

DANGEROUS GOODS SEARCH **TOOL AND ILLICIT GOODS CONVERGENCE FORUM**





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DANGEROUS GOODS SEARCH TOOL AND ILLICIT GOODS CONVERGENCE FORUM

Opening remarks

UPU and TRACIT illicit pharmaceuticals toolkit

UPU illicit goods campaign

UPU Trainpost platform – New courses on illicit goods mitigation

Dangerous Goods Search Tool

Closing remarks

Mr **Abdel IIah Bousseta**, Director of Postal Operations, UPU International Bureau

Ms **Suriya Padmanaabhan**, Director of Programs, TRACIT

Mr **Jacob Gholson**, Postal Operations and Safety Expert, UPU International Bureau

Mr **Sofiene Jouini**, Trainpost platform Administrator, UPU International Bureau

Mr **Stéphane Herrmann**, Mail Products and Services Expert, UPU International Bureau

Mr **Jacob Gholson**, Postal Operations and Safety Expert, UPU International Bureau



UPU and TRACIT illicit pharmaceuticals toolkit

Suriya Prabha Padmanaabhan, Director of Programs TRANSNATIONAL ALLIANCE TO COMBAT ILLICIT TRADE

About TRACIT



Aggregated approach work across 11 industry sectors, wildlife and human trafficking



Addressing common vulnerabilities In the supply chain



Exposing associated crimes



Timeline – TRACIT & UPU engagement





TRACIT and UPU surveyed national postal carriers on vulnerabilities and priorities



The UPU PSG created a special taskforce in Illicit Goods Mitigation Expert Team



Delivered several projects including the Pharma Toolkit

TRACIT urged UPU address the risks of illicit trade to global postal security



TRACIT proposed creation of a UPU working group on illicit trade



TRACIT & UPU signed a MoU and set a work program



Pharma Toolkit



Sector selected based on UPU-TRACIT survey results: Pharma was #1 among impacted sectors.

Production

- TRACIT created a guidance document for national posts.
- TRACIT collected intelligence and data from member companies and other stakeholders: US FDA, INCB, INTERPOL.

Products

- Detection guide
- Postmaster briefing
- Awareness materials









Overview



Introduction and objectives

Understanding illicit pharma

Health and safety risks

Detection indicators

Recap of key red flags

Cooperation



Training objectives





Improve designated operators' understanding of illicit pharmaceuticals



Educate designated operators on concealment tactics



Improve designated operators' risk profiling systems



What are illicit pharmaceuticals?





Substandard



Unregistered/unlicensed



Falsified

Fail to meet quality standards and/or specifications

Have not undergone evaluation/ approval by the regulatory authority

Deliberate misrepresentation of composition, identity or source, or tampering

Counterfeit

Theft

Diverted

Tampering

Infringement of intellectual property rights, fake medicines with harmful ingredients

Stolen products or embezzlement of pharmaceuticals

Approved for sale in one country but sold in another

Expired medicines sold after tampering



Health and safety risks to consumers

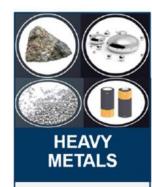


Therapeutic failure

- No active ingredients
- Undeclared excipients
- Wrong dosage
- Expired or temperature compromised

Toxic

- Harmful chemicals additives
- Presence of poisons or heavy metals



- Mercury
- Aluminium
- Uranium
- Arsenic
- Lead
- Chrome



POISONS

- Rat poison
- Benzopyrenes
- · Boric acid
- Antifreeze
- BCPs



CHEMICALS

- Road paint
- · Wall paint
- · Brick dust
- · Floor wax
- Sheet rock
- · Paint thinner



DECLARED APIs

- Aminotadalafil
- Homosidenafil
- Sildenafil
- Sibutramine
- Haloperidol
- Ciprofloxacin



NON DECLARED EXCIPIENTS

- Dextrose
- Dextrin
- Lactose
- Starch
- Salt
- Saline

Illicit pharmaceuticals lead to loss of confidence in medicines, healthcare providers and health systems





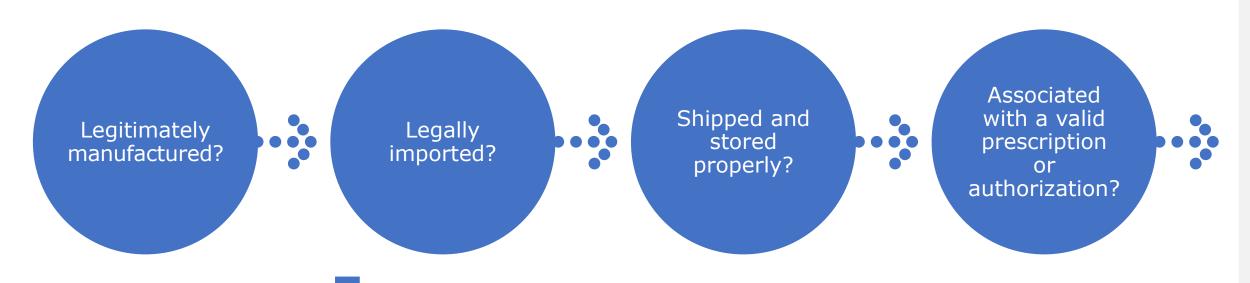
Detection of illicit pharmaceuticals



Key elements to look for



Is the product...



Yes = legal

No = illicit





Four primary indicators



Understanding the four primary indicators



What to look for?

1

2

3

4

Packaging

Seller and recipient information

Documentation

Origin and destination considerations



Indicator 1 – Packaging









Visible stains, discoloration, signs leakage, poor quality material, lumpy packages, excessive tape

Low seal integrity

Evidence of tampering such as resealing, opened and closed packages

Inaccurate labels

Spelling errors, grammatical mistakes, errors in manufacturer name or ingredients

Poor logos and branding

• Unable to replicate exact brand name or logo

Embedded in declared items

• Some products can be embedded in packaging with declared items



- Contact pharmaceutical companies and intellectual property rights holders for additional support in detecting illicit parcels
- X-ray and technological inspections
- Advanced detection systems chemical composition scanners, contraband-specific detection technologies
- Proper packaging per national regulations enforcing international packaging requirements
- Training and awareness adequate personnel training



Indicator 2 – Seller and recipient information







Use of fictitious details

False names and addresses provided for the sender or recipient – can be non-existent or unable to be linked to individuals or entities

Absence of return address

 Common tactic – parcels without a return address signal immediate risk

Recurrent shipments under different names

 Multiple shipments with the same address and different names, or same name and various addresses

Frequent parcels to a single address or unusual addresses

 Recipients suddenly receiving multiple parcels inconsistent with their usual habits or packages being delivered to suspicious delivery locations, e.g. car parks

- Identity verification and validation
- · Rigorous address verification
- · Business verification
- Confirmation by telephone
- Suspicious activity monitoring develop and implement algorithms to identify patterns of illicit activities
- Cooperation with authorities
- Staff training programmes



Indicator 3 – Documentation







Absence of documentation

Misdeclaration

Improper customs documentation

Alterations to documentation

Embedded in declared items

Product name

- Regulatory authorities usually require proper registration for the shipment of medicines
- Prescriptions, invoices and/or receipts are required to mail medicines
- Discrepancies in declarations vis-à-vis physical inspections
- Incomplete, incorrect or suspicious documentation
- Signs of tampering with official documents
- Embedded in packaging with declared items
- Items listed as powders, samples, prescription drugs, pills or cleaning supplies



- Verification of valid and appropriate documentation for shipments, including prescription checks
- Implementation of stringent checks to detect misdeclarations – verifying details against Harmonized System codes for Customs
- Multilayered approach with focus on:
 - Inconsistencies in documentation
 - Alterations to documentation
 - Incorrect information



Indicator 4 – Origin and destination considerations







Parcels from high-risk regions

• Focus on regions with high production of illicit pharmaceuticals – e.g. India and China

Parcels frequently sent to a particular city/area

Common cities and addresses frequently used as destination points

Transhipped parcels

 Multiple labels on the item (overlabelling) and destination cities do not correspond to the country listed

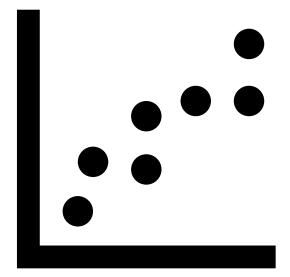
- Enhanced inspection of parcels from these origins
- Comprehensive verification and inspection processes
- Collaboration with international law enforcement agencies



Patterns in indicators 1 to 4



- Patterns can be any combination of the red flags indicated under each indicator
- The more pronounced the pattern for parcels with the four primary indicators, the greater the chance of the contents being illicit





Cooperation is key





National drug regulatory authorities



National law enforcement agencies: customs and border control, police



Health and safety agencies



Brand owners



Regional cooperation with other Posts to exchange crucial information



Implementation



We need:

- More Posts to use these tools and train their staff.
- Continued support and feedback to improve these toolkits.
- To track progress and impact of these tools.
- More Posts to work with each other and with the private sector.

We stand ready to work with you for its implementation











2025 projects: Under development





Modeled along the Pharma toolkit



Thank you for playing a critical role in combating illicit trade



UPU illicit goods campaign

Presentation by Jacob Gholson

Postal Operations and Safety Expert

UPU International Bureau



Illicit Goods Mitigation Portal

Background

As the threat of illicit goods continues to grow, the Illicit Goods Mitigation Portal is a tool designed as a centralized hub, bringing together and streamlining access to a diverse range of existing campaigns focused on the prevention and mitigation of illicit goods. This platform serves as a valuable resource providing knowledge and easy access to a wide array of tools and materials that can be utilized to strengthen mitigation efforts.

The Campaign has been broken down into four topics related to separate types of illicit goods. Resources and information for each topic can be located on the UPU Illicit Goods Portal.

- 1. General counterfeits
- 2. Pharmaceuticals
- 3. Intellectual Property
- 4. Illicit Trade in Plants and Wildlife





Topic 1 – General counterfeits

General Counterfeits



-- One -_'

Campaigns

I Buy Real -

- Collaboration by the UPU, the Business Action to Stop Counterfeiting and Piracy (BASCAP), launched by the International Chamber of Congress (ICC).
- This campaign focuses on four key topics that highlight the serious consequences of buying "fakes".
- Eight flyers to raise awareness among consumers about the importance of purchasing real items instead of counterfeits.

Go for Real -

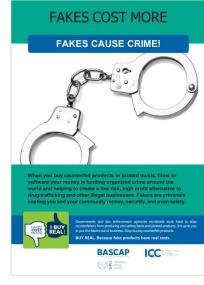
- Produced by United States Patent and Trademark Office (USPTO) and the US Crime Prevention Council (NCPC).
- Educational initiative for secondary school students on how to make buying decisions as they gain independence.
- Social media toolkit to help spread awareness.
- Three videos starring McGruff the Crime Dog focusing on the consequences of purchasing counterfeit goods.



I Buy Real



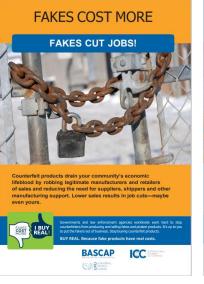
















Go for Real

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McGruff the Crime Dog® and the Go For Real™ campaign are teaming up to expose the dangers of counterfeit pills and other fake goods. This video is geared towards preteens, teens and young adults, shedding light on the serious risks and consequences of purchasing and using counterfeit products.

Watch the video **here** to learn more and join us in spreading the word about the importance of choosing real and safe products.



Image credit: Go For Real™

Think Again

You're smart. Buy smart. Go For Real.

McGruff the Crime Dog® is back, teaming up with the Go For Real™ campaign to take a bite out of counterfeits.

Sales of fake products are not just a risk to your health, they can also fund larger criminal enterprises, including human trafficking and child labor.

Join us in the fight against counterfeits and learn how your choices can make a real difference.

Watch the video here.

This video, specifically geared towards teens, dives into the real consequences of buying fake electronics and other counterfeit products.

Watch the video <u>here</u> to learn more about the dangers and why it's important to choose genuine and safe products.



Image codit: Go Ear Peal®





Topic 2 – Pharmaceuticals

Educators –

This campaign works with the "Go for Real" campaign, providing materials for educators that are designed to empower young people to "think again" before buying and/or taking pills from someone other than a licensed provider.

Designate operators and other partners –

The UPU partnered with Transnational Alliance to Combat Illicit Trade (TRACIT) to produce a guide to detecting illicit pharmaceuticals in small packets. This has become a good resource for postal operators.





Pharmaceuticals: Outreach tools

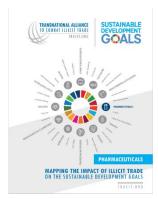
Trade in Counterfeit Pharmaceutical Products (OECD)

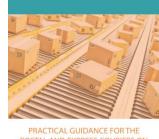




United Nations Toolkit on Synthetic Drugs







PRACTICAL GUIDANCE FOR THE
OSTAL AND EXPRESS COURIERS ON
REVENTION AND INTERDICTION OF
NON-MEDICAL SYNTHETIC OPIOIDS
AND FENTANYLS



<u>Practical Guidance for the Postal and Express Courier on Prevention</u> <u>and Interdication of Non-Medical Synthetic Opioids and Fentanyls</u>



Global Rapid Interdiction of Dangerous Substances



Topic 3 – Intellectual Property



The Intellectual Property (IP) campaign, Building Respect for Intellectual Property, is designed to ensure creators and innovators are recognized, industries flourish and communities thrive. The campaign strives to bring awareness regarding the value of IP, the risks of infringement, and to promote ethical use.

The UPU has also partnered with World Intellectual Property Organization (WIPO) to provide outreach tools for the campaign through resources available on their website.



Building Respect for Intellectual Property

Guide

Guide to brand protection for small and medium-sized enterprises

The Center for Anti-Counterfeiting and Product Protection (A-CAPP) at Michigan State University offers a comprehensive guide to brand protection for small and medium-sized enterprises (SMEs).

This resource is designed to help SMEs safeguard their brands against counterfeiting, piracy and other IP-related threats. It provides practical tools, insights, and strategies for:

- · Identifying potential vulnerabilities in brand protection.
- · Building robust anti-counterfeiting measures.
- · Navigating legal and technological solutions to protect your business.

Explore the guide <u>here</u> to secure yourself with the knowledge to defend brand identity, reputation and innovation.



Game



Image credit: WIPO

Discover WIPO's IP challenge game

The IP Challenge, hosted by the World Intellectual Property Organization (WIPO), is an interactive game that makes learning about intellectual property fun and engaging. Through real-life scenarios, players explore how IP rights like copyrights, trademarks and patents, support creativity and innovation.

Test your knowledge with this challenge, and uncover the importance of respecting IP that values and protects creators' rights.

Start the game **here** and become an IP champion.

Educational readings and toolkits

Here, WIPO presents **Honmono**, a manga (Japanese comic) by Emiko Iwasaki that highlights the dangers of counterfeit products. This engaging narrative, developed through the Real Manga Competition in Japan, aims to raise awareness about the health and safety risks associated with counterfeit goods.

To reach a global audience, *Honmono* has been translated into multiple languages, including **Japanese**, the six official UN languages (**Arabic**, **Chinese**, **English**, **French**, **Russian and Spanish**), as well as various **Southeast Asian languages**.

All language versions can be accessed and downloaded here.

By illustrating the real-world consequences of purchasing fake items, *Honmono* underscores the importance of respecting intellectual property rights and supporting genuine products.



Image credit: WIPO

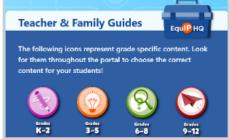


Image credit: USPTO

EquipHQ, developed by the United States Patent and Trademark Office (USPTO), is an educational platform designed to enhance understanding of IP among students, educators and families.

The platform offers interactive games, activities and videos that explore the significance of IP in fostering innovation and creativity.

By engaging with EquipHQ, users can learn how to invent, brand and create original works while developing IP awareness and literacy.

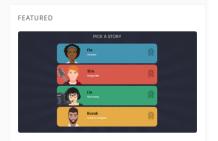
Access all activities, resources and videos from here.



World Intellectual Property Organization

Building Respect for IP: Awareness Raising

Building respect for intellectual property (IP) involves more than just enforcement; we also have to educate, inform and change attitudes. We assist our member states to design national strategies for building respect for IP and to develop tools for use in awareness raising, in particular among young people.



New IP Game - Can you be an IP champion? Challenge yourself!

Play and don't strike out!

In Schools

Our interactive website, Respectforip.org and specific projects, aims to raise young people's awareness and understanding of copyright and trademarks.

In action

A selection of videos on the theme of raising awareness in schools.



Video on YouTube: A secondary school student in Botswana learns that school text books are protected by copyright.

Take our Quiz!



Video on YouTube: Children in Malawi learn about the importance of respecting copyright.



Video on YouTube: High-school children in South Africa learn the basics of intellectual property.



Video on YouTube: A Trinidad student undertakes a school project on protecting IP with unexpected results for those around her.

Take our Quiz



WIPO Manga

With the support of the Government of Japan – WIPO organized the "Real Manga" competition, inviting Japanese manga artists to create an original work highlighting the health and safety risks associated with counterfeits.



Philippines

IP and Citizen Journalism for Philippine Science High School Main Campus and Polytechnic University of the Philippines Laboratory High School





Dominican Republic Students learn about the importance of respecting Copyright

Watch the video



Manhwa (webtoon)

WIPO launched a Manhwa on Copyright Enforcement with the support of the Ministry of Culture, Sports and Tourism (MCST) of the Republic of Korea.

Download



Respect for Copyright

This module – supported by funds-in-trust provided by the Republic of Korea – consists of five units designed for children aged 10 to 15. It aims to develop a better understanding of creative activity and the links to IP through debate and discussion. Printable version for students [PDF], for teachers [PDF].



Respect for Trademarks

This module – supported by funds-in-trust provided by the Japan Patent Office – offers three units for young people aged 14 to 19. It focuses on the role of trademarks in modern society and the creativity which goes into the development of brands. Printable version for students [20], for teachers [20].



IP and Citizen Journalism – Senegal is an IP awareness-raising project for school students, designed and implemented by the WIPO Building Respect for IP Division (BRIP) with the generous support of the Republic of Korea's Ministry of Culture, Sports and Tourism (MSCT).





Topic 4 – Illicit Trade in Plants and Wildlife



Overview

The global trade of plants and wildlife is vital for economic development but also poses significant risks to biodiversity, ecosystems and food security. The illicit trade in these goods, including unregulated e-commerce transactions, facilitates the spread of harmful pests species, disrupts ecosystems and undermines conservation efforts.

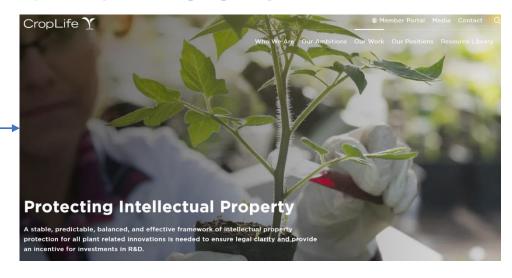
The resources presented in this campaign focus on raising awareness of the dangers of illicit trade in plants and wildlife and promoting compliance with international standards. With the rise of ecommerce, regulating the movement of these goods has become more complex, often bypassing essential checks.



Audience Outreach and Tools

<u>Intellectual Property Rights in Crop Protection</u> (<u>Crop Life International</u>)





<u>Mapping the Impact of Illicit Trade on the Sustainable Development Goals - Pesticides</u>



<u>Tackling the Sale of Illicit Pesticides on E-commerce Platforms (TRACIT)</u>





IP Connected Crimes



A Double Homicide, the Chinese Mafia and Counterfeiting!



Paolo Beconcini

Head of China IP Team at Squire Patton Boggs/Lecturer in Law at USC Gould School of Law





Lessons to Keep in Mind

The assassination of Zhang D. underscores several critical truths:

- Counterfeiters are not isolated actors—they are embedded in larger transnational criminal networks.
- Organizations like the Chinese mafia rely on counterfeiting to fund other illicit enterprises, including human trafficking and money laundering.
- Chinese counterfeiters operate globally, with the ability to evade tariffs, enforcement actions, and legal boundaries through well-established international networks.
- Most importantly, counterfeiting is not a victimless crime. It fuels
 organized crime, exploits vulnerable populations, and undermines legitimate
 businesses and legal systems.

April 17, 2025



THANK YOU FOR YOUR ATTENTION

Jacob Gholson

Postal Operations and Safety Expert

UPU International Bureau

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UPU Trainpost platform – New courses on illicit goods mitigation



Sofiene Jouini
Senior Administrator, Trainpost platform
Expert in digital learning solutions

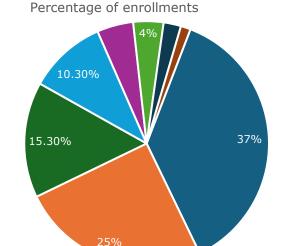


Importance of postal security courses on Trainpost platform

- Statistical evidence highlighting the growing emphasis placed by postal operators on security training in recent years
- Postal security is the training field with the **highest number of enrolments**
- Security certification (advanced) and dangerous goods are the most popular courses on the platform over the last three years
- Among 95 courses, postal security courses have:
 - highest number of enrolled users
 - highest number of awarded certificates
 - highest number of participating countries

Top ranking enrolments (2022–2025) over 95 courses

Rank	Course name	Number of enrolled users	Number of countries	Number of regions	Number of active learners	Number of certificates
1	Security certification advanced	851	137	6	814	463
2	Dangerous goods and lithium batteries (old)	814	100	6	770	416
3	New approach to quality of service	608	117	6	537	95



- Postal security
- Ouality
- Postal reform and regulation
- Postal operations
- Miscellaneous
- Management techniques
- Postal technologies
- Postal products



Evolution of postal security courses on Trainpost platform

- Significant growth in the number of e-learning courses developed in the field of postal security
- Development of high-quality, engaging and multilingual e-learning courses

Open courses for enrolment

Basic	Basic S58/S59			
Secur	ity certification (adv	anced) 🜟 4.8 (49)		
Cyber	security InfoSec	4.8 (44)		
15	■ 2004-2022	■ 2025		
10				
5				
0 —	No. courses	No. languages		
	No. Courses	No. languages		

	Before (2004-2022)	Now (2024–2025)
Number of courses	2 courses	12 courses
List of courses	 Postal security Dangerous goods and lithium batteries 	 Basic cybersecurity Cybersecurity InfoSec Basic S58/S59 Advanced security certification UPU rules and regulations Dangerous goods Alarm resolution Mail theft Revenue protection Misuse of the postal supply chain Road safety Liaison replacement
Year(s) of production	2013	2024-2025
Languages available	One language	Six languages
Technologies deployed	 Text-based with static images No voice-over Classic modular structure Limited device compatibility (no mobile support) 	 Interactive multimedia content Professional voice-overs Microlearning modules Fully responsive (desktop, tablet, mobile) Gamified elements and quizzes for engagement



New postal security courses

Dangerous goods

M1: What are dangerous goods?

M2: Essential requirements and procedures for handling dangerous goods

M3: Safe handling and incident response for dangerous goods in postal

networks

Activities of the course

Self-assessment tests

Progress tests

Final test

Forum, feedback

Certificate of completion

E-learning format

Engaging, multimedia and interactive content using video players, object identification, voice-overs, etc.

Launch date

September 2025

Six available languages

English

French

Arabic

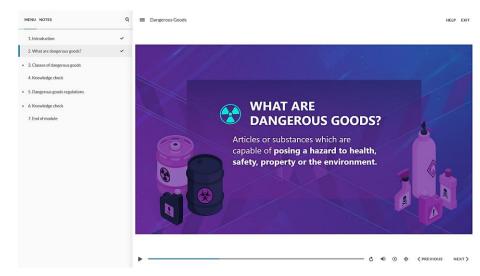
Spanish

Portuguese

Russian

Duration

Two hours







New postal security courses

Misuse of the postal supply chain

M1: Drug trafficking

M2: Cigarette trafficking

M3: Illicit pharmaceuticals

M4: Intellectual property

Activities of the course

Self-assessment tests

Progress tests

Final test

Forum, feedback

Certificate of completion

E-learning format

Engaging, multimedia and interactive content using video players, object identification, voice-overs, etc.

Launch date

September 2025

M5: Money laundering

M6: Firearms

M7: Lottery mail

Six available languages

English

French

Arabic

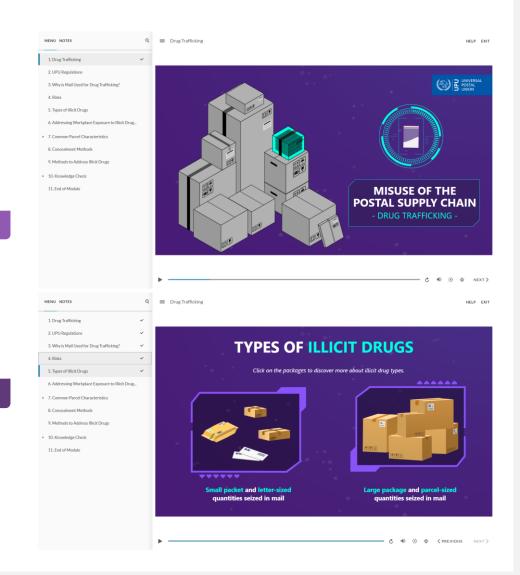
Spanish

Portuguese

Russian

Duration

Two hours





Strategy for promoting security courses using the Trainpost platform

Local facilitators

84 qualified local facilitators: A network of trained local facilitators representing their respective postal operators plays a key role in promoting participation.

We share with them all important updates regarding new courses, and they pass this information along.

- Announce internally the launch of new courses
- Form groups to follow online courses according to their specialties and role at the Post
- Share training initiative information with the platform administrators

No.	Region	Number of tutors
1	Local tutors from Africa	42
2	Local tutors from Arab countries	14
3	Local tutors from Caribbean	28
TOT	AL	84





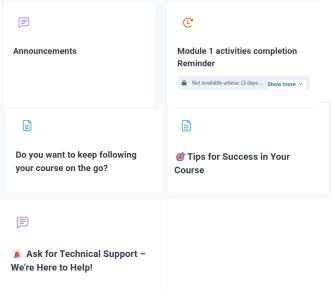


Strategy for promoting security courses using the Trainpost platform

Communication tools

- Course announcements:
 - Trainpost learners community
 - Newly launched courses
- Reminder plugin: Improve completion rates by automatically sending reminder e-mails to learners who have paused or stopped their progress
- Tips for success in your course
- Support forums: Includes a default forum titled "Ask for technical support – We're here to help!" to assist users and address technical issues promptly
- Matrix platform (in progress): A new communication platform being introduced to replace WhatsApp groups; platform supports multimedia messaging, including text, voice and video





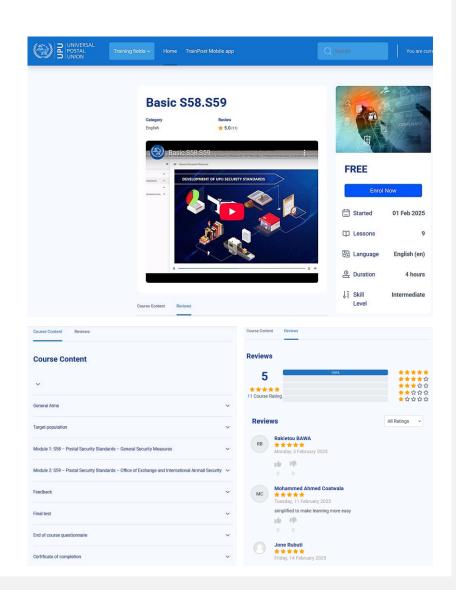


Strategy for promoting security courses using the Trainpost platform

Enrolment page

- General aims
- Target audience
- Course duration
- Skill level
- Course reviews
- Course modules and assessments
- Certificate of completion
- Other related courses
- A short introductory YouTube video







Flexibility to encourage and motivate participation

- Continuous enrolment: Courses are open from February to December each year.
- Multilingual enrolment: Learners can enrol in the same course in more than one language – ideal for bilingual participants.
- Group enrolment: Bulk enrolment is possible using a list of e-mail addresses.
- Flexible progression: Learners who fail progress tests can request additional attempts and unlock remaining modules.
- Trainpost mobile app: Supports learning on the go and even offline access to course materials.





Security courses – Roles to monitor participation

local tutor

- Non-editing Granted upon request by local **tutors** or postal operators
 - Enables local tutors, through local course groups, to closely monitor participation from their country

tutor

- **Non-editing** Assigned to **UPU** security programme managers
 - Allows tracking of learner progress across the course

Tutor

- Assigned to scripting providers
- Grants the ability to integrate course packages, activities and resources





Options for benefiting from security e-learning courses

Self-paced individual learning

Learners access the online modules at their convenience, progressing at their own pace.

In-person group training (blended learning)

Postal operators can organize facilitated group sessions using the e-learning content as a foundation. This approach encourages collaborative learning, local discussion and practical application through workshops or classroom activities.

Pre-workshop preparation for UPU-led postal security workshops

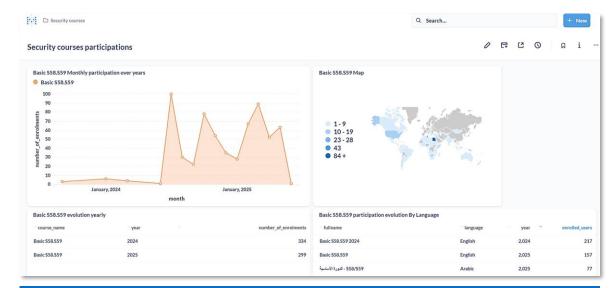
Online security courses serve as essential preparatory material for **UPU regional** or **global workshops** on postal security. Completing e-learning modules beforehand ensures participants arrive with foundational knowledge, enabling more effective face-to-face training and deeper engagement.

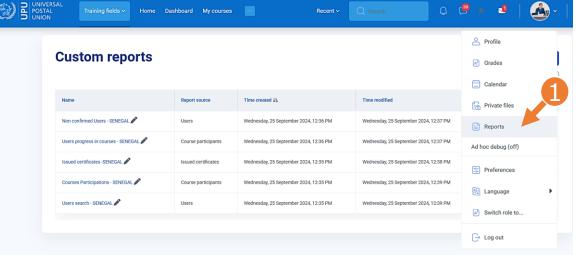




Dashboards and reporting tools (for UPU International Bureau experts and programme managers)

- **IB dashboard**: Customized realtime data visualization and tracking
- **Custom reporting**: Tailored reports to monitor participation, completion and engagement levels
 - ► Five custom reports are provided to each postal operator
 - Custom reports for security programme manager and IB experts







Trainpost mobile app QR code















Thank you



Dangerous Goods Search Tool

Presentation by Stéphane Herrmann Mail Products and Services Expert UPU International Bureau **DGST** (Dangerous Goods Search Tool) is an application developed by the Universal Postal Union to enable designated operators and carriers to **detect, identify and intercept dangerous goods** at any point – but as early as possible – in the supply chain.

The development of DGST has been funded by the US Tied Funds provided under the requirements of Article 29-10 of the UPU Convention.



Business Drivers

Early detection of dangerous goods allows:

- Improve safety and security
- Prevention of criminal activities
- Legal and regulatory compliance
- Save transportation and handling cost
- Monitor trends in dangerous goods appearances



Prediction

Provide an API that can calculate the probability of an International mail item being dangerous.

Analytics: reporting

Provide super users with analytical/aggregated reports/dashboards

Analytics: Search/Query

Provide super users with click

and type-based search capability

to drill down at different levels

within the data



Prediction of Dangerous Goods

DGST calculates the probability of being dangerous for an international mail item using machine learning/AI algorithms based on postal EDI messages (ITMATT, EMSEVT...).

Example of information that can be used:

EMSEVT → the locations where the items are processed

the reason code for sending items at customs, or for canceling import/export

ITMATT → sender/recipient name and address, description of items...



Prediction of Dangerous Goods

- The system calculates the probability near-real time and provides it through an API
- The machine learning model is re-trained regularly (e.g. every 3 months) in order to improve its predictions
- The procedure to be followed is decided by each designated operator on the basis
 of the dangerous goods prediction score.
- **Data privacy:** DGST only uses data for which the designated operators have authorized its use.



Analytics on Historical Data

Reporting: The system will provide aggregated reports and dashboards

- Actual vs predicted dangerous goods
- Customs/security retention reasons
- Top 10 DG exporters and importers

• • •

Query/Search: The system will provide capability to search for dangerous goods by a combination of attributes (Search Query Tool)



Integration

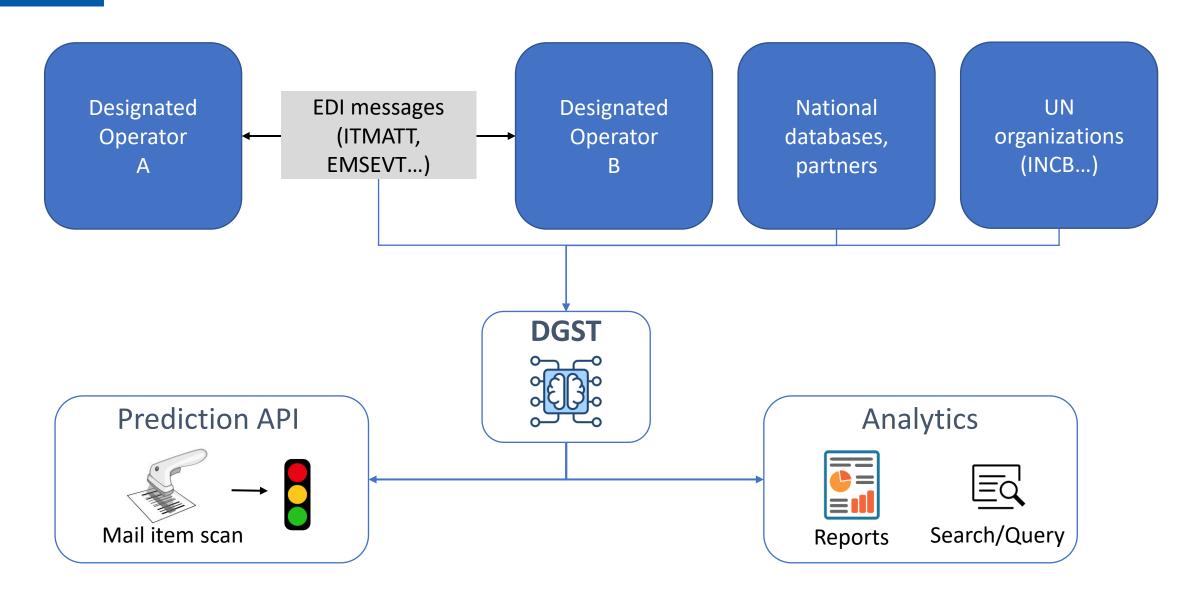
In a next step, the system will **integrate with external systems** in order to improve the predictions:

- National databases maintained by designated operators, customs...
- Databases from other UN organizations (INCB International Narcotics Control Board...)
- Denied parties databases
- Confirmed dangerous goods reported to the Postal Security programme

...



Overview

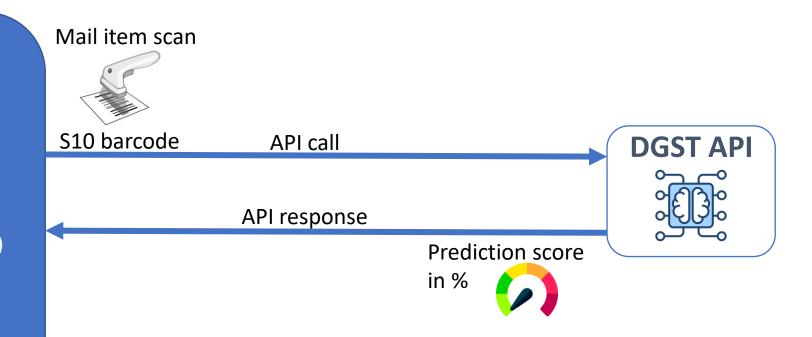




Operational process

IPS/DPS or bespoke application

- Collection at post office (EMA)
- Received at OE (EMB)
- Dispatch preparation (EMC)
- Any other scan



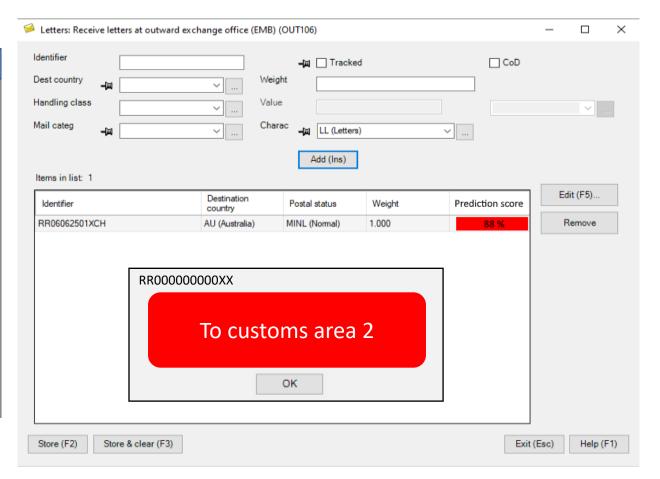
- ➤ IPS will include a management function to customize the message displayed on the operational screen according to the level of prediction score
- > IPS and DPS will be automatically interfaced with DGST
- For bespoke applications, please contact PTC to receive the technical documentation (API specification, security token and URL)



DGST in IPS

DGST – co	- 0			
Range from (%)	Range to (%)	Message	Background color	Blocking
0	40	ОК		
41	80	To customs area 1		
81	100	To customs area 2		\square
Store (F2)	Store & clear (F	3)	Exit (Esc) Help (F1)

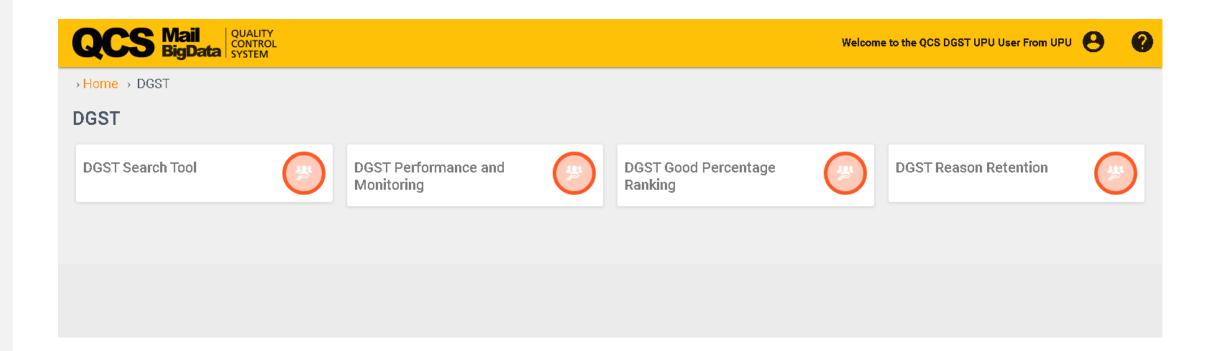
Management function to configure messages according to the DGST prediction score (wireframe)



Receive items at office of exchange (EMB) (wireframe)



DGST - Home





Search Query Tool – Search Criteria 1/2

ItemID			
Search Scope			
●Items on Route			
OArchive			
Direction O (Outbound)	*		
Origin Operator:	Orig	in Office:	
☑ All	_	All	_
☐ AEA (UNITED ARAB EMIRATES - EmiratesPost)	• -	AEAUHA (EmiratesPost)	•
☐ AFA (AFGHANISTAN - Afghan Post)		AEDXBA (EmiratesPost)	
☐ AGA (ANTIGUA AND BARBUDA - GPO Antigua)		AEDXBB (EmiratesPost)	
☐ AIA (ANGUILLA - AnguillaPost)		AEDXBE (EmiratesPost)	
☐ ALA (ALBANIA - Albanian PT)		AEDXBI (EmiratesPost)	
☐ AMA (ARMENIA - Haypost AM)		GBASFY (EmiratesPost)	
☐ AOA (ANGOLA - COR ANGOLA)		GBLONO (EmiratesPost)	
☐ ARA (ARGENTINA - CORREO AR)	_	NLVANZ (EmiratesPost)	•
Destination Operator:	Des	tination Office:	
☑ All		All	<u> </u>
☐ AEA (UNITED ARAB EMIRATES - EmiratesPost)		AEAUHA (EmiratesPost)	0
☐ AFA (AFGHANISTAN - Afghan Post)		AEDXBA (EmiratesPost)	
☐ AGA (ANTIGUA AND BARBUDA - GPO Antigua)		AEDXBB (EmiratesPost)	
☐ AIA (ANGUILLA - AnguillaPost)		AEDXBE (EmiratesPost)	
☐ ALA (ALBANIA - Albanian PT)		AEDXBI (EmiratesPost)	
AMA (ARMENIA - Haypost AM)		GBASFY (EmiratesPost)	
□ AOA (ANGOLA - COR ANGOLA)		GBLONO (EmiratesPost)	
☐ ARA (ARGENTINA - CORREO AR)		NLVANZ (EmiratesPost)	
	Ť		*



Search Query Tool – Search Criteria 2/2

Dangerous Goods			Mail Class:
☐ Dangerous			☑ AII
☐ Not Dangerous			Parcels (CP) (C)
□ Unknown			□ EMS (E)
			Empty receptacles (T)
			Letters (LC/AO) (U)
Prediction Score Three	shold(%)	100	Declared gross weight (KG): From: To:
Reporting Period	Induction (Outbound)		
From:	01/01/2024	_	
То:	31/12/2024	_	
Sender name			Sender address
Recipient name			Recipient address
Content piece descrip	tion		
SEARCH CLEAR			



Search Query Tool – Search results

Rows per page: 10 🕶



Item ID	Prediction Score (%)	Origin Operator	Destination Operator	Origin Country	Destination Country	Mail Class	Origin Office	Destination Office	Decl. Weight	DGL	DGL Reason	DGL Event
RK015739504	100					U			0.097	Unknown		
LZ574998636	100					U			0.046	Unknown		
LZ584396794	100				:	U			0.63	Unknown		
LZ583515773	100					U		:	0.207	Unknown		
EN00065983	100					Е			0.000	Not Dangerous	50 - Invoice missing/inappropriate	EME
LZ584269308	100					U			1.559	Not Dangerous	58 - At sender's request	EME
RB047258490	100					U			0.438	Unknown		
RD06867475	100					U			0.180	Not Dangerous	58 - At sender's request	EME
RD06868467-	100					U			0.070	Not Dangerous	58 - At sender's request	EME
UJ83448143	100					U			0.055	Unknown		

1

2 3 4 5 6 7 8 9 10 ...



Performance and Monitoring

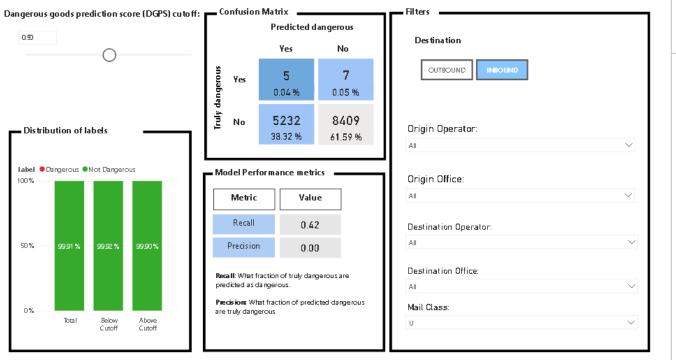


Welcome to the QCS DGST UPU User From UPU



→ Home → DGST → DGST Performance and Monitoring

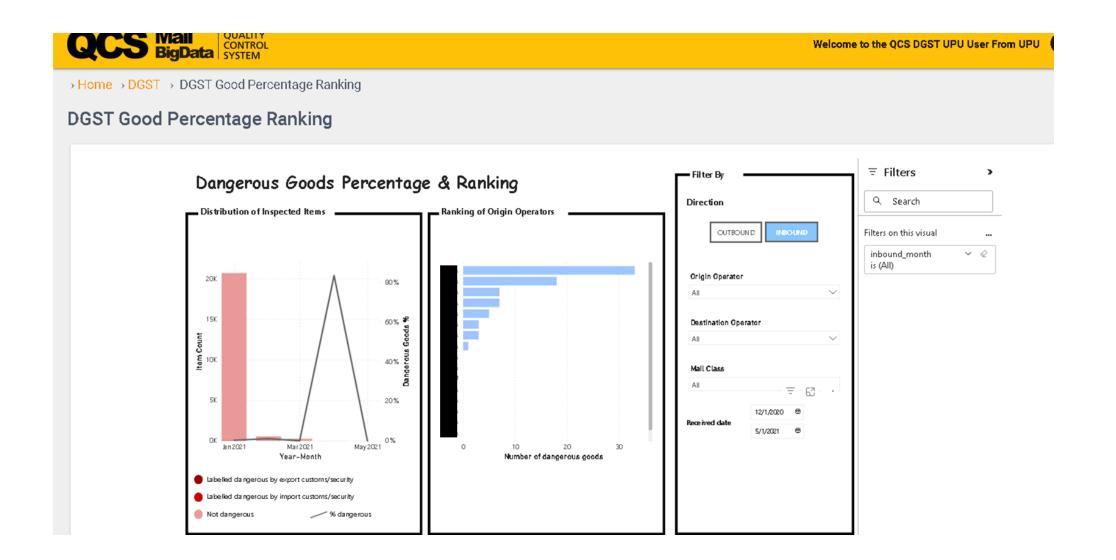
DGST Performance and Monitoring



₹ Filters					
Q Search					
There aren't any filters to display.					

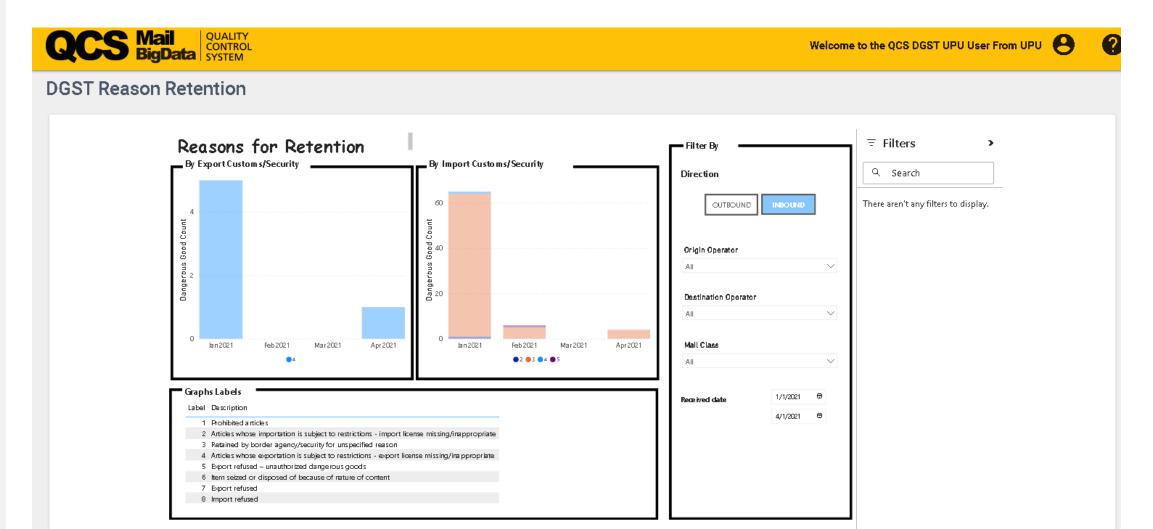


Ranking and Distribution





Reasons for retention





Final note: data is key!

- DGST is a machine learning system, built on the big data infrastructure available at the UPU
- Capacity to feed the system with large amount of data is ready
- The machine learning process will become increasingly performant (and DGST will become increasingly "intelligent") when learning on large data sets
- Posts are therefore encouraged to authorize access to their data, and in return obtain maximum value from the DGST



2025 PSG Chairman Award Nominations



- 2025 Application process is now open until 1 July 2025.
- More information and all forms are available <u>here</u>
- The nomination must demonstrate the intent of the UPU has been reached, resulting in a positive outcome in the field of postal security.
- The submission should allow the judging panel to assess how the nominee has performed as a role model for the industry or how they have demonstrated exceptional leadership qualities within the postal sector.
- Nominations should be prepared electronically and submitted as an e-mail attachment to security@upu.int





Thank you for taking the time to complete this survey.
Your feedback is valuable.

https://fr.surveymonkey.com/r/B37VBRQ



Any question regarding the workshop? Please contact security@upu.int



Thank you