



DeLaRue

Product  
Authentication  
& Traceability  
Solutions

# Combating illicit trade, protecting revenues and protecting citizens

Illicit trade stunts economic growth, damages revenues and reputation and risks the health and safety of consumers.

Fighting this epidemic requires effective product authentication – the controlled movement, tracking and verification of genuine products from source to consumption – enabling governments to collect the correct tax revenues and consumers to make safe purchases.

As global specialists in product authentication and traceability, De La Rue is the partner you can trust to deliver the right solution for you.

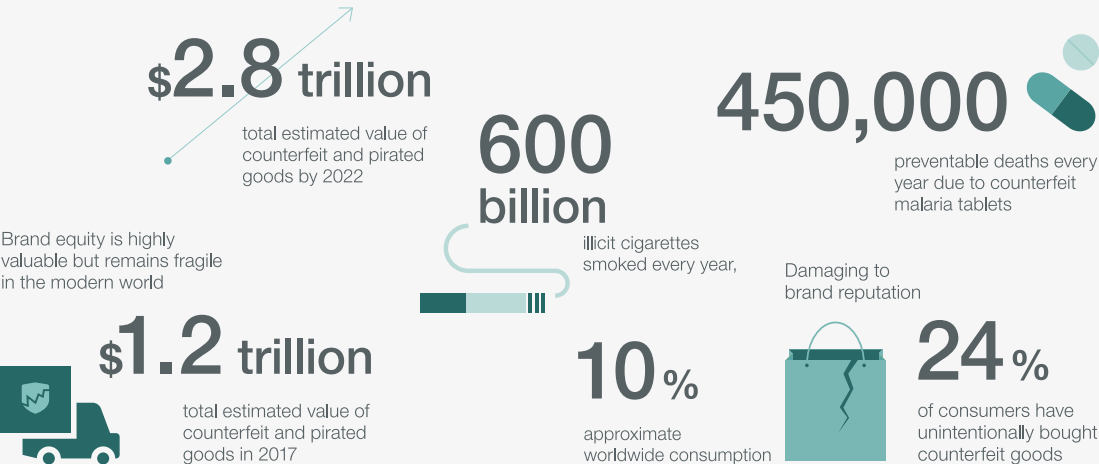
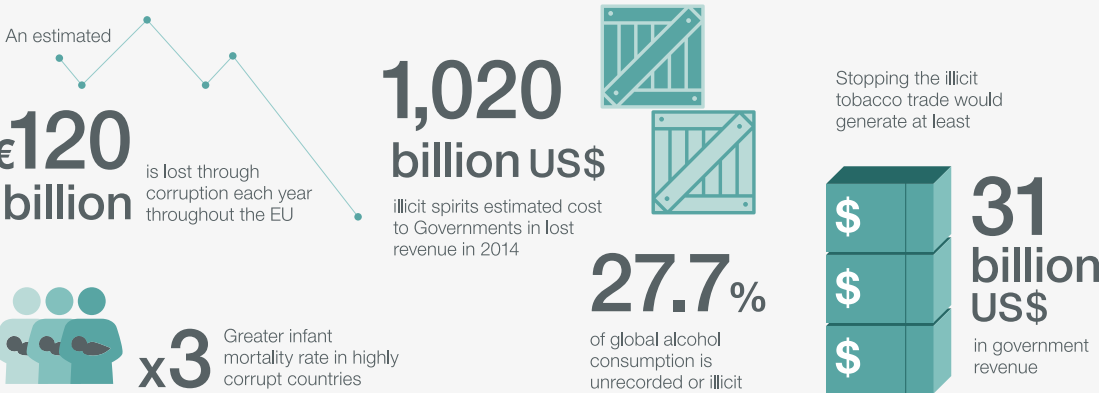
# Global Context and Market Insights

## Impact of illicit trade

On Government	On Brands & Enterprise	On Consumers	On Crime
Reduces government revenues due to tax evasion	Reduces brand value and damages brand reputation	Threatens consumer well being as a result of illicit manufacture	Growth of black and grey (diversion) markets
Stunts economic growth	Reduces size of legitimate goods market	Leads to lack of consumer trust	Part of the global corruption pandemic
Redirects funding that could be spent on development to support the fight against illicit trade	Increases fraudulent claims and returns	Damaging to health, potentially even leading to death	Provides funding for major crimes and terrorism
Limits investment in infrastructure	Discourages reinvestment into innovation and limits investment in jobs and skill development	Increased use of unsafe products e.g. hardware, electronics and consumables	Fuels criminality

## Illicit trade is a major problem

	Counterfeiting	Smuggling	Tax evasion
			
Scale	<b>\$650 BILLION</b> The illicit economy, primarily driven by the sale of counterfeit goods, is valued at US\$650 billion worldwide	<b>600 BILLION</b> The illegal, unregulated black market in cigarettes amounts to 600 billion cigarettes a year of 11% of global consumption	<b>58.6 BILLION</b> In the EU alone, 58.6 billion illegal cigarettes were consumed in 2013, equating to revenue losses of approx. €10.9 billion
Solution	To differentiate real products from fake ones is essential either through physical marking or digital means	To understand where a product is going and where it has been – its track and traceability – is a key element in identifying smuggled goods	Volume verification, through the use of tax markings or data analysis, ensures that excise revenues are collected efficiently on all products where they are due



Sources include: World Health Organization, World Bank, Transparency International, World Economic Forum and United Nations Conference on Trade and Development, July 2019





# The De La Rue solution

## Combatting illicit trade, protecting revenues, protecting citizens

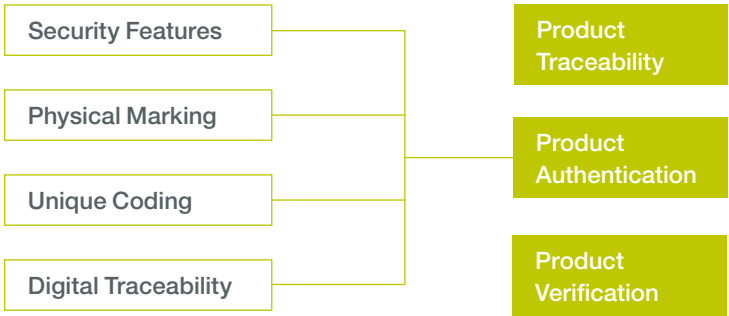
De La Rue is dedicated in the fight against illicit trade, to defeating counterfeiting and in providing the tools and expertise to support both brand and government revenue protection.

Our solutions are designed to enable governments to reduce illicit trade and control the movement of legitimate products with optimised tax revenue generation.

We work with all stakeholders to develop cost-effective product authentication and traceability solutions. And we provide the actionable evidence you need in the fight against illicit trade, counterfeit and fraud.

Our authentication schemes meet World Health Organization’s Framework Convention on Tobacco Control (FCTC) legislation requirements, incorporating tax stamps and a software platform linking unique identifiers to product, enabling full traceability of genuine goods and tax revenue collection.

Our approach, wherever possible, is to create a 3-way partnership that will strengthen your supply chain security, working alongside both the revenue and customs authorities as well as ensuring easy implementation for industry.



Underpinning the De La Rue solution, we offer and provide a wide range of services to ensure programme optimisation. This includes full project management, customer care centres, 24/7 helplines, full training and skill transfer and the building of long term strategic partnerships.



# The right solution



## De La Rue offers flexible commercial models

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From design, build and transfer to build and operate

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Giving the authorities choices in financing and degree of control

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Prices are competitive reflecting the complexity of the system and the volume of markers sold over the term



## De La Rue delivers a solution that can fully integrate with manufacturer's existing systems and processes

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We make it as easy as possible for manufacturers to implement the required solution

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Alignment with existing manufacturing processes to minimise disruption capital expenditure or investment

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We can use the manufacturers existing systems where possible or implement new solutions as required

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Detailed and proven onboarding processes

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Simple ordering process for physical and digital codes



# Meeting needs, delivering benefits

## Your needs

- To correctly identify and track legitimate products through the supply chain
- To collect tax revenue on defined products whether for revenue raising or health reasons
- Meet legislation
- Reporting from track and trace solution to inform target enforcement activities
- Consumer engagement applications as the first line of defence
- Increase public engagement with the revenue authorities and health messaging
- Protect citizens from harmful and illicit products
- IMF demands efficient tax collection as a condition of loaning funds
- Solution to work across multiple stakeholders and with fast payback

## Solution benefits

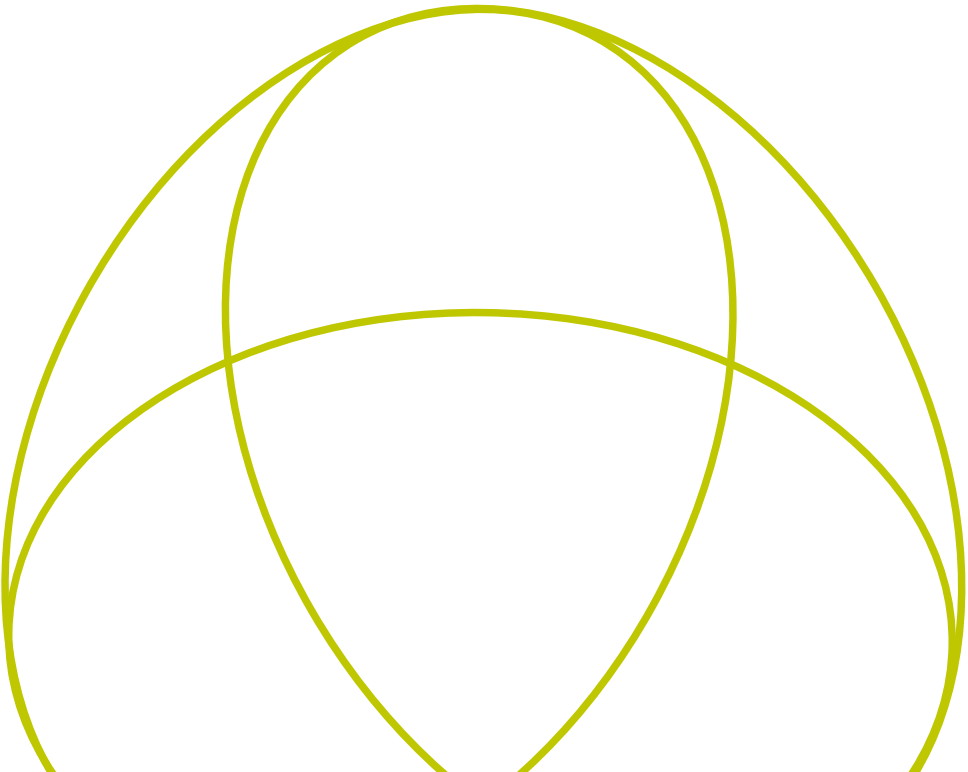
- Full anti-counterfeit solution
- Delivers global trace capability
- Customised to your requirements
- Can be self funding once up and running
- Revenues raised can contribute to funding for national infrastructure and socio-economic development
- Meets legislation
- Protects citizens

## Functional benefits

- Maximum security
- Globally proven solution
- Significant R&D backing to “stay ahead”

## Emotional benefits

- Peace of mind
- Low hassle



# Excisable goods

Illicit trade targets high value and excisable products. Governments can apply solutions to ensure collection of excise duty on a variety of different products:



Wine and spirits



Beer



Tobacco products



Vaping products



Pharmaceuticals



Soft beverages



Components

# Solutions suitable for all products

## A solution to address all forms of illicit trade

- Secure tax stamps to give absolute authentication for tobacco, wine, spirits & low volume beer and soft drinks.
- Direct code printing for domestic high volume beers and soft drinks.
- DLR Certify™ traceability software for track & trace and reporting

## Intelligent tax stamp for tobacco with direct printed code



## Intelligent tax stamp for wine and spirits



## Intelligent tax stamp for small volume imported beer and soft drinks



## Direct printed code for cigarettes, high volume beer and soft drinks



## Tobacco

Secure tax stamps and track and trace marker

### Compliant with WHO Framework Convention on Tobacco Control

### Compliant with EU Tobacco Products Directive



### Physical Tax Stamp

- Carries Security Features
- Visible “tax paid” marker
- Not used for track and trace
- Issued by De La Rue
- Applied by manufacturer



### Digital Pack Code

- Track and Trace marker
- Issued by De La Rue
- Printed directly to pack by manufacturer



## Wine and spirits

Secure tax stamps with track and trace marker

### Common system architecture with tobacco solution and in-field inspector interface



### Physical Tax Stamp

- Carries Security Features
- Visible “tax paid” marker
- Used to seal the bottle and prevent refill with illicit alcohol
- Code on stamp is used for track and trace
- Issued by De La Rue
- Applied by manufacturer

## Beers and soft beverages

Secure track and trace marker

### Common system architecture with tobacco solution and in-field inspector interface



### Digital Secure Marker

- Track and Trace marker
- Printed directly onto bottles and cans
- Suitable for standard high speed CIJ systems
- Issued by De La Rue
- Digital security, no need for special inks
- Code structure and intelligent software prevent counterfeiting and cloning



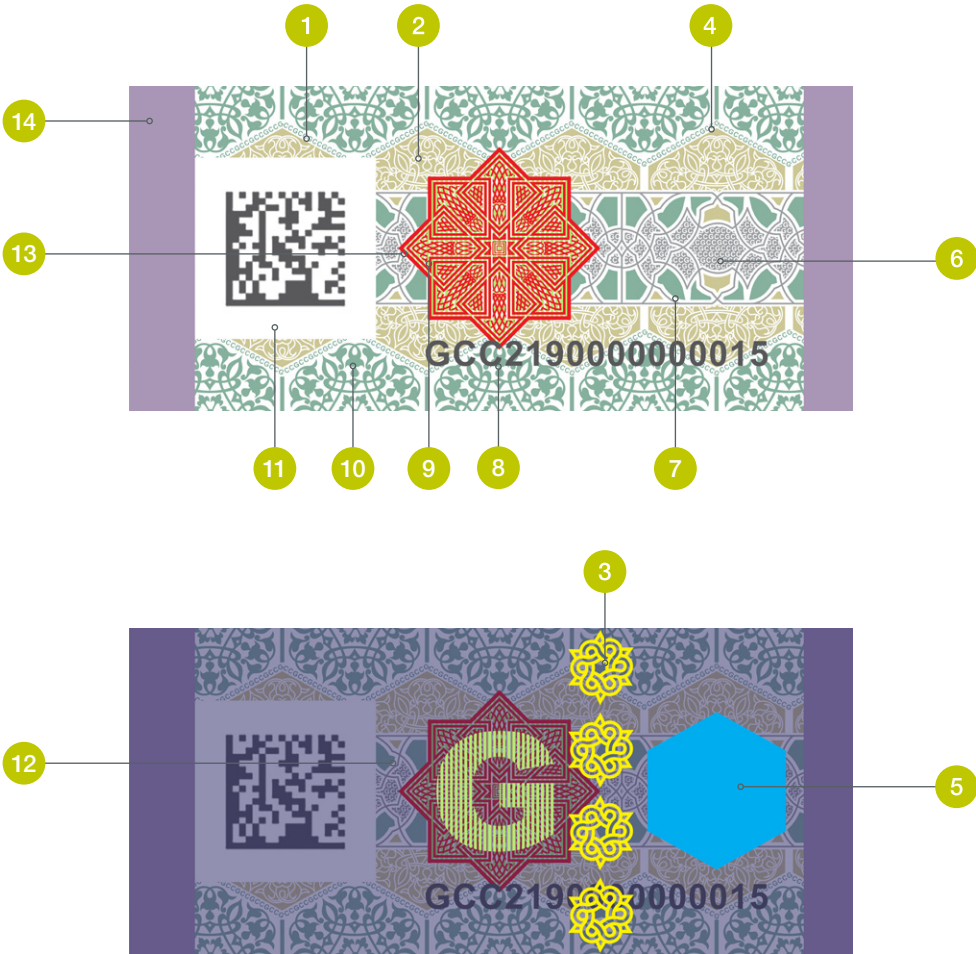


# Security features to prove authenticity

Tax stamps provide governments with a way to mark their excisable products, ensuring the correct tax has been paid and to enable the validation and authentication of these products as genuine.

The design of the tax stamp is achieved via a sophisticated layering of highly secure print features combining specific overt, covert and forensic elements, bespoke to each country's requirements.

The below shows an example of a tax stamp and some of the features that can be incorporated into its design.



1. Extra small print



2. Visible fibres



3. Invisible



4. Deliberate error



5. Machine readable taggant



6. REMIC



7. Duplex



8. 16 digit Certify™ HR code



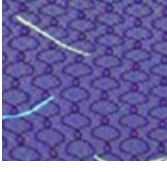
9. Guilloche



10. Background pattern



11. 20 data matrix barcode



12. Invisible fibres



13. Metameric with IR seal feature and primary fluorescence



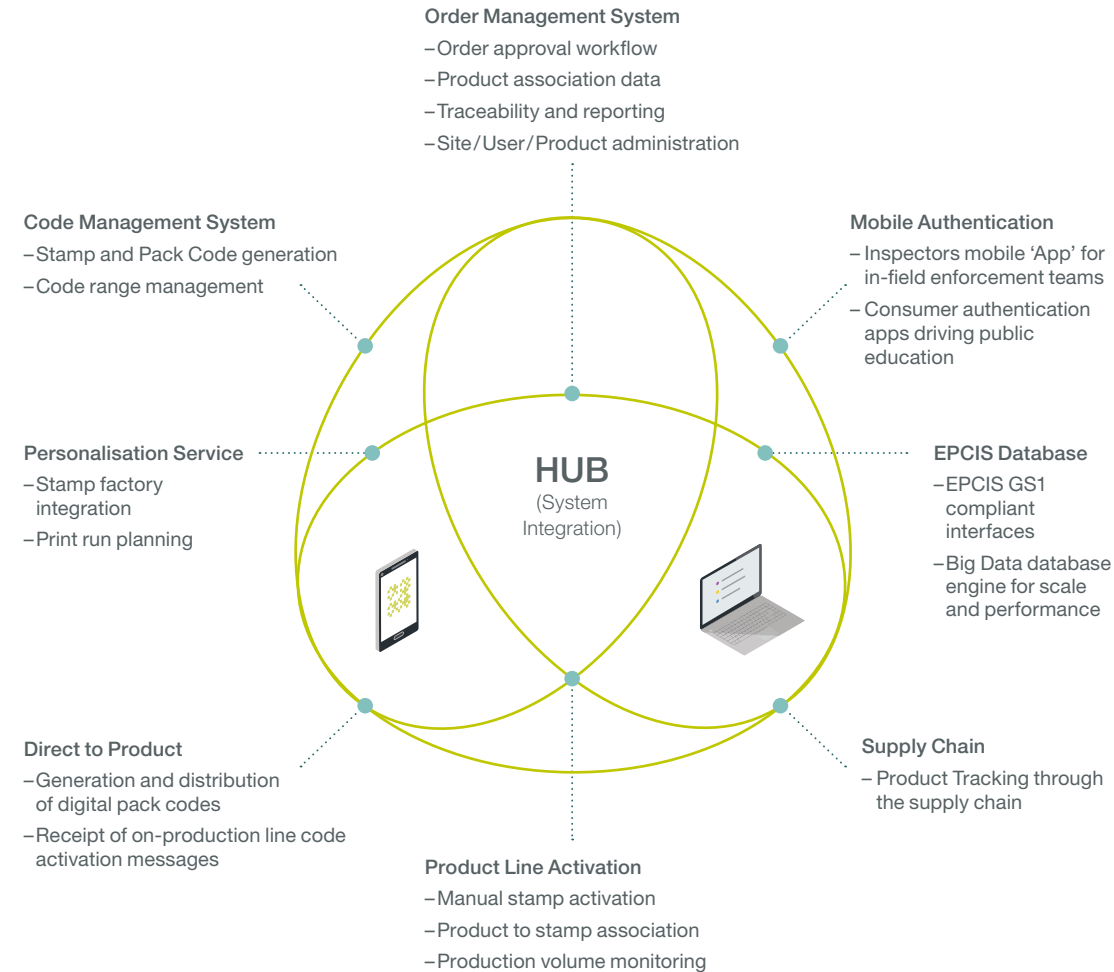
14. Thermochromic ink



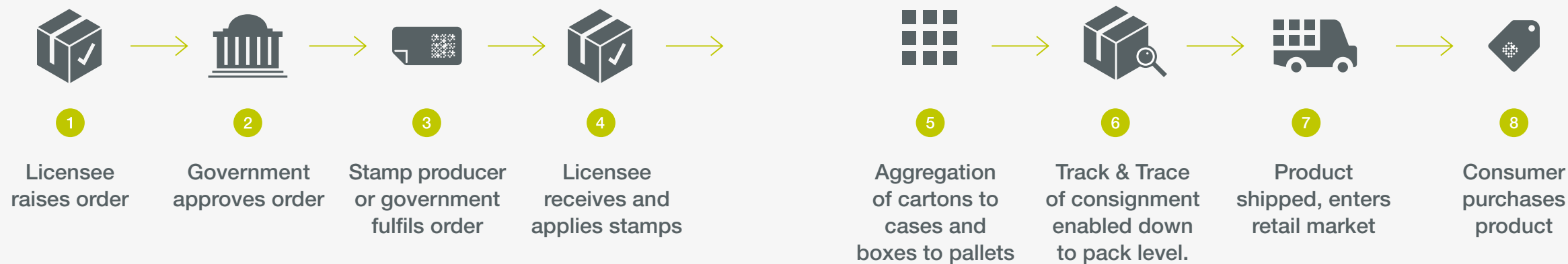
# Digital platform for Track and Trace

## DLR Certify™ delivers control and traceability

- Order management process for efficient and secure ordering and supply of stamps and codes under control of the revenue authority
- Reporting and monitoring for all forms of illicit activity
- Mobile inspection enables intelligence led enforcement
- Future-proof system expands to meet revenue authority needs and global regulations, e.g. WHO FCTC
- Full system located in highly secure ISO27001 compliant data centres, hosted internationally or in country of use



## How the solution works



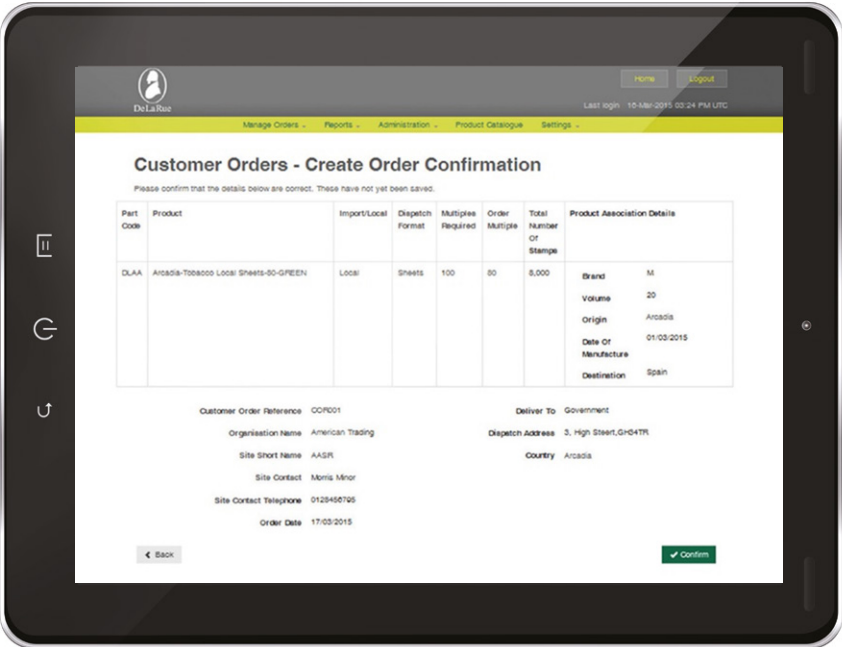
# Operations, reporting and mobile app

Intuitive user interfaces for registering suppliers and processing orders

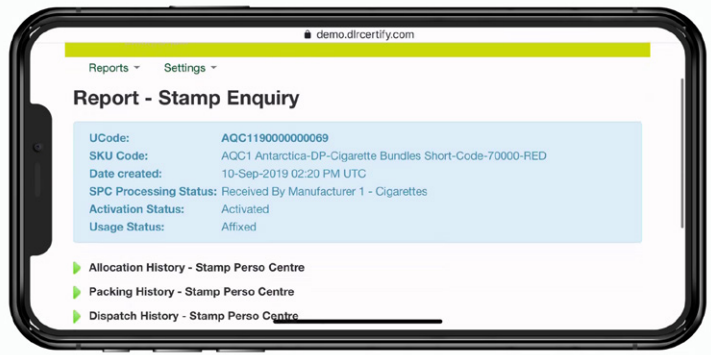
Full control for Revenue Authority to ensure compliance with legal requirements

Reporting to support enforcement

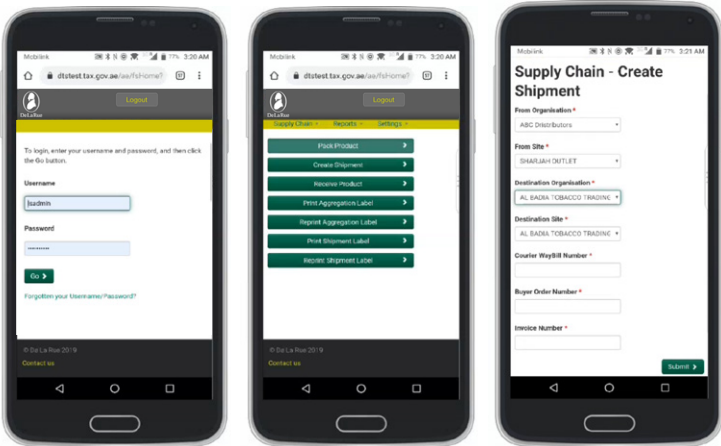
Mobile app for inspectors with full event logging



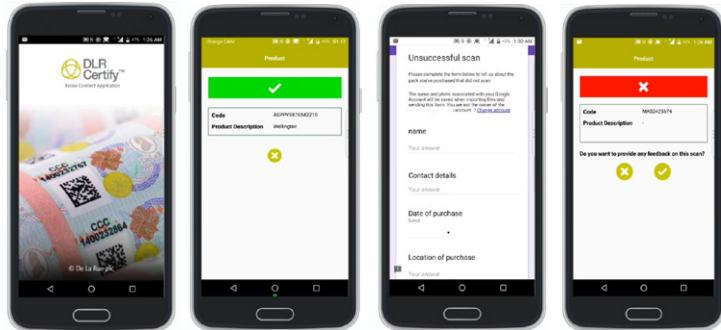
## Web portal mobile



## Supply chain



## Consumer app





# Tailored in-country services



## Mobile Apps

- Mobile inspection for intelligence led enforcement
- Public education and a free mobile app to encourage consumers to become an additional inspection force



## Public Education Program

- Citizens can be confident that products are genuine by checking the product code with a smartphone app or by SMS



## Control Centre

- Based in country or in regional centre
- Working with revenue authority
- Helping gain maximum benefit from the solution
- Driving UP tax revenue
- Driving DOWN illicit trade
- Guiding intelligence led enforcement activity
- Working with public engagement programs
- Including distribution of tax stamps for small domestic manufacturers and importers

# Recent references and successes



## UK: HMRC

To meet the requirements of the EU Tobacco Products Directive, De La Rue has implemented a digital solution to track and trace the c1.7 billion cigarette and hand rolling tobacco packs sold in the UK each year through a unique identifier.

As part of the contract De La Rue also manages the service for HMRC with all tobacco manufacturers, importers and relevant economic operators serving the UK tobacco products sector.



## Europe

De La Rue has secured multiple contracts to deliver more than 3.5 billion tax stamps each year to be applied on tobacco products sold in the UK, France, Austria, Sweden, Finland and Cyprus.

The tax stamps are custom designed to meet the specific requirements of each of these countries. In compliance with the EU Tobacco Products Directive (EUTPD), the stamps also contain visible and invisible security features



## The Kingdom of Saudi Arabia

De La Rue, has signed a five year contract with the General Authority of Zakat and Tax (GAZT) in The Kingdom of Saudi Arabia to implement and operate a digital tax stamp solution for all tobacco products and soft drinks sold in the Kingdom. The solution ensures that The Kingdom of Saudi Arabia complies with the World Health Organisation's Framework Convention for Tobacco Control.



## United Arab Emirates

In partnership with the Federal Tax Authority (FTA) of the United Arab Emirates, De La Rue is delivering a Digital Tax Stamp (DTS) solution to track and trace tobacco products to carry both a physical tax stamp and digital code on their packaging. The DTS system, running on DLR Certify™, receives orders for tax stamps and digital codes which are being supplied to manufacturers through existing systems implemented in their production locations. UAE Customs Authorities have been fully trained and equipped to inspect, accept and approve all shipments which are tracked from manufacturer through importer and into the supply chain in the UAE. The solution also ensures that the UAE complies with the World Health Organisation's Framework Convention for Tobacco Control, designed to minimise illicit trade in tobacco-based products.



Delivering products and solutions that are contributing to a safer, more secure and sustainable future

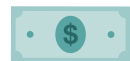
On the ground knowledge, strong partnerships and in country joint ventures

7 Centres of manufacturing excellence across 4 continents and 20 locations globally



**200 years**  
of fighting counterfeit and fraud

Over 200 years experience; Always staying one step ahead of the counterfeiter



**7 billion** banknotes

Extensive experience gained within the Banknote, Identity, Security products and Financial documents sectors



**22 million**  
secure identity documents

We create the most secure features possible; visible and invisible

The use of security tokens throughout the supply chain serves to reinforce the level of trust consumers have for your brand

We operate in both physical and digital security

We are active on a global scale, working in over 140 markets globally in the last three years

Dedicated to eradicating counterfeit and fraud

Trusted when and where it matters most



More than  
**8 billion**  
product authentication labels





De La Rue, helping to keep the world's nations, populations and economies secure. With over 200 years of anti-counterfeit experience, De La Rue is dedicated in the fight against illicit trade and the protection of brand, reputation and revenues.

If you would like to find out more,  
please visit [www.delarue.com](http://www.delarue.com)

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