax rate, in amounts beyond those reasonable for personal use. **Illegal Manufacturing**. This covers cases where tobacco products are manufactured without declaration to the relevant authorities. In some cases, they may be manufactured in approved factories, unbooked and/or out of normal hours.

<sup>2</sup> Joossens L, Merriman D, Ross H, Raw M. *How eliminating the global illicit cigarette trade would increase tax revenue and save lives*. Paris: International Union Against Tuberculosis and Lung Disease; 2009

<sup>3</sup> <http://www.dcta-global.com/>

<sup>4</sup> Philip Morris International. Codentify 2012.

[http://www.pmi.com/eng/documents/Codentify\\_E\\_Brochure\\_English.pdf](http://www.pmi.com/eng/documents/Codentify_E_Brochure_English.pdf)

The codes may contain the following information:

- date and time of manufacture
- machine of manufacture
- brand and brand variant
- pack type
- pack size
- destination market
- price

Anyone who does not have access to secret keys to encrypt the information cannot generate original valid codes. Codes could be checked for validity through call centres, applications on mobile devices and through other means.

Each of the four big tobacco firms also has at least one global database. If a law enforcement officer enters a code through the DCTA portal, it can be checked for validity, and the decrypted code can be referred to the global database of the relevant firm to provide tracking and tracing information.

### Possible Security Problems

The Codentify system uses relatively unsecured commercially available equipment on sites where operators may have a vested interest in misusing it.

The system does not appear to prevent valid codes from being used twice. Therefore, counterfeiters and other illicit manufacturers could simply copy codes (sometimes called “code cloning”). Since Codentify codes are visible, it could be easy to collect a large number of such codes. If the same code is scanned twice on different packs it appears to be impossible to tell which is illicit.

Codentify also seems vulnerable to “code recycling”, to print valid codes on illicit products, for example by using codes originally printed on tobacco products that have been rejected and destroyed (which isn’t unusual during the production process). Particularly if these codes are placed on tobacco products sold in the same market as the legitimate products whose codes have been copied,

it may be impossible for enforcement authorities to identify them as illicit.

The system of secret keys may be usable to generate apparently genuine tobacco products in factories “after hours”. For example, factories could use unused codes from a production run to produce additional products that are intended for illicit trade but may appear valid if the code is traced.

There may also be a weakness around “code migration”; where codes printed in one country can be reprinted in another, creating apparently legal products that enforcement agencies could not effectively trace.<sup>5</sup>

Codes produced using inkjet printers may be easily erased or altered, and would therefore not be “securely affixed”, as required by the Protocol and Directive.

Although the industry has marketed Codentify as a tax verification system, this does not appear to be the case for the reasons given above. This is why many countries where it is used also have a tax stamp system, for example in the European Union<sup>6</sup>

### Other Issues

When enforcement agencies use Codentify codes in their investigations, the enquiries could be transparent to the industry, allowing it to manipulate replies and hide key data.

The tobacco industry’s secretive behaviour means that there has been no full independent assessment of the security of the Codentify system. Without such an assessment, governments could be opting for a “black box” system, with features and possible weaknesses that only the tobacco industry is aware of.

<sup>5</sup> These problems are in effect admitted by the industry in the Codentify patent documentation, which states that: “[0008] [...] the production codes can easily be imitated or cloned.” (patent EP1719070 (B1) Page 2)

<sup>6</sup> Including Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovakia, Spain.

Some information required under the Protocol and Directive will not be known at the time of production, when Codentify codes would be printed. This includes shipment routes from manufacturing to first retailer, the identity of all purchasers from manufacturing to first retail outlet, and the invoices, order numbers and payments of all purchasers from manufacturing to first retailers. It is not clear how this information will be associated with Codentify codes.

### Key Questions

The tobacco industry has already had some success in marketing its Codentify system to international agencies. In 2011 INTERPOL accepted a donation from Philip Morris International (PMI) of \$23.5 million. Shortly afterwards, in July 2012, INTERPOL announced the creation of the INTERPOL Global Register (IGR) which aims to provide tools to help law enforcement and the public determine a product's authenticity. INTERPOL also stated it would be working with the DCTA to make Codentify accessible via the IGR.

**It is unacceptable that any government or international agency should adopt the Codentify system without having set proper standards for its tracking and tracing regime, and having assessed properly whether Codentify meets them.** This is particularly dangerous in countries with very limited enforcement resources.

The following questions **must** therefore be asked and answered before any government considers Codentify as a solution to its obligations under the Illicit Trade Protocol and the EU Products Directive.

- a. Can Codentify codes be copied or diverted for use on tobacco products that are not tax paid, in order for them to appear as not illicit when examined by enforcement officers?
- b. Does Codentify provide an adequate guarantee that tobacco products are being sold in their stated target market and are tax

paid? If it does, why do many European countries using Codentify also require tax stamps on tobacco products?

- c. Would the use of Codentify by enforcement agencies, and access to any related database, be transparent to the tobacco industry, making available information about investigations that should be kept confidential?
- d. Is Codentify and the accompanying handling and storage of data by the tobacco industry compliant with Article 8.8 of the Protocol, which requires the establishment of an *independent* "global focal point" through which governments and enforcement agencies can access the information required under Article 5?
- e. Will the industry undertake to make available to governments, the European Commission or their designated agents, information about the source code and algorithms behind Codentify, so that it can be independently assessed?
- f. Do individual Codentify codes include a product description, as required under Article 8.4.1(g) of the Protocol and Article 15.2(e) of the Directive?
- g. Does the information encoded under Codentify include all the information required in Article 15 of the Directive, including "the actual shipment route from manufacturing to the first retail outlet ... the identity of all purchasers from manufacturing to the first retail outlet" ... and the invoice, order number and payment records of all purchasers from manufacturing to the first retail outlet"? It should be noted that some of this information might not be known at the time of manufacture.

There are many competing tracking and tracing systems provided by companies unrelated to the tobacco industry that could be used on tobacco packaging, for example 2d bar codes. **These should certainly be preferred if there are no satisfactory answers to the key questions about Codentify.**

NEWS / ECONOMIC AFFAIRS

# Big Tobacco suspected of dodging EU anti-smuggling rules

By **PETER TEFFER**  

BRUSSELS, TODAY, 10:57

Tobacco companies have sold their anti-smuggling system to a third party to comply with upcoming EU rules, but critics say the new owner is a front company.

The track-and-trace system, Codentify, helps tobacco firms and customs authorities to find out where a pack of cigarettes was produced and is used to combat smuggling - a multi-billion euro criminal industry in Europe.

It was set up in the wake of cooperation agreements between the EU and the four major tobacco companies, which required the firms to keep track of their products.

Tobacco companies had previously been suspected of smuggling their own goods in an effort to avoid paying taxes.

Codentify was owned by the tobacco industry until last month.

The cooperation agreements, one of which, with Philip Morris International (PMI), is due to expire in less than three weeks, were non-legislative contracts and did not require the track-and-trace system to be separate from the tobacco industry.

However, new EU legislation, as well as upcoming World Health Organisation (WHO) rules, specify that the system should be independently owned.

The WHO has previously expressed criticism of Codentify, which it said lacked transparency “and might have features that only the tobacco industry is aware of”.

Spokespersons for Philip Morris International, and for the joint venture that sold Codentify, told this website via email on Monday that the system now complies with the EU's new Tobacco Products Directive and the WHO's Framework Convention on Tobacco Control (FCTC).

The FCTC is an international treaty, also signed by the EU, which aims to curb tobacco smuggling.

“Inexto is fully independent from the tobacco industry,” said PMI spokesman Andrew Cave, referring to the Swiss-registered company that bought Codentify.

Inexto is registered in the Swiss city of Lausanne, at an address that is a five-minute drive from the offices of Philip Morris International (PMI) and British American Tobacco Switzerland.

Inexto was founded this year and owned is owned by a French group called Impala, which has several daughter companies specialising in industries that range from energy to manufacturing.

The receptionist at Inexto's mother company, Impala, said she did not know Philippe Chatelain, Inexto's managing director, but told EUobserver he would be called back. This has yet to happen.

Chatelain, and two other top officials of Inexto, have worked for PMI for over a decade. They left the firm just last month.

EUobserver was made aware of the sale and make-up of the new company by Oscar Larsson, a student at the Open University of London. [He runs a blog, called Why It's Bad](#) in which he is critical of the Codentify tool.

“This is not an innocent purchasing of a legitimate technology,” Larsson told this website in an email.

"These are not just former employees from PMI, they are the dedicated core of the whole Codentify concept. Their names are on the patents and they are the inventors of this intentionally flawed system, designed by the tobacco industry to serve the tobacco industry and not the European Union", he said.

Other critics of the tobacco industry also questioned the motives behind the sale.

Anna Gilmore, director of the tobacco control research group at the University of Bath, said Inexto could not be considered sufficiently independent from the tobacco industry.

"Given the tobacco industry's long history of involvement in the illicit tobacco trade, a genuinely independent system would be a threat to the industry," she told this website via email.

"It is therefore attempting to have governments implement its Codentify system by setting up intermediaries and front organisations to promote Codentify," she added.

Luk Joossens, advocacy officer of the Association of European Cancer Leagues, said the sale was "a predictable move", adding that tobacco companies will now "pretend" that Codentify is no longer part of the tobacco industry.

The FCTC's secretariat, which [has taken aim at Codentify before](#), repeated its opposition in a response to this website.

"Whether or not the new company will truly be independent of the tobacco industry, or if it will continue to defend the interests of the tobacco industry with just one more degree of separation remains to be seen," said Vera Luiza da Costa e Silva, head of the secretariat of the FCTC.

She added that even if the track-and-trace (T&T) system was independent, it would still lack transparency.

"If the new company's purpose is to continue to promote Codentify as a T&T system allegedly in compliance with the protocol, then this independence is

irrelevant, since ... analyses of Codentify have found it to not be compliant with protocol recommendations on T&T," said Da Costa e Silva

The Digital Coding & Tracking Association (DCTA), which owned Codentify until 1 June 2016, said Inexto "is fully independent from any tobacco company".

DCTA is a joint venture by British American Tobacco, Imperial Tobacco Limited, Japan Tobacco International, and Philip Morris International.

"The three individuals you reference are no longer employees of any tobacco manufacturer and their jobs transferred to Inexto as part of the technology sale," a DCTA spokesperson said by email, without revealing his or her name.

"Their deep knowledge of the technology, combined with their understanding of the complexities involved in the tobacco supply chain, means they offer Inexto unique expertise which will be necessary as the technology continues to evolve as a world-class, open source solution".

The European Commission did not respond to requests for a comment.

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## Slim fit

[speccomm](#) | March 1, 2016

Lean, tailor-made and cost-efficient tracking-and-tracing solutions help smaller tobacco companies comply with TPD2.

By Stefanie Rossel



The tracking and tracing of tobacco products is a major requirement of the EU's revised Tobacco Products Directive (TPD2)—and one of its most complex. The legislation calls for an EU-wide system for the legal supply chain, as well as visible and invisible security features to help authorities distinguish genuine and legal tobacco products from illicit products.

Articles 15 and 16 of TPD2 stipulate that each smallest salable unit of a tobacco product must be marked with an irremovable unique identifier carrying, among other things, comprehensive information about the product's origin and intended destination. Aggregated packaging such as cartons, master cases and pallets must be marked and recorded too. All data generated in the encoding process must be stored.

The new system and the security features are scheduled to be introduced in phases. Cigarettes and roll-your-own tobacco are supposed to be compliant as of May 20, 2019, followed by compliance of all other tobacco products as of May 20, 2024.

Noncigarette products represent a challenge for tracking and tracing because their smallest salable units can differ significantly from standardized cigarette packs. Roll-your-own tobacco, for example, often comes in varied quantities.

tobacco are supposed to be compliant as of May 20, 2019, followed by compliance of all other tobacco products as of May 20, 2024.

Noncigarette products represent a challenge for tracking and tracing because their smallest salable units can differ significantly from standardized cigarette packs. Roll-your-own tobacco, for example, often comes in round tins; sophisticated mechanical processes are required to apply the code in the correct position.

Pouches pose a similar hurdle. Making matters worse, the new, enlarged health warnings leave only one-third of the packaging for branding. Somewhere in this area, the code has to be applied in such a way that it will still be readable at later stages of the supply chain. Engineers are currently trying to find ways of effectively applying coding onto such nonstandard packaging forms. A Confederation of European Community Cigarette Manufacturers study, published in late January, suggests it may become difficult to meet the TPD2 deadlines.

<http://www.tobaccoreporter.com/2016/03/slim-fit/>

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The European Commissions' Directorate-General for Health and Food Safety, DG Sante, has appointed Eurogroup Consulting to determine the technical standards for the track-and-trace system and the security features, as well as the key elements of the data storage. The group finalized its report in May 2015.

A stakeholder consultation was organized in July 2015. To ensure that TPD2 track-and-trace legislation will also be compliant with the World Health Organization's Protocol to Eliminate Illicit Trade in Tobacco Products, DG Sante decided to seek further advice. It has launched a tender for a second study, which will consider the consulting group's conclusions but also explore further options; the contractor should be selected shortly, the report says. "There are some delays in the process, so it seems unlikely that the foreseen deadlines for adopting relevant secondary legislation will be held," the report concludes.

### Finding the right solution

Regardless of the current regulatory uncertainty, tobacco manufacturers must adapt their production processes *now* to ensure compliance once the legislation has been implemented. Particularly for small and mid-sized tobacco companies it will be a challenge: Integrating a comprehensive track-and-trace system presents a significant financial burden for a company producing only small cigarette volumes or specializing in lower-volume products such as cigars. The technical requirements may also represent a major hurdle if the manufacturing equipment used is older and the level of automation in the production process is low.

For years, the leading international tobacco companies have been using Codentify, a coding system originally developed by Philip Morris International in 2005. The company turned Codentify into a joint tobacco industry project by licensing it for free to British American Tobacco, Japan Tobacco International and Imperial Brands, formerly known as Imperial Tobacco Group. In May 2013 the four formed the Digital Coding & Tracking Association (DCTA) to further promote the technology, which is currently deployed in more than 50 markets. Codentify enables tracking and tracing, product authentication and digital tax verification. According to the DCTA, the system is simple: a unique and secure, eye-readable, 12-digit code is printed directly onto packs and cartons during manufacturing. The solution works on standard equipment and is easily integrated into the production process.

Although Codentify sounds like a system designed exclusively for high-volume cigarette production, it may also be a good solution for smaller or specialized tobacco manufacturers, says Mario Bock, director of global tobacco and security business and global strategic accounts Europe at Videojet Technologies, which advises tobacco firms on the implementation of track-and-trace systems.

"Tobacco coding demands sophisticated solutions and near-constant uptime," he says. "Each tobacco company, with different brands, cans, cartons and cases, must ensure that communication between the individual stages is established so that the manufacturer has comprehensive and reliable information on every step in the supply chain."

For high-volume production, Bock says, the technology must deliver high-quality codes reliably and efficiently while meeting the challenge of demanding production line speeds. Smaller players have different needs, he says: "They want a simple system with manageable costs and data volume. They know that their production lines need to be made compliant, but they are often insecure about how to achieve this and whether all of their products will be affected by the forthcoming tracking-and-tracing legislation."

Smaller manufacturers, he explains, have a different logistics expenditure; sometimes their manufacturing and logistics processes still involve manual labor, placing special demands on the coding system.

### Three packages needed

According to Videojet, each tobacco manufacturer needs to consider the acquisition of three packages. For a factory, a tobacco manufacturer will require an IT package, which contains all elements that are necessary to communicate between the different systems and stakeholders. The scope of this IT package depends on the complexity and is a one-time investment per factory; later on there may be licensing costs for the software. The IT package should offer a track-and-trace solution as well as serialization and authentication solutions.

...tobacco manufacturer will require an IT package, which contains all elements that are necessary to communicate between the different systems and stakeholders. The scope of this IT package depends on the complexity and is a one-time investment per factory; later on there may be licensing costs for the software. The IT package should offer a track-and-trace solution as well as serialization and authentication solutions.

As a second element, an aggregation package will be needed for each production line, which should fulfill the following minimum requirements: Apart from aggregation of the smallest salable units, it should include the installation, the hardware and software, as well as training and commissioning. Depending on the final installation, additional cameras and sensors may be required.

The third package is the hardware coding package comprising all equipment that must be installed on the factory floor. Depending on the types of machinery involved, this package, which is needed for each line, will include a laser or a continuous inkjet printer, a label applicator, and vision systems to read the codes and accessories.

One of the companies offering an IT package for track-and-trace compliance is Blue-infinity of Switzerland. The company has developed Anti-Illicit Trade (AIT) Central, a suite of packaged solutions and services that provides scalable, TPD2-ready track-and-trace capability to tobacco companies and related operators, such as third-party logistics suppliers and warehouses.

"As the solution is fully scalable, it fits the needs of smaller and mid-sized manufacturers," says Stephane Huck, director of packaged solutions, track and trace, at Blue-infinity. "Blue-infinity will customize a tailor-made solution, based on open standards, in order to integrate the production and IT landscape of manufacturers," he says. "Its heart relies on three

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focused technologies covering serialization, tracking and authentication needs. We provide packaged services, operation and management of these systems."

One of the system's advantages, according to Huck, is that it has been made by the industry for the industry. It also has a proven capacity to sustain high volume, speed and data integrity; offers a rapid time to market; and provides flexibility at all levels. What's more, the system is compatible with Codentify. To facilitate implementation and help secure timelines and cost, AIT Central is designed modularly; the company says the solution is forward-looking in that it "learns" and continually evolves with experience.

Blue-infinity's approach meets the challenges often found at smaller tobacco manufacturers, such as organizational issues, heterogeneous equipment and the lack of unique internal specialists, Huck explains.

"Blue-infinity goes beyond traditional IT services with a hands-on knowledge of manufacturing facilities and extensive know-how to support complex problem-solving at the factory floor down to supply chain. Finding a knowledgeable specialist covering the challenges within small companies is the challenge. That's where a team of partners is used to work together, with clear roles and responsibilities, which is a key factor to speed up piloting and roll out a working solution in a controlled time."

While manufacturers often focus on their production line, 70 percent of the integration process is in fact related to the remainder of the supply chain, according to Blue-infinity.

"To overcome significant supply chain impact, phased-approach, retro-planning integration activities are strongly advised," says Huck.

The industrial approach also allows manufacturers to generate and manage vast amounts of data. "We recommend a cloud-ready approach as a first step, benefiting from Blue-infinity hosted infrastructure and fully managed services to shorten time to market, improve flexibility and cost," says Huck. "Secondly, our customers have the choice of transferring the platform to their environment, knowing that most probably the regulation will push for data not being stored on manufacturer premises. We believe that technology should be an enabler, not a barrier."

### From pack to carton—and beyond

Solutions for aggregation come from companies such as Hermos, a German specialist in IT process integration and automation. The company provides full aggregation solutions from pack to pallet level. The case-to-carton—or bundle—aggregation is considered to be the core process. Pack-to-carton or any other aggregation processes, such as multicarton-to-case, are easily adaptable to this core. The standardized software framework connects all these process hierarchies to logical groups through parameter settings, explains Harald Koehler, chief technical officer at Hermos. Hermos also offers a modular hardware and software toolkit that can be integrated into existing production lines. The system is versatile and enables the aggregation from pack to carton to case to pallet or only from pack to carton. The

multicarton-to-case, are easily adaptable to this core. The standardized software framework connects all these process hierarchies to logical groups through parameter settings, explains Harald Koehler, chief technical officer at Hermos. Hermos also offers a modular hardware and software toolkit that can be integrated into existing production lines. The system is versatile and enables the aggregation from pack to carton to case to pallet or only from pack to carton. The parameters allow users to set threshold values in compliance with TPD2. With this tool, Hermos says it can guarantee that only goods that have been tracked 100 percent are stored in the warehouse.

The process is the same for all manufacturers, as are the factors to be considered before an investment in track-and-trace solutions. "To reach a workable end-to-end track-and-trace solution that is realistic and reliable in price, it is important to start the technical assessment as early as possible," Koehler says. All business segments and technical disciplines should be involved in the solution-finding process, as implementation will result in production downtime, he stresses. Success depends on clear communications and the buy-in of all parties involved.

"For smaller tobacco companies, the pack-to-carton-to-case process often is very complex. While modern bundle makers send the wrapped cartons onto a conveyor line to an automatic case packer, older production lines have neither a conveyor nor a case packer at the outbound of the bundle makers, but a simple table instead, which leads to a pileup of cartons. At this point, manual labor comes in—an operator will pack the pile of cartons into a case, [which means] pack tracking is no longer a safe process."

Two years ago Hermos developed a fully manual case-packing process with a 100 percent tracking efficiency, at that stage comprising only carton-to-case aggregation. This provides a solid tracking process even for manual operation. Pack tracking can be added to that system as well, if an automated upstream conveyor exists. If not, which is quite often the case, a newly developed Hermos solution will solve the problem.

In addition to the retrofit solutions for packing lines already mentioned, Hermos says it offers the "ideal" infeed tracking conveyor consisting of carton itemizer, insertion station, pack tracking (for clear wrap cartons), mounting location for the carton label applicator and reject station. All process equipment is as compact as possible and processable in the same modular way as all other solutions provided by the company, Koehler says.

#### Manageable hardware

Videojet provides solutions for the third package, the coding hardware. The company offers a variety of stand-alone printers, label applicators and laser systems with high efficiency rates—to be integrated at various points in the production line—to comply with the full coding requirements. The units, which pass signals to a reject unit, are mounted

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onto existing systems and have minimal footprints. "We advise smaller tobacco companies about the minimum they need to invest in the hardware to make their production compliant," says Bock. "Often, coding units at the packer and the bundle maker, which should be compatible with SAP or other MES systems, will suffice." The actual manufacturing process will not be changed by the additional equipment. In order to avoid rejects and to enable efficient aggregation, coding needs to be clear and easily readable from the start, he points out. To optimize the track-and-trace process for its smaller customers, Videojet offers to take on the template management for them. The company can set up a template with all the information required by TPD2 for various packing machines.

There are many SAP-based track-and-trace systems on the market, and of course customers can implement their proprietary solutions. Nevertheless, Bock recommends Codentify for smaller companies. "It is simple and manageable, has a proven track record and involves comparatively low investment." He points out that implementation can now be simplified with new Codentify interfaces that are designed to improve integration and connectivity between digital printing technology, the required Codentify code generator and the tobacco applications.

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## Bibliographic data: AR094031 (A1) — 2015-07-08

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### METHOD AND APPARATUS FOR MARKING MANUFACTURED ITEMS USING PHYSICAL CHARACTERISTIC

**Inventor(s):** ERWAN FRADET [CH]; PATRICK CHANEZ [CH] ± (ERWAN FRADET, ; PATRICK CHANEZ)

**Applicant(s):** PHILIP MORRIS PRODUCTS SA [CH] ± (PHILIP MORRIS PRODUCTS S.A)

**Classification:** - international: **G09C5/00; H04L9/00**  
- cooperative: **G06Q30/0185; G09C5/00; H04L9/00; H04L9/0861; G06Q2220/10; H04L2209/122**

**Application number:** AR2013P104761 20131216

**Priority number (s):** EP20120197525 20121217

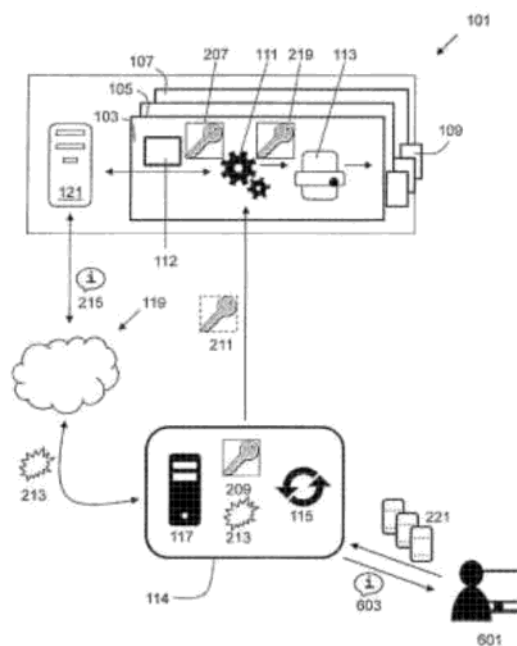
**Also published as:** WO2014095737 (A1) US2015317644 (A1) TW201440017 (A) SG11201504777S (A) PH12015501051 (A1) more

**Abstract not available for AR094031 (A1)**

**Abstract of corresponding document: WO2014095737 (A1)**

A method of marking a manufactured item is described, comprising: creating a unique product identifier for a manufactured item; creating one or more encryption keys; generating a secret key using the unique product identifier and the one or more encryption keys; generating a system noise value by performing a hash function on the secret key and the unique product identifier; generating a physical key from a measured physical property of the manufactured item; generating a physical noise value by performing a hash function on the physical key and the unique product identifier; generating a secure identifier derived from or incorporating the system noise value and the physical noise value; and placing a mark on the manufactured item, the mark comprising the secure identifier or an identifier derived from the secure identifier. Also described are methods of authenticating items marked in accordance with the described method.

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Espacenet

## Bibliographic data: AR094030 (A1) — 2015-07-08

### METHOD AND APPARATUS FOR STORAGE OF DATA FOR TRACKING MANUFACTURED ITEMS

**Inventor(s):** STEVE NIQUILLE [CH]; PATRICK CHANEZ [CH] ± (STEVE NIQUILLE, ; PATRICK CHANEZ)

**Applicant(s):** PHILIP MORRIS PRODUCTS SA [CH] ± (PHILIP MORRIS PRODUCTS S.A)

**Classification:** - international: G06C1/00; G06C3/00  
- cooperative: G06Q10/0833; G06Q10/087; G06Q30/018

**Application number:** AR2013P104760 20131216

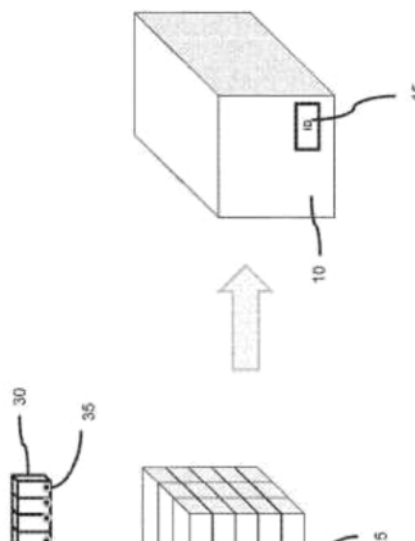
**Priority number (s):** EP20120197513 20121217

**Also published as:** WO2014095740 (A1) US2015332210 (A1) TW201433993 (A)  
SG11201504776Q (A) PH12015501029 (A1) more

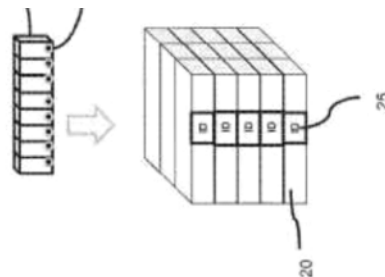
**Abstract not available for AR094030 (A1)**

**Abstract of corresponding document: WO2014095740 (A1)**

The invention provides a method for the generation and storage of data for manufactured items in a batch of manufactured items that reduces data storage requirements. The method may comprise the steps of: at a production line generating a unique identifier for each item, the unique identifier comprising production details and a counter value of an incremental counter; at a production line, associating each item with the corresponding unique identifier or an encrypted version of the unique identifier; reading at least some of the unique identifiers associated with items in the batch of the items to provide a list of read identifiers, wherein at least some counter



identifiers associated with items in the batch of the items to provide a list of read identifiers, wherein at least some counter values of the incremental counter are not in the list of read identifiers; generating a plurality of ranges of read identifiers, each range comprising a number of read identifiers having common production details and sequential counter values; and



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storing the plurality of ranges of read identifiers having common production details as a single data record in an electronic database, the single data record comprising the production details and an indication of each of the ranges of sequential counter values.

# CHALLENGING BIG TOBACCO



## CODENTIFY®: AN INDUSTRY ATTEMPT TO CONTROL ILLICIT TRADE

### HOLDING BIG TOBACCO ACCOUNTABLE THROUGH AN ILLICIT TRADE PROTOCOL (ITP)

Parties to the FCTC are negotiating a protocol to prevent illicit tobacco trade (ITP), building on Article 15 of the treaty. To uphold parties' obligations under the World Health Organization Framework Convention on Tobacco Control (FCTC), **this protocol MUST prioritize health over trade, protect health policy from tobacco industry interference and hold tobacco transnationals accountable for the harms they cause.**

### ARTICLE 5.3 AND THE ILLICIT TRADE PROTOCOL

Parties recognize tobacco industry interference as perhaps the greatest threat to FCTC implementation. As parties launched negotiations on an illicit trade protocol, the Conference of the Parties reaffirmed “the importance of Article 5.3 of the WHO FCTC, which requires the Parties to act to protect their public health policies from commercial and other vested interests of the tobacco industry in accordance with national law.” In practical terms, this means “the tobacco industry should not be a partner in any initiative linked to setting or implementing public health policies, given that its interests are in direct conflict with the goals of public health.”

Further, Article 7 of the draft text of the ITP states that “Obligations assigned to a Party shall not be performed by or delegated to the tobacco industry,” and that “Each Party shall ensure that its designated competent national authorities, in participating in the tracking and tracing regime, interact with the tobacco industry and those representing the interests of the tobacco industry only to the extent strictly necessary in the implementation of the provisions of this Article.”

### CODENTIFY®: THE TOBACCO INDUSTRY’S ATTEMPT TO UNDERMINE THE PROTOCOL

Parties have already made significant progress on Article 7, which aims to establish the global tracking and tracing of tobacco products. **The tobacco industry’s latest effort to undermine the ITP is an industry-created brand-authentication and tracing system known as Codentify®.** Although developed and patented by Philip Morris Products, S.A. (PMP), British American Tobacco (BAT), Imperial Tobacco and Japan Tobacco International have publicly endorsed the system.

This industry sponsored system was not designed to “track” as defined in the current draft Protocol, nor was it designed to be controlled by governments. Because tobacco transnationals have benefited from—and even been complicit in—illicit trade in tobacco products in order to open up new markets and evade taxes, **parties should reject industry-promoted systems to control illicit trade.**

#### BOSTON

10 Milk Street  
Boston, MA 02108  
Tel: 617.695.2525

#### BOGOTÁ

Oficina América Latina  
Bogotá, Colombia  
Tel: 57.1.8022011

[www.StopCorporateAbuse.org](http://www.StopCorporateAbuse.org)  
[info@StopCorporateAbuse.org](mailto:info@StopCorporateAbuse.org)

**Phillip Morris Products' patented Codentify®** is an effort by the tobacco industry to preempt and thwart efforts to reign in illicit trade, and control sensitive data and system functionality. The use of Codentify® by governments raises serious concerns regarding the delegation of parties' obligations under Article 7 to the tobacco industry. In addition, the tobacco industry's promotion of Codentify® creates unnecessary interactions between government officials and the industry that can result in direct violation of Article 5.3 and its guidelines.

PMP has carefully crafted language in the patent to circumvent parties' obligations under Article 5.3, referencing a "a trusted third party" having control over the system if it involved tax collection and an "independent integrator" that was described as the system's administrator. These concepts were promoted by a group called the Digital Coding and Tracking Association, which consists of representatives from major tobacco corporations.

### **WHY GOVERNMENTS SHOULD BE WARY OF CODENTIFY®**

- Philip Morris Products holds the patent to Codentify®, and it has been endorsed by British American Tobacco, Imperial Tobacco and Japan Tobacco International. Given the industry's ongoing history of complicity in illicit trade and interfering in the life-saving health measures of the FCTC, **any industry-promoted system will inherently undermine public health efforts and potentially effect anti-illicit trade investigations.**
- Even accepting the use of a "trusted third party" or any similar entity, **Codentify® remains a system developed, patented, promoted directly and indirectly by the tobacco industry.**
- **Codentify® gives the industry sensitive, proprietary information from competitors and governments that, if misused, would actually make it easier for them to engage in illicit trade, evade taxes and open up new markets for their brands.**
- **With Codentify®, manufacturers, not governments, control and store data.** This presents serious problems in terms of transparency and accountability.
- **Codentify® is not proven to increase revenue for governments,** unlike tracking and tracing systems created by independent security products companies.
- **Because Codentify® is primarily a brand-authentication system, not a tracking and tracing system, seizure is likely to be focused on counterfeit and expired products.** It is in the tobacco industry's interest to get the government to seize counterfeit and expired products that compete with their brands or otherwise impact brand value. Though this is laudable, this means that less focus will be placed on preventing smuggling and overproduction, which is the primary way that the tobacco industry evades taxes and opens up new markets for its deadly products.

### **WE STRONGLY URGE PARTIES TO:**

- Not utilize Codentify® because of its direct ties to the tobacco industry.
- Adopt a robust and independent tracking and tracing systems where governments, not the tobacco industry, control operations and information

*The final text of the illicit trade protocol should reflect these key principles while ensuring consistency with the FCTC Article 5.3 Guidelines ([http://www.who.int/fctc/guidelines/article\\_5\\_3.pdf](http://www.who.int/fctc/guidelines/article_5_3.pdf)). For background on Article 5.3 and an exposé of current tobacco industry tactics to undermine the FCTC and the illicit trade protocol, visit [www.ChallengingBigTobacco.org](http://www.ChallengingBigTobacco.org).*

**BOSTON**

10 Milk Street  
Boston, MA 02108  
Tel: 617.695.2525

**BOGOTÁ**

Oficina América Latina  
Bogotá, Colombia  
Tel: 57.1.8022011

[www.StopCorporateAbuse.org](http://www.StopCorporateAbuse.org)  
[info@StopCorporateAbuse.org](mailto:info@StopCorporateAbuse.org)

A COMPLETE SOLUTION FOR  
TACKLING ILLICIT TRADE



## ***Implementing Technologies to Fight the Illicit Trace***

Daniel Hubert

May 2013

# DIGITAL CODING & TRACKING ASSOCIATION



## AIM

To promote cost effective industry standards & supporting technology solutions for...

**Digital Tax Verification**

**Track & Trace**

**Product Authentication**

## HOW

- Engage with governments and international organisations
- Work with standardisation bodies and solution integrators

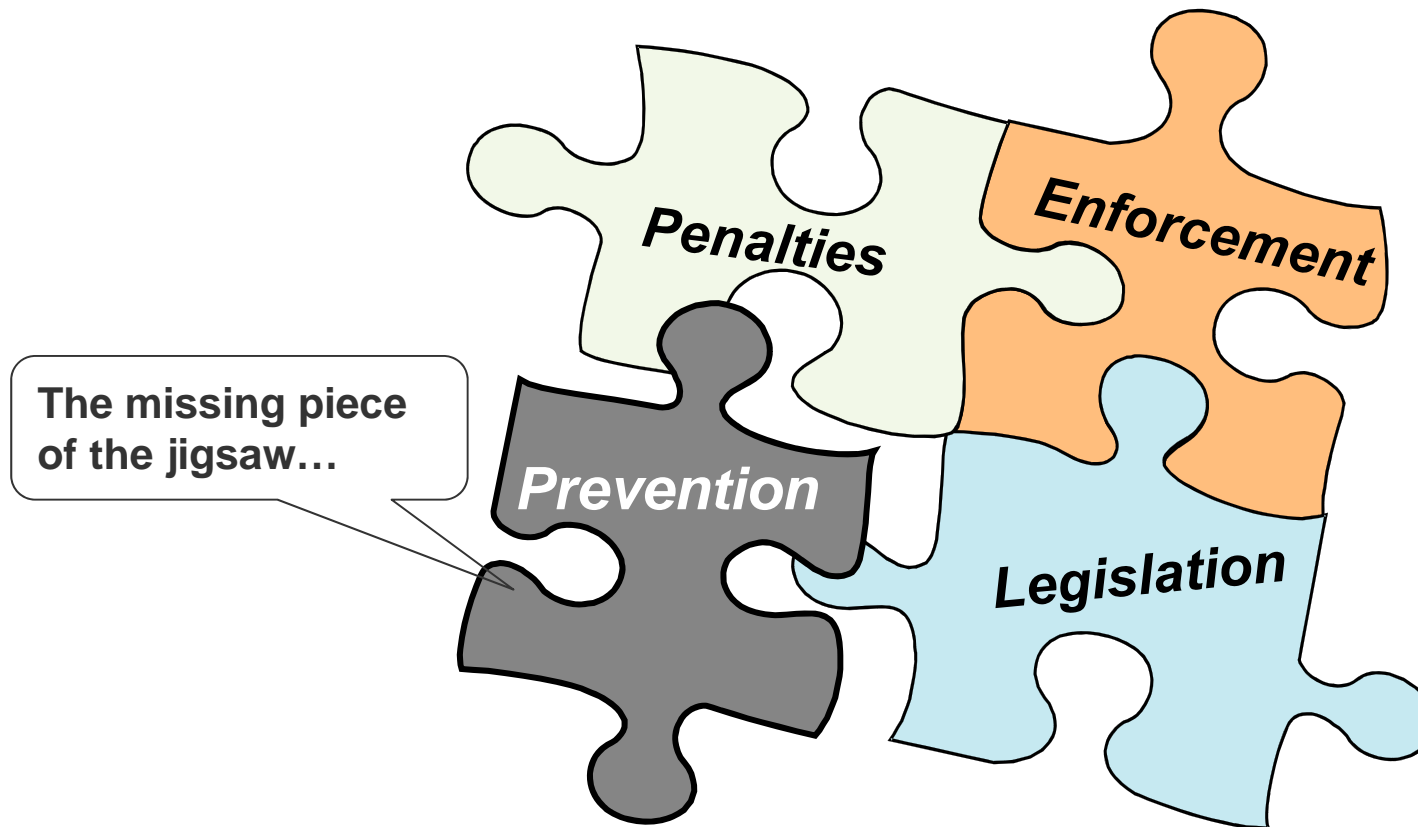
**Drive for the adoption of standards (and approved solutions) to fight illicit trade in excisable products.**

# WHO WE ARE



- Formal Association, registered in Zurich
- Current members:   |  
- Produce 75% of the world's tobacco products (excluding China), or some 2.5 trillion cigarettes (2011)
- Raise over US\$150 billion in taxes annually
- Membership open to any manufacturer of excisable products that is actively seeking to reduce illicit trade

# PREVENT ILLICIT TRADE BY IMPLEMENTING TECHNOLOGY



**Technology: A key enabler, but not a silver bullet**

# ILLCIT TRADE IS GROWING



## PROBLEM



**Smuggling**



**Counterfeit**



**Tax Evasion**

## IMPACTS

**600+ billion illicit cigarettes**

**10-12% of world consumption**

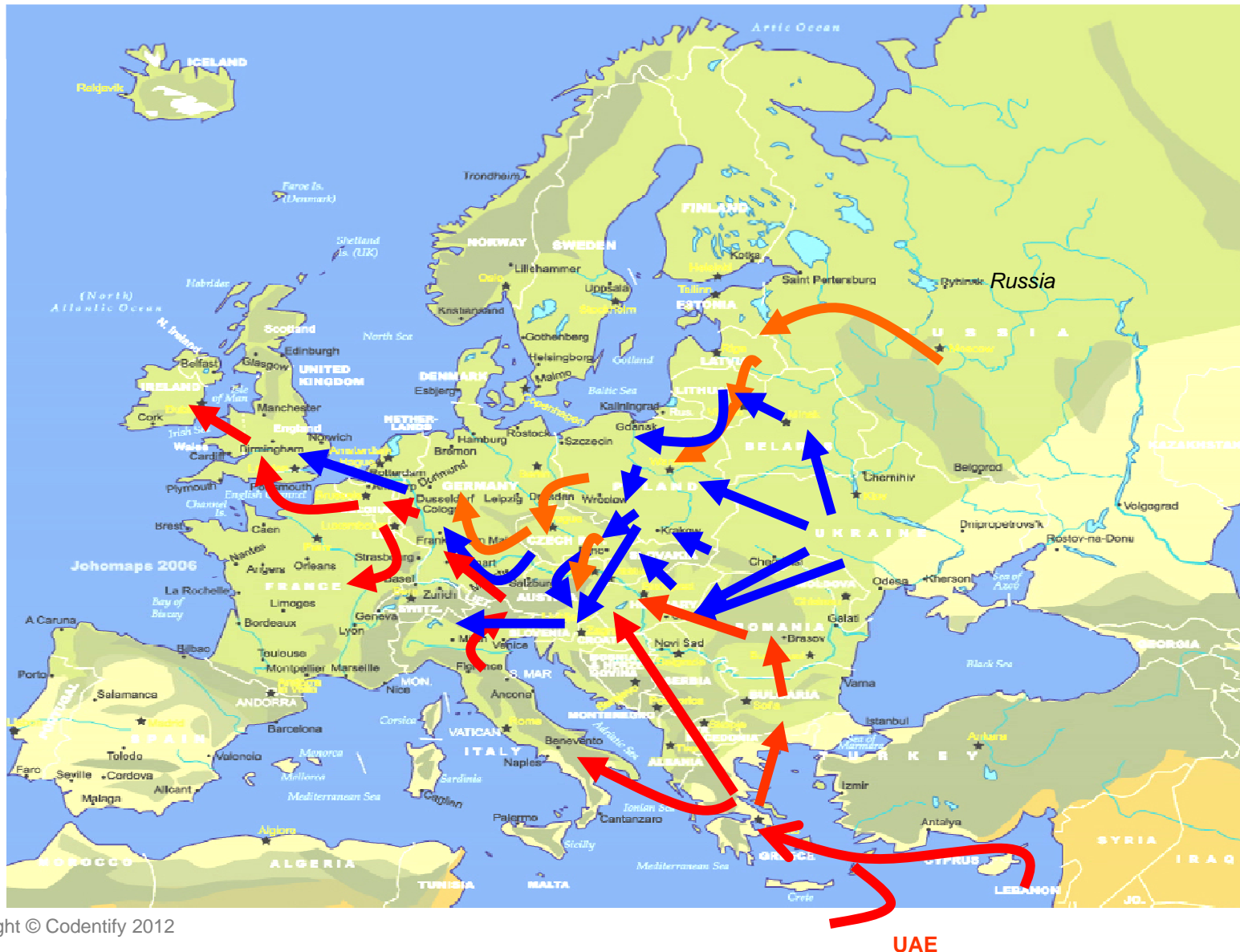
**Annual tax revenue loss: US\$40 billion**

**Poor quality & unregulated products**

**Annual revenue loss to business: US\$5-10 billion**

**Funding organised crime & terrorism**

# A TRULY TRANSNATIONAL PROBLEM



Copyright © Codentify 2012

# REGULATIONS, BUT NO CLEAR STANDARDS ON THE HOW



## PROBLEM



**Smuggling**



**Counterfeit**



**Tax Evasion**

## SOLUTIONS

**Track & Trace**

**Authentication**

**Volume/Tax  
Verification**

**WHO: FCTC Illicit  
Trade Protocol**

# WHAT THE FCTC ITP SAYS



**Global T&T**  
Cigarettes 5 years  
OTP 10 years

*“..agree to establish within five years of entry into force of this Protocol a global tracking and tracing regime, comprising national and/or regional tracking and tracing systems and a global information-sharing focal point..”*

**Pack Level T&T**

*“..unique identification markings, such as codes or stamps, are affixed to or form part of all unit packets and packages and any outside packaging of cigarettes..”*

**Full T&T Data**  
As per EU Agreement

*“..as part of the global tracking and tracing regime, require that the following information be available..*

- (a) date and location of manufacture;*
- (b) manufacturing facility;*
- (c) machine used to manufacture tobacco products;*
- (d) production shift or time of manufacture;*
- (e) the name, invoice, order number and payment records of the first customer who is not affiliated with the manufacturer;*
- (f) the intended market of retail sale;*
- (g) product description;*
- (h) any warehousing and shipping;*
- (i) the identity of any known subsequent purchaser; and*
- (j) the intended shipment route, the shipment date, shipment destination, point of departure and consignee.”*

**Beyond 1st Customer**

*“..further development and expansion of the scope of the applicable tracking and tracing system up to the point that all duties, relevant taxes, and where appropriate, other obligations have been discharged at the point of manufacture, import or release from customs or excise control.”*

- The Protocol was opened for signature 10 January 2013 and will remain open until 9 January 2014
- Comes into force 90 days after 40<sup>th</sup> signature

# TRACK & TRACE



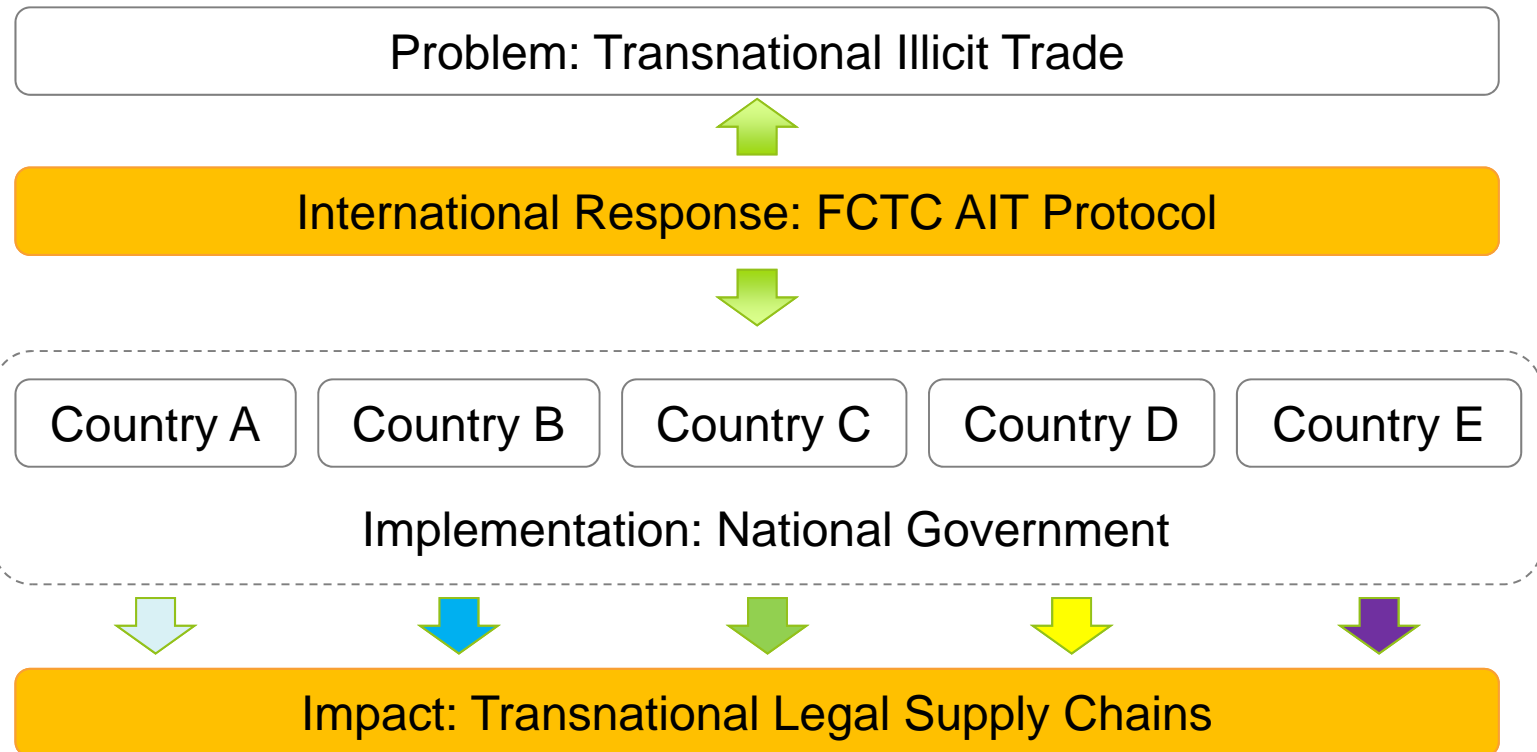
**“Tracking”** - the forward movement of goods through the supply chain; and also



**“Tracing”** - backwards through the supply chain to establish where genuine products may have been diverted from normal distribution channels.

- ✓ **unique identification of products**
- ✓ **hierarchy management of packaging units**
- ✓ **scanning capabilities across multiple locations**
- ✓ **integration of multiple data capture points**
- ✓ **centralised data capture**

# FCTC: IMPLEMENTATION RISK



**Risk: Governments implement the FCTC without considering the international nature of the problem**

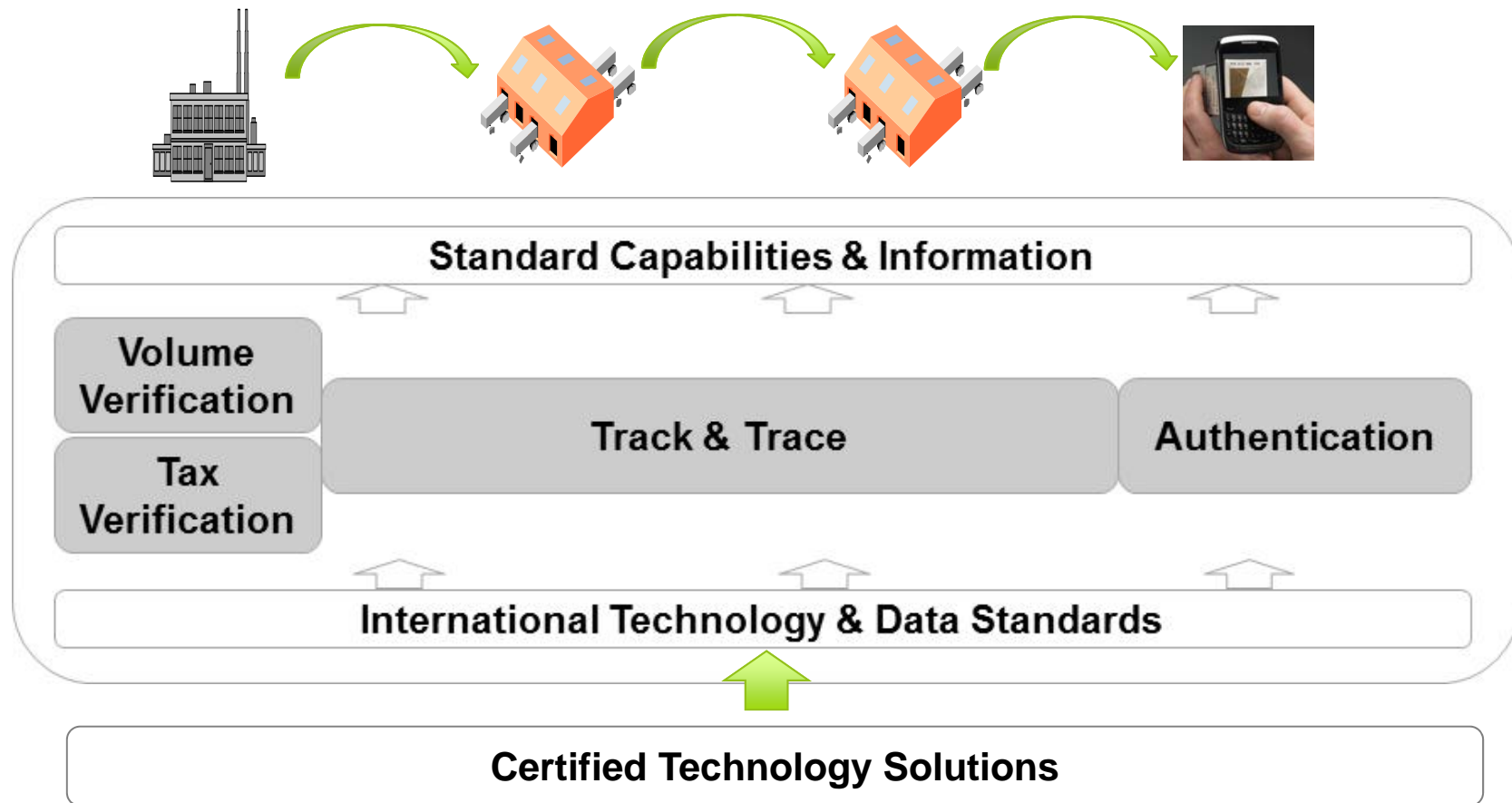
**Result: the FCTC Protocol is not delivered and proves ineffective**

# WHAT IS NEEDED TO BE SUCCESSFUL...



1. A coordinated **international response**
2. **Technology solutions based on internationally recognised standards** that provide stakeholders with the following capabilities:
  - Visibility & control over manufacturing and distribution
  - Tracking & Tracing and identification of points of diversion
  - Enhanced tax recovery
  - Improved law enforcement capacity
  - Product authentication by anyone: mass consumer authentication
  - Cost effectiveness

# INTEGRATED SECURE TECHNOLOGY



**End to end secure technology model that protects  
legal transnational supply chains**

# TECHNOLOGY SOLUTIONS BASED ON INTERNATIONAL STANDARDS



**The DCTA has developed a complete  
solution for tackling illicit trade**



## **Digital Tax Verification**

protect tax revenues by strengthening recovery capabilities and reducing evasion

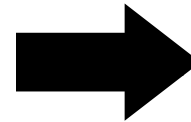
## **Track & Trace**

monitor and secure the distribution of products worldwide

## **Product Authentication**

anytime, anywhere verification of product by anyone

# 'ACTIVE' VERIFICATION THROUGH DIGITAL CODING



**Tax stamps: Passive authentication**

**Digital coding: Active verification**

**Law enforcement, retailers & consumers  
Large data source to analyse illicit trade issues and trends**

# CODENTIFY DELIVERS FOR GOVERNMENTS



**Real-time visibility and control**



**Protects government revenues**



**Strengthens law enforcement capacity**



**Meets international regulatory requirements**



**Guarantees product integrity**



**Cost effective, secure and easy to implement**



# A PROVEN TRACK RECORD



**Codentify is operating in over 50 countries worldwide**



**EU anti-illicit  
trade agreements**

**INTERPOL  
Global Register**



CODENTIFY®

# THANK YOU

## Patents by Inventor Patrick Chanez

Patrick Chanez has filed for patents to protect the following inventions. This listing includes patent applications that are pending as well as patents that have already been granted by the United States Patent and Trademark Office (USPTO).

- [METHOD AND APPARATUS FOR STORAGE OF DATA FOR TRACKING MANUFACTURED ITEMS](#)

**Publication number:** 20150332210

**Abstract:** The invention provides a method for the generation and storage of data for manufactured items in a batch of manufactured items that reduces data storage requirements.

**Type:** Application

**Filed:** December 16, 2013

**Publication date:** November 19, 2015

**Inventors:** Steve NIQUILLE, Patrick CHANEZ

- [METHOD AND APPARATUS FOR MARKING MANUFACTURED ITEMS USING PHYSICAL CHARACTERISTIC](#)

**Publication number:** 20150317644

**Abstract:** A method of marking a manufactured item is described, comprising: creating a unique product identifier for a manufactured item; creating one or more encryption keys; generating a secret key using the unique product identifier and the one or more encryption keys; generating a system noise value by performing a hash function on the secret key and the unique product identifier; generating a physical key from a measured physical property of the manufactured item; generating a physical noise value by performing a hash function on the physical key and the unique product identifier; generating a secure identifier derived from or incorporating the system noise value and the physical noise value; and placing a mark on the manufactured item, the mark comprising the secure identifier or an identifier derived from the secure identifier. Also described are methods of authenticating items marked in accordance with the described method.

**Type:** Application

**Filed:** December 16, 2013

**Publication date:** November 5, 2015

**Inventors:** Patrick Chanez, Erwan Fradet

- [METHOD AND APPARATUS FOR STORAGE OF DATA FOR MANUFACTURED ITEMS](#)

**Publication number:** 20150310386

**Abstract:** Exemplary embodiments are directed to a method and apparatus for storing data for a batch of manufactured items. The method comprises defining in a processor, using a lower limit identifier and an upper limit identifier, a range of unique item identifiers for the batch, wherein each manufactured item in the batch is allocated a unique item identifier falling within the range. The item identifiers are stored in allocated storage space. If an upper limit identifier is specified for each time interval, an amount of storage specified for all manufactured items during a production time period is calculated as a sum of a first product and a second product, the first product being a product of a production time and a size allocated to each upper limit identifier, and the second product being a product of the production time, a total number of manufactured items, and a percentage of unused identifiers.

**Type:** Application

**Filed:** June 12, 2015

**Publication date:** October 29, 2015

**Applicant:** PHILIP MORRIS USA INC.

**Inventors:** Erwan FRADET, Alain SAGER, Patrick MAUROUX, Patrick CHANEZ, Philippe CHATELAIN

- [Method and apparatus for storage of data for manufactured items](#)

**Patent number:** 9058584

**Abstract:** Exemplary embodiments are directed to a method and apparatus for storage of data for a batch of manufactured items. The method comprises defining, by a lower limit identifier and an upper limit identifier, a range of unique item identifiers for the batch, wherein each manufactured item in the batch is allocated a unique item identifier falling within the range. The number of unique item identifiers allocated to the manufactured items is smaller than the number of unique item identifiers in the range. The unique item identifiers allocated to the manufactured items are defined by the lower limit item identifier of the range, the upper limit item identifier of the range and an indication of those item identifiers in the range which are not allocated to a manufactured item.

**Type:** Grant

**Filed:** December 22, 2010

**Date of Patent:** June 16, 2015

**Assignee:** Philip Morris USA Inc.

**Inventors:** Erwan Fradet, Alain Sager, Patrick Mauroux, Patrick Chanez, Philippe Chatelain

- [METHOD AND APPARATUS FOR MARKING MANUFACTURED ITEMS](#)

**Publication number:** 20140046852

**Abstract:** A method and apparatus includes providing a cryptographic key, in an inactive state, to a point in a supply chain for manufactured items, providing the cryptographic key, in an active state, and an activation code for activating the cryptographic key, to a verification centre, and providing the activation code to the point in the supply chain in response to the point in the supply chain transmitting information relating to the received cryptographic key. The method includes generating, at the point in the supply chain, an identification (ID) code for each manufactured item, derived from the cryptographic key in the active state and a dynamic key generated for each batch of manufactured items. Including providing the dynamic key for each batch of manufactured items to the verification centre, marking each manufactured item with the ID code, and counting the actual or correct number of ID codes marked on the manufactured items.

**Type:** Application

**Filed:** December 21, 2011

**Publication date:** February 13, 2014

**Inventors:** Philippe Chatelain, Patrick Chanez, Erwan Fradet, Alain Sager

- [METHOD AND APPARATUS FOR STORAGE OF DATA FOR MANUFACTURED ITEMS](#)

**Publication number:** 20110154046

**Abstract:** Exemplary embodiments are directed to a method and apparatus for storage of data for a batch of manufactured items. The method comprises defining, by a lower limit identifier and an upper limit identifier, a range of unique item identifiers for the batch, wherein each manufactured item in the batch is allocated a unique item identifier falling within the range. The number of unique item identifiers allocated to the manufactured items is smaller than the number of unique item identifiers in the range. The unique item identifiers allocated to the manufactured items are defined by the

lower limit item identifier of the range, the upper limit item identifier of the range and an indication of those item identifiers in the range which are not allocated to a manufactured item.

**Type:** Application

**Filed:** December 22, 2010

**Publication date:** June 23, 2011

**Applicant:** Philip Morris USA Inc.

**Inventors:** Erwan Fradet, Alain Sager, Patrick Mauroux, Patrick Chanez, **Philippe Chatelain**

- [METHOD AND APPARATUS FOR IDENTIFYING, AUTHENTICATING, TRACKING AND TRACING MANUFACTURED ITEMS](#)

**Publication number:** 20090230190

**Abstract:** A method and apparatus for identifying manufactured items in containers, where each container is suitable for containing two or more units, and where the method comprises the steps of: associating each unit with a unique unit identifier, uniquely identifying each unit, allocating two or more units to be contained in each container, uniquely identifying each container, for each container, determining one or more ranges of unit identifiers of the two or more units allocated to the container, and storing, in a database, a container identifier for each container, each container identifier being coupled, in the database, to the one or more ranges of unit identifiers of the two or more units allocated to the container. There is also provided methods and apparatus for authenticating, tracking and tracing the units.

**Type:** Application

**Filed:** March 17, 2009

**Publication date:** September 17, 2009

**Applicant:** Philip Morris USA Inc.

**Inventors:** Patrick Chanez, Alain Sager, **Philippe Chatelain**, Erwan Fradet

# Why It's Bad

<https://whyitisbad.wordpress.com/>

## Investigating Tobacco Industry Corruption

### Sale of Codentify to Inexto Means Business as Usual for Big Tobacco

June 21, 2016



Today, [Peter Teffer](#) from the EU Observer published a hard hitting article about the [DCTA's](#) sale of Codentify to what at first glance seems like a third party company. I felt it important to provide as much detail as possible to shed even more light on the important issues he raised.

Just a small reminder before we proceed – DCTA stands for “Digital Coding & Tracking Association”, which is a very “techy” brand-name for an association consisting of the Big Tobacco companies (I guess Deception Campaign for Tobacco Affiliates would sound a bit too sincere...).

It seems that the industry’s efforts to portray Codentify as a legitimate “Digital Coding and Tracing” solution have finally crumbled, because at the beginning of the June DCTA’s official web page released a statement that all of its technology was allegedly transferred to an independent third party company named “Inexto”. If that was entirely true, it would be good news for the advocates of an independent Track & Trace solution, such as the FCTC protocol and this blog – but unfortunately in this case, it is only an additional layer of deceit.

The press release states that Inexto, an affiliate of the French group [Impala](#), has acquired the DCTA’s Track & Trace and product authentication technology (i.e. Codentify). It must raise a question – who is really behind this Inexto company that decided to buy a controversial product such as this?

Meet Inexto’s managing director, [Philippe Chatelain](#). You might know him from his former role

Philippe Chatelain

Director Technology Center

Lausanne, Canton de Vaud, Switzerland | Information Technology and Services

Current Philip Morris International

Education Université de Neuchâtel

Send Philippe InMail

▼

163 connections

https://ch.linkedin.com/in/philippe-chatelain-2513b54

Background

Experience

Director Product Tracking Intelligence & Security

Philip Morris International

2002 – Present (14 years)

PHILIP MORRIS INTERNATIONAL

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau

(43) International Publication Date  
13 April 2006 (13.04.2006)

(10) International Publication Number  
WO 2006/038114 A1

(51) International Patent Classification:  
G06K 17/00 (2006.01)

(21) International Application Number:  
PCT/IB2005/003103

(22) International Filing Date:  
29 September 2005 (29.09.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
EP04104954.5 8 October 2004 (08.10.2004) EP

(71) Applicant: PHILIP MORRIS PRODUCTS S.A.  
[CH/CH]; Quai Jeanrenaud 3, CH-2000 Neuchâtel (CH).

(72) Inventors: SAGER, Alain; Route de Reynet 4, 1615  
Bonnens (CH). CHATELAIN, Philippe; Chemin de  
Chaudremont 12a, 1373 Chavornay (CH). FRADET,  
Erwan; Rue de Maupas 19c, 1004 Lausanne (CH).

(74) Agent: LLOYD, Patrick, Alexander, Desmond; Reddie  
& Grose, 16 Theobalds Road, London WC1X 8PL (GB).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY,  
MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO,  
NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,  
SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VN, VC, YU, ZA, ZM, ZW.

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kind of regional protection available): ARIPO (BW, GH,  
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European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,  
RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA,  
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:  
— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND SYSTEMS FOR MAKING, TRACKING AND AUTHENTICATION OF PRODUCTS

[Erwan Fradet](#) was a senior engineer in PMI's tracking and security activities over the past 10+ years, in fact, since 2010 he was Codentify's project manager. But where does he work these days? He is Inexto's new Chief Technology Officer!

## Erwan Fradet

Chief Technology Officer at INEXTO SA  
Geneva Area, Switzerland | Computer Software

Current **Inexto SA**  
Previous **Philip Morris International, ELCA Informatique SA**  
Education **Ecole polytechnique fédérale de Lausanne**

Send Erwan InMail

216  
connections

<https://ch.linkedin.com/in/erwan-fradet-b156883>

### Background



### Experience

#### Chief Technology Officer

Inexto SA  
June 2016 – Present (1 month)

#### Product Manager Codentify

Philip Morris International  
September 2010 – May 2016 (5 years 9 months)



And the list goes on... Inexto's Chief Operating Officer, Patrick Chanez, is also a senior PMI manager:

#### Chief Operating Officer

Inexto SA  
June 2016 – Present (1 month) | Lausanne Area, Switzerland

#### Senior Manager Technology Center Research & Development

Philip Morris International  
April 2011 – May 2016 (5 years 2 months) | Lausanne Area, Switzerland



#### Project Manager Anti Illicit Trade Technology R&D

Philip Morris International  
January 2005 – April 2011 (6 years 4 months)



And so is Inexto's Development Manager, Nicolas Stubi:

#### Manager Development

Inexto SA  
June 2016 – Present (1 month) | Lausanne Area, Switzerland

#### Project Manager Anti Illicit Trade Technology Center R&D

Philip Morris International  
July 2015 – May 2016 (11 months) | Lausanne Area, Switzerland



#### Project Leader Anti Illicit Trade Technology R&D

Philip Morris International  
May 2013 – June 2015 (2 years 2 months) | Lausanne Area, Switzerland



#### Engineer Technology Center Research & Development

Philip Morris International  
October 2012 – April 2013 (7 months) | Lausanne Area, Switzerland



#### Engineer Anti-Illicit Trade Technology R&D

Philip Morris International  
January 2012 – September 2012 (9 months) | Lausanne Area, Switzerland



The question that remains unanswered is: What type of severance and pension plans did these employees receive from PMI?

By now the bottom line is clear: Inexto did not acquire Codentify – Inexto IS Codentify. Same people, same interests. In fact, these are high ranking PMI managers, who were (and still are) in the core of Codentify operations. A name change and a couple of money transfers from one corporation to another does not change this reality, and simply cannot be enough to satisfy the rightful demands of the FCTC protocol for a truly impartial solution, not one that has a decade's worth of ties to the tobacco industry.

## **Monumental decision by the EUs High Court Leaves out Codentify**

May 22, 2016June 8, 2016

It was day for anti-tobacco activists in Europe as its High Court confirms anti-tobacco laws, but this modest win still does not address Codentify, which could prove most harmful to citizens.

Recently the [New York Times's columnist David Jolly](#) reported on the recent upholding of new anti-tobacco laws that will take effect at the end of May. The laws included in the EU High Court decision were the legal right of the legislative coalition to restrict and regulate the newly established e-cigarette industry, a ban on menthols, as well as obliging all cigarette packs to contain an image of diseased lungs, also known as "Plain Packaging".

Despite this monumental confirmation of anti-tobacco laws, the article reports that twenty-eight countries in the EU aren't necessarily bound by all of the laws' stipulations, and can essentially customize the laws to their specific needs. Therefore, the binding nature, and the net positive effect henceforth, of this new set of laws can be put into serious doubt.

Luckily, however, the article notes that even with the addendum of flexibility, the general ruling cannot be appealed by the tobacco industry, which can be considered a win in its own right. Nevertheless, the EU should prepare for an assault by Big Tobacco to reverse these common-sense laws that have only now been cleared by the High Court. According to most experts, the tobacco lobby will most likely consolidate its fight against plain packaging.

The law was originally passed in 2014, and yet these stipulations are only going to be put into effect this month. That's because, according to the article, certain countries appealed the legality of the 2014 laws because their populations and economies could "suffer" as a result, particularly Poland, Romania and England. Their courts begged whether the law should be indiscriminately extended across of all member states.

Take Poland: according to the New York Times, "Poland...has one of the world's highest rates of menthol cigarette consumption," which certainly clears the air as to where Poland (and its ally in this instance, Romania) stands in the fight against tobacco, and why they pioneered the appeal of these laws, particularly the part banning menthols.

That's why this case has taken particularly long, and had to be ratified by the Court of Justice in Luxembourg, which essentially serves as the EU's main appeals court to member states. Ultimately, however, the Court of Justice ruled that the law was legal and should be "applied evenly across the bloc".

Additionally, the regulation of e-cigarettes is a big step forward in the fight against Big Tobacco in Europe. Yet the article mentions no detailed analysis of these restrictions, and happen to note that the restrictions will certainly be weaker than that of traditional cigarettes.

The article notes that while the United States lacks federal laws against e-cigarettes, many individual states have taken it upon themselves to limit their use in public. In this regard, Europe has lots of catching up to do if it aims to sustain its reputation as being a pro-health coalition.

However, what grossly overshadows this modest legislative success is the complete lack of mention of the most dangerous policy in the European tobacco market: Codentify. Without the prevention of Codentify, all the aforementioned laws, and any future laws could prove completely obsolete.

For those who aren't aware, Codentify is a technological regulatory system aimed at preventing the manufacturing, shipping and sale of counterfeit tobacco products. The purpose of such a system is to be able to track and trace all legitimate sales, and thus determine what is or is not a legal form of tobacco.

The reason such a system needed remains multifold. Firstly, the counterfeit tobacco market tends to use lower-quality and more harmful tobacco in their products since they are beyond the scope of health regulations. The source and delivery of these products are even linked to terrorist organizations in the Middle East and North Africa. This inevitably makes the customer more at risk of health issues, and without the proper knowledge of the carcinogenic potential in the cigarette he or she was smoking.

Moreover, the counterfeit market allows many large tobacco corporations to evade millions of Euros in taxes that they would otherwise be giving back to citizens. This gives a major incentive for these tobacco corporations to actually participate in the counterfeit market. In fact, there have been many cases linking direct involvement between tobacco executives and the illegal sale of tobacco products both domestically and overseas.

Which makes it all the more ironic that the Codentify system was actually conjured up by Big Tobacco, and lobbied by them as well. This conflict of interest alone should be reason enough to be skeptical of the Codentify and block any attempt of implementing it in Europe.

Yet even the system itself has proven to be unreliable – primarily because it lacks any real track and trace system necessary for monitoring the counterfeit movement and sale of tobacco. When we look at all these reasons, the fact that Codentify still receives a general level of

support in the EU Parliament is astonishing and baffling – especially when we receive news of superficial laws like those the New York Times relayed this week.

In closing, while anti-tobacco leaders have a right to celebrate their win in the EU High Court today, they must not lose the forest for the trees, and should concentrate their efforts on blocking Codentify from being implemented in the European Union as soon as possible.