

# Cyber Resilience in the global Digital Economy:

# A Focus on e-Commerce Logistics

August 2025
Tracy Hackshaw
.POST Business Management Unit
Universal Postal Union



# Many posts now offer a wide range of digital services

**70%** of posts promote digital inclusion through provision of at least 1 digital connectivity service or solution.



**71%** of posts promote economic inclusion through e-commerce services.

**51%** of posts promote social inclusion through e-government services.



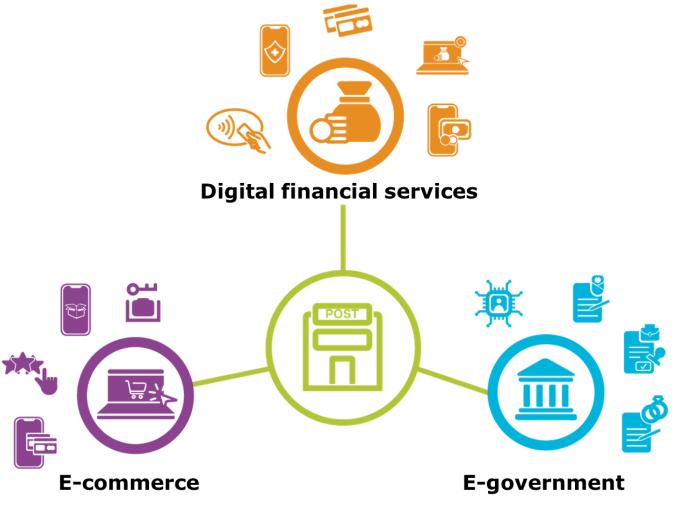


**58%** of posts promote financial inclusion through digital financial services.



# 34% of posts show signs of becoming one stop shops for essential digital services

- Promoting economic, financial, and social inclusion and digital inclusion under same roof
- Helps governments achieve public policy objectives related to financial inclusion, inclusive economic growth, territorial cohesion, etc.,

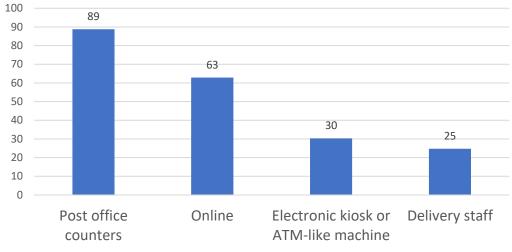




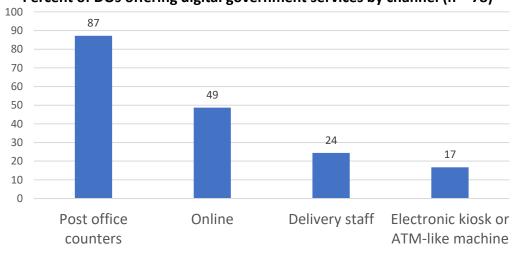
# Postal infrastructure is becoming critical across multiple channels

- Posts are most likely to offer digital services in person through digitally enabled counters
  - 650,000 post offices, a majority in rural areas
- Some also leverage their delivery staff for digital services
- Significant potential to promote inclusion for groups most at risk of being left behind
- Necessary to ensure that all service delivery channels and the staff and customers interacting with them are secure





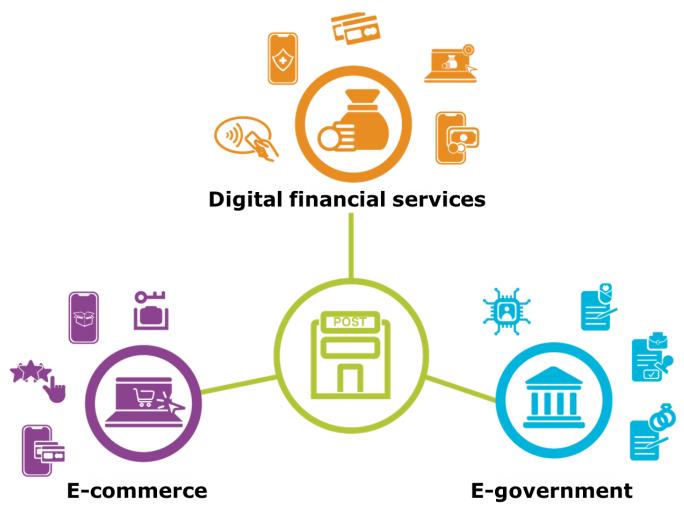
#### Percent of DOs offering digital government services by channel (n = 78)





# As posts offer more services through multiple channels, its infrastructure becomes more critical

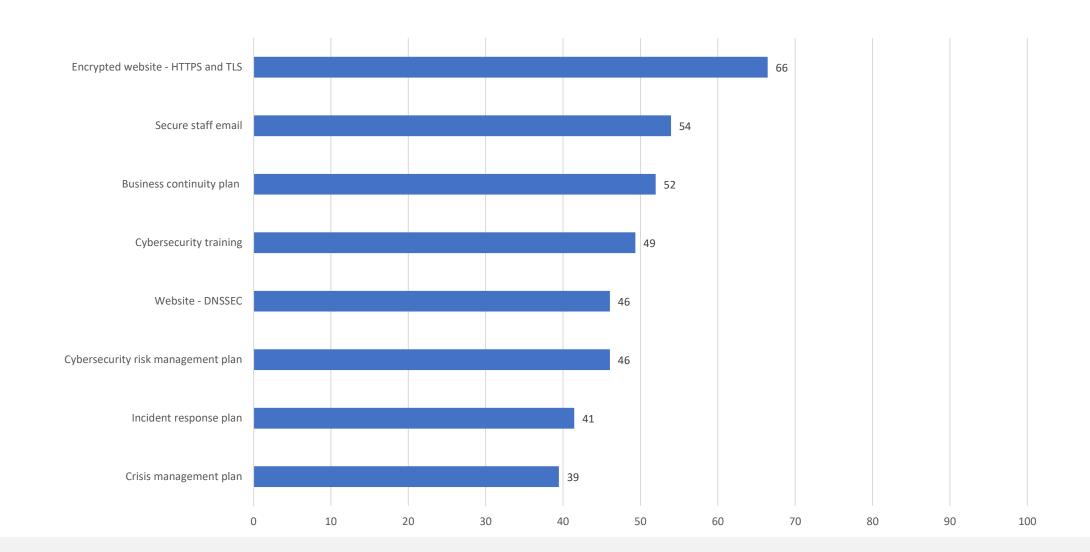
- More sensitive data about customers and citizens
- More severe consequences of
  - Disruptions
  - Breaches
  - Identity theft
  - Financial losses
- More channels = more cyber-attack entry points
- Trust in the post more important than ever
  - For customers
  - And partners many services offered in partnership with private companies and government





## Cyber-hygiene best practices are largely lacking

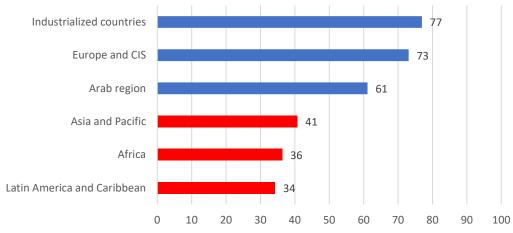
% of Posts implementing cyber-security and cyber-hygiene practices (n = 152)





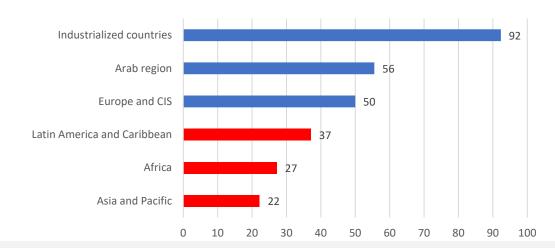
# **Especially in developing regions**



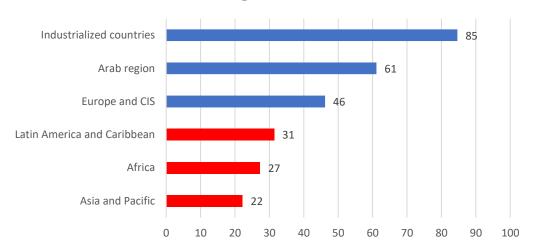


**Percent of posts implementing Incident Response** 

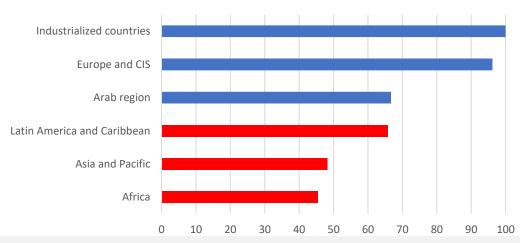
**Plans** 



**Percent of Posts implementing cybersecurity Crisis Management Plans** 



Percent of Posts whose websites are encrypted with **HTTPs and TLS** 

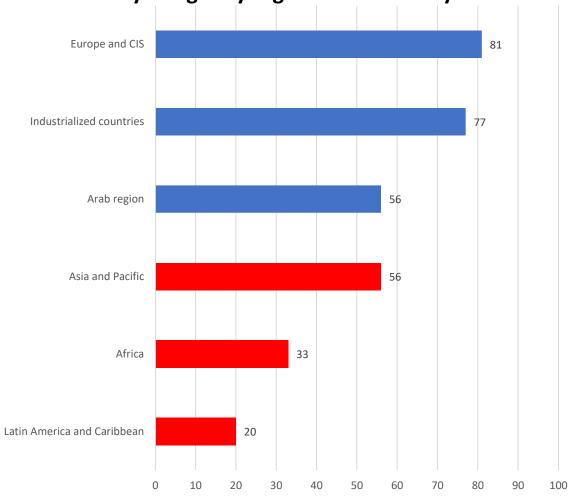




# Cyber hygiene budgets are not keeping up with workloads

- 69% of Posts report an increase in cybersecurity workload
- But only 49% report increases in cybersecurity budget
- Cybersecurity budget increases are less likely in developing regions
- Posts are also not getting national level support responding to cyber-risks
  - Only 35% are affiliated with the national information security incident response team (ISRT)

Percent of posts reporting an increase in cyber security budget by region in the last 2 years





# The rapid digitalization of supply chains exposes organizations to novel cyber risks

10,000

Flights delayed and over 1,300 canceled<sup>1</sup>

After a 2023 nationwide ground stop imposed by the Federal Aviation Administration over a system failure that forced a 90-minute halt to all U.S. departing flights.

30,000

Containers were backlogged and delayed for up to 10 days<sup>2</sup>

In 2023, DP World Australia had to suspend operations in its container terminals in Melbourne, Sydney, Brisbane and Western Australia's Fremantle for three days due to a cyberattack.

730

Employees made redundant after a ransomware attack led to bankruptcy<sup>3</sup>

IKNP Logistics Group, one of UK's leading privately owned logistics companies, declared itself insolvent in September, due to a ransomware attack that affected key systems, processes, and financial information.





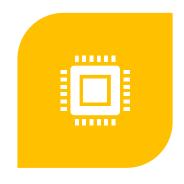
# The Evolving Threat Landscape – the Postal Sector Context



POSTAL NETWORKS HANDLE
SENSITIVE DATA
(FINANCIAL, PERSONAL, PARTNERS,
ETC) MAKING THEM ATTRACTIVE
TARGETS.



RANSOMWARE ATTACKS ARE ON THE RISE, CRIPPLING POSTAL OPERATIONS AND HARMING THE PUBLIC.



PHISHING IS USED TO GAIN UNAUTHORIZED NETWORK ACCESS, ESCALATING TO BROADER EXPLOITS.



SUPPLY CHAIN
VULNERABILITIES PUT POSTAL
OPERATIONS AT RISK
(SOFTWARE PROVIDERS, ETC.)





### The Growing Need for Cybersecurity & Cyber Resilience

- Increased reliance on digital tools and interconnected systems makes the postal & logistics sector a significant target for cybercriminals.
- Postal & logistics services handle vast amounts of sensitive data and provide essential services, increasing their vulnerability.
- Cyberattacks can lead to data loss, service disruption, reputational damage, and financial losses.
- The COVID-19 pandemic accelerated the digitization of postal & logistics services, further amplifying cyber risks.
- The UPU is committed to improving the safety and security of the global postal & logistics sector through a multi-faceted approach.





# Recent Cyberattacks in the postal sector

- Royal Mail in the UK, which was hit by a ransomware attack linked to Russia that suspended international deliveries and demanded \$80m for decryption<sup>123</sup>
- Hellenic Post in Greece, which was subjected to a serious cyberattack that brought down computer systems using malware<sup>4</sup>
- New Zealand Post, which was shut down by a cyberattack that disrupted its online services and tracking system







# Cybersecurity is becoming increasingly complex

# Geopolitical tensions



Geopolitical tensions are an influence on cyber strategy in nearly 60% of organizations, with one in three CEOs citing cyber espionage and loss of sensitive information/IP as top concerns.

# Cybercrime sophistication



# Supply chain interdependencies



72% of respondents say cyber risks have risen in the past year, with cyber-enabled fraud on the rise, an increase in phishing and social engineering attacks and identify theft becoming the top personal cyber risks.

# With 54% of large organizations citing third-party risk management as a major challenge, supply chain challenges remain a top concern for achieving cyber resilience.

# Al and emerging tech



66% of respondents believe that Al will affect cybersecurity in the next 12 months, but only 37% have processes in place for safe Al deployment.

# Cyber skills gap



The cyber skills gap has widened since 2024, with two in three organizations reporting moderate-to-critical skills gaps. Only 14% of organizations are confident that they have the people and skills required.

# Regulatory requirements



78% of leaders from private organizations feel that cyber and privacy regulations effectively reduce risk in their organization's ecosystems. However, two-thirds of respondents cited the complexity and proliferation of regulatory requirements as a challenge.







# **Impacts & Consequences**



Loss of revenue and reputation



Customer dissatisfaction and complaints



Operational disruption and delays



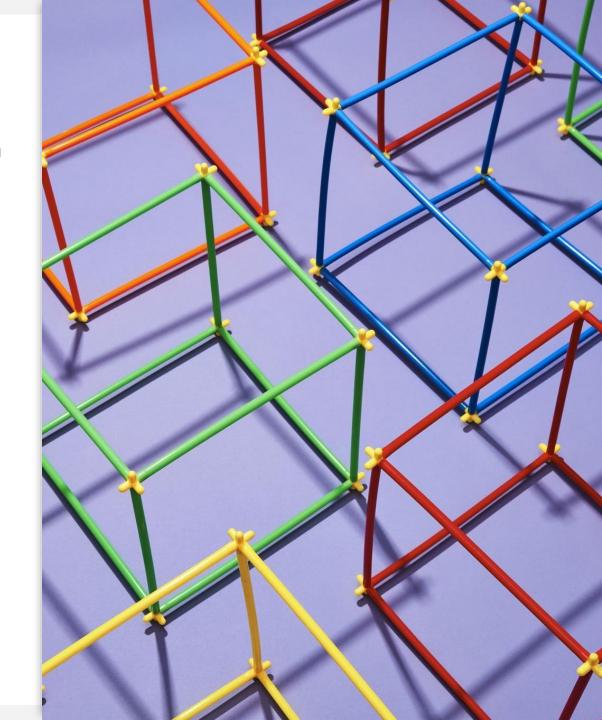
Legal and regulatory compliance issues





### **Best Prevention Practices**

- Strong password policies and multi-factor authentication
- Robust network segmentation to limit the spread of attacks
- Continuous patching and updating of software and systems
- Employee awareness and security training (phishing simulations)
- Proactive cyber threat intelligence with industry sharing platforms



Prevention is always more cost-effective than incident



# **Incident Response & Recovery**



Have an up-to-date incident response plan with roles & responsibilities clearly defined.



Isolate infected systems quickly to prevent spread.



Secure backups for crucial data.



Communicate transparently with stakeholders and relevant authorities.



Conduct post-incident analysis for continuous improvement.





# **Cyber Resilience Initiatives**

- UPU: Taking a multi-faceted approach to improving safety and security in the global postal & logistics sector
- .POST Domain: A Secure Digital Identity
- .POST Shared Services Platform: Secure Online Services
- **SECURE.POST:** Cybersecurity Awareness Portal
- POST-ISAC: Information Sharing and Analysis Centre







# **UPU .POST Digital Framework**

.POST Digital Centre of Excellence (best Practices from the Postal Sector Community in Digital Services)

.POST Applications Marketplace (offered from Postal Sector Community partners)

DNS Services	Cybersecurity & Cyber Resilience Services	e-Commerce Services	Secure e-mail Hosting Se rvices	Secure Web Hosting Services	e-Learning & Capacity Building Services	X Services -> -> ->
<b>V</b>	<b>/</b>	<b>✓</b>	<b>✓</b>	<b>/</b>	<b>✓</b>	

.POST Security infrastructure

.POST Governance & Compliance Policies

.POST Shared Services Platform





# THE STRENGTH BEHIND .POST

### Rooted in Tradition, Strengthened by Innovation

UPU's legacy of 150 years stands behind .POST, ensuring the highest industry standards and policies.





# Transparency and Accountability

Transparency is at the heart of .POST.
Stringent verification processes conducted by the UPU validate the authenticity of all applicants, further enhancing the domain's integrity.

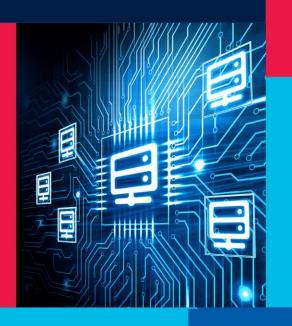




# .POST: CREATING A SECURE CYBERSPACE FOR THE POSTAL SECTOR

### **Robust Security Protocols**

POST domains enforce strict security requirements, including DNSSEC, SSL, and Domain-based Message Authentication, Reporting, and Conformance (DMARC) for email authentication.



### **ICANN Endorsed**

.POST has been sanctioned by ICANN, ensuring the trustworthiness and legitimacy of our domains.













# POST

# **Establishing Digital Trust**

.POST Domain fosters trust in the digital postal & logistics environment.

o2— Promotes
digital
transformation
in the postal &
logistics
industry.



Creates a secure platform for postal & logistics services online.

Strengthens security for digital interactions and postal & logistics services.





# .POST Domain: A Secure Digital Identity



- POST Domain: A Top Level Domain (TLD) exclusively for the postal and logistics sector
- Sponsored by the UPU
- Provides Internet domain services for postal and logistics businesses
- Increases the security of postal and logistics digital services
- Serves as a digital trust infrastructure for the postal and logistics sector





# **.**POST Domain: A Secure Digital Identity



Strict Registration Requirements: The .POST registry has stricter registration requirements compared to generic TLDs like .com or .org. This can minimize the risk of malicious actors registering domain names with the intention of cyberattacks.

### Improved Trust and Confidence:

- Brand Recognition: The .POST domain name clearly identifies a
  website as belonging to a postal service. This can help users
  distinguish legitimate postal service websites from fraudulent
  ones, promoting user trust.
- Reputation Management: The UPU maintains a high standard for .POST domain registrants and engages in comprehensive DNS Abuse and security compliance monitoring, enhancing the overall reputation and trustworthiness of websites using this TLD.





# Cybersecurity in .POST

#### **DOMAIN VALIDATION**

- DMP ensures the control and the security steps in accreditation and release of .POST domains
- All the business domains are verified by UPU and have to respect the 30-days notification period

#### **CYBERSECURITY POLICIES**

- Defined and updated to ensure increased security levels
- Abidjan Cycle introduces a schedule activity for updating the policies.
- Available for all on the UPU website: .POST Security Policies

### <u>UPU ANTI-ABUSE DOMAIN</u> <u>MONITORING</u>

Constant monitoring activitie



#### **SKILLS DEVELOPMENT**

- Collaboration with GCA for bootcamps
- Webinars for members
- Workshop and training initiatives
- Newsletters

#### **CIRT**

- .POST Cyber Incident Response Team (CIRT)
- Supporting posts for the incidents
- Know-how on the cyber threats

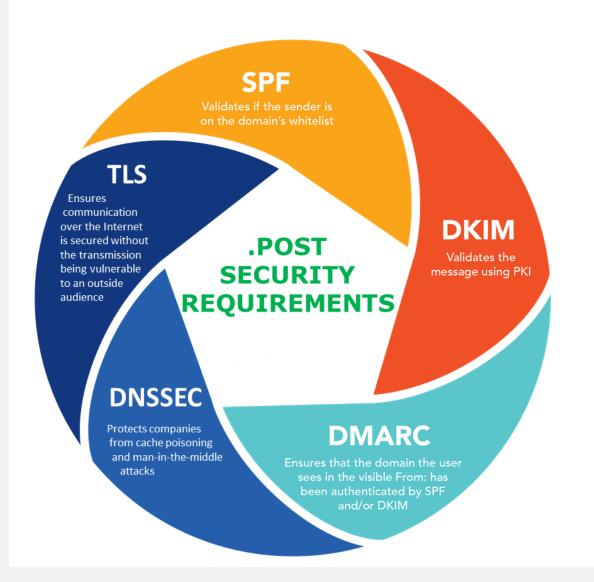
## DOMAIN COMPLIANCE MONITORING

Real-time monitoring support





# **UPU .POST Cybersecurity Framework**

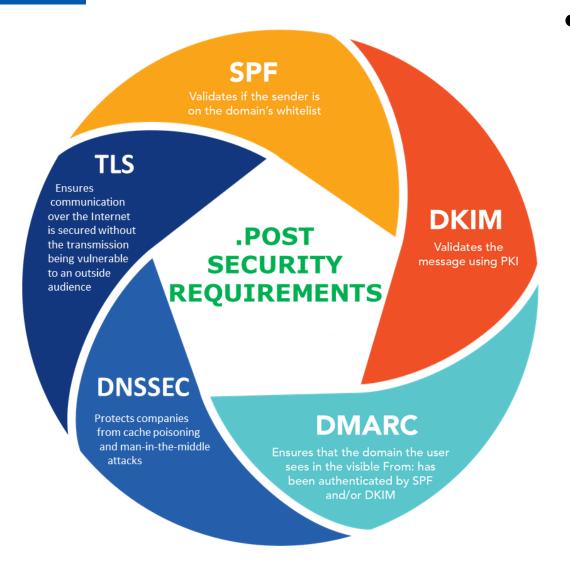


- A set of UPU approved recommended cybersecurity policies for Members, their Designated Operators and Wider Postal Sector Operators (WPSPs)
- Goal is to reduce domain hijacking, phishing, and spoofing in the postal & logistics sector
- Key Policies Include:
  - DNSSEC Implementation Policy
  - Secure Email Authentication Policy
  - Secure Online Transactions Policy





# **UPU .POST Cybersecurity Framework**



### Impacts and Benefits

- Provides a baseline of cybersecurity guidance for UPU member countries, their designated postal operators and WPSPs.
- Helps to mitigate common and significant cyber threats targeting the postal & logistics sector.
- Contributes to building trust in digital postal & logistics services.





### **Additional Benefits for Posts:**

- **Reduced Costs:** Postal services can benefit from economies of scale through the centralized management of the .POST TLD.
- **Technical Support:** The UPU can provide technical support and guidance on cybersecurity best practices to Post offices using the .POST domain.
- Global Visibility: Using a TLD sponsored by a United Nations System Agency can enhance the online presence of Postal services and potentially attract more international business partnerships.







# Committed to Cybersecurity Excellence

for the Postal Sector







ICANN Endorsement



DNSSEC, SSL and DMARC Protocols



Transparency and Accountability







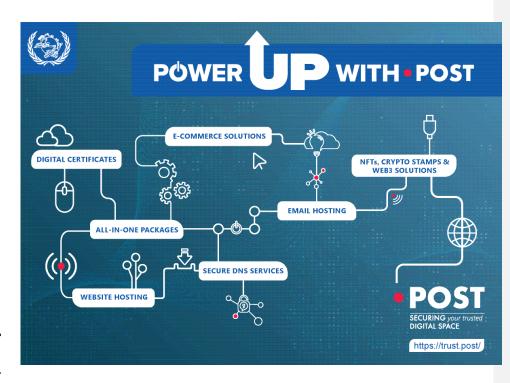
# **.**POST Shared Services Platform → https://trust.post

 A variety of new secure digital services are available on the .POST Shared Services Platform, including:

✓ E-mail hosting	✓ Secure sockets (SSL) certificates	layer		
✓ Web hosting	✓ Secure domain management services	name (DNS)		
✓ E-commerce	and much more			

**Note.** – Discounts are available at the checkout for qualifying small island developing states (SIDS) and least developed countries (LDCs), as classified by the United Nations.

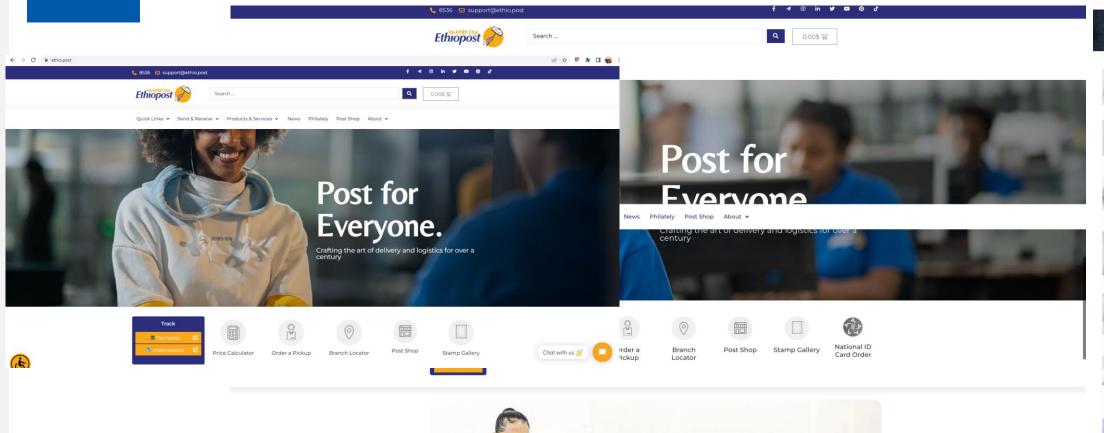
# **TRUST POST**

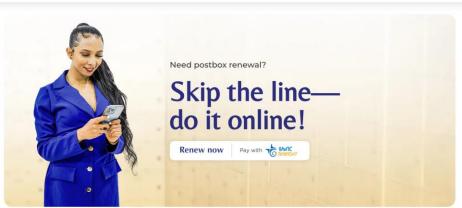






# .POST Showcase - ETHIO.POST











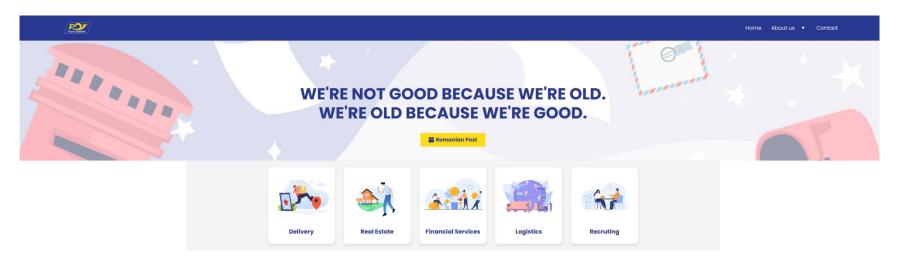




Chat with us 👏



### .POST Showcase - RO.POST



#### The Mission of the Romanian Post

Romanian Post is one of Romania's largest employers, with over 22,000 employees and a fleet of 12,000 vehicles. It operates a unique courier network, ensuring the efficient delivery of letters and parcels both domestically and internationally. Romanian Post is committed to renewing trust, modernizing its services, and setting a benchmark for well-nee in the public sector.

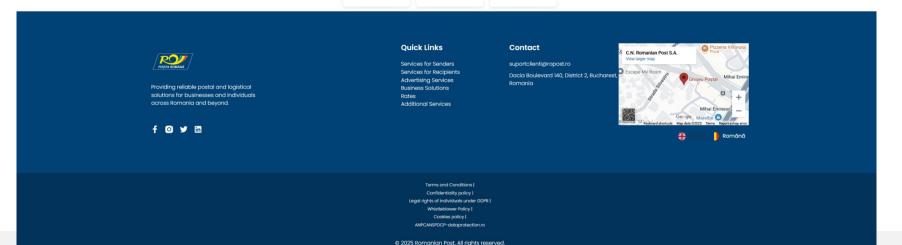






0 5,500 es Postal Units

1,200



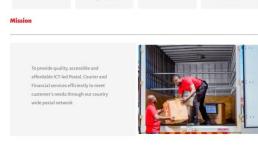




### .POST Showcase - MALAWIPOST.POST







#### ision

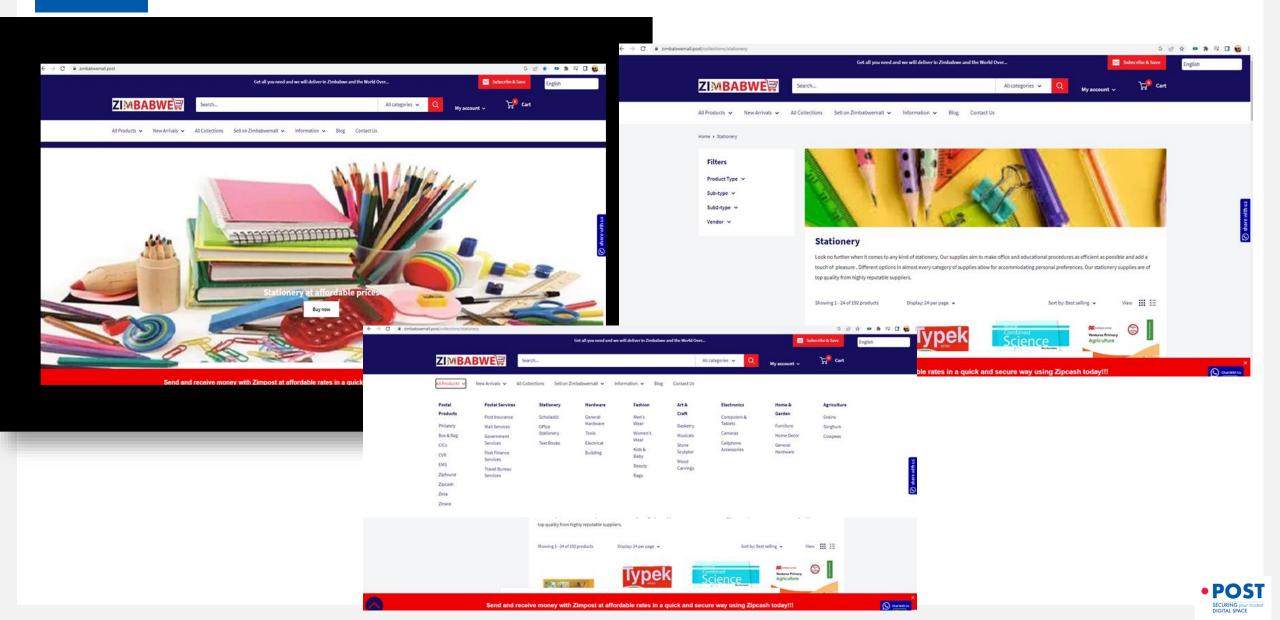


To be a leader in the provision of ICT-led Postal, Courier and Financial Services in Malawi.

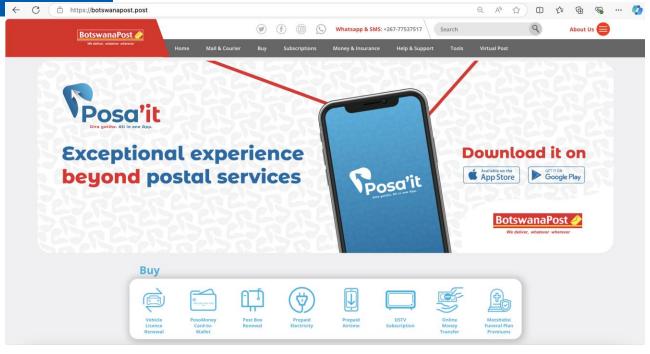




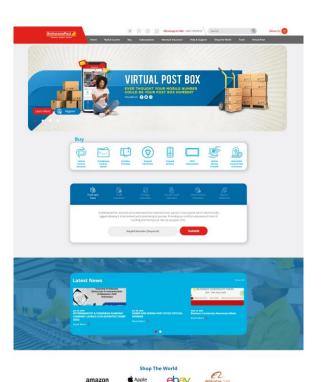
### .POST Showcase – ZIMBABWEMALL.POST

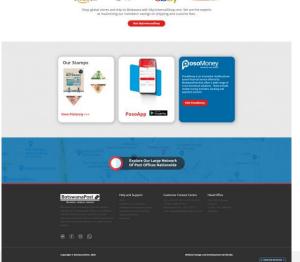


# .POST Showcase - BOTSWANAPOST.POST













# .POST Showcase – STAMPS.TZ.POST



#### **COLLECTIONS 2023**

Collection 2023

Collection 2022

Collections 2021

Collections 2020

Collection 2019

Collection 2018

Collection 2017

Collection 2016

Collection 2015

Collection 2014

Collection 2013

Collection 2012

Collection 2011

Collection 2010

Collection 2009

Collection 2008

Collection 2007

Collection 2006

Collection 2005

Collection 2004

Collection 2003

Collection 2002

Collection 2001

Collection 2000

Collection 1999

Collection 1998 FEATURED COLLECTIONS





English English

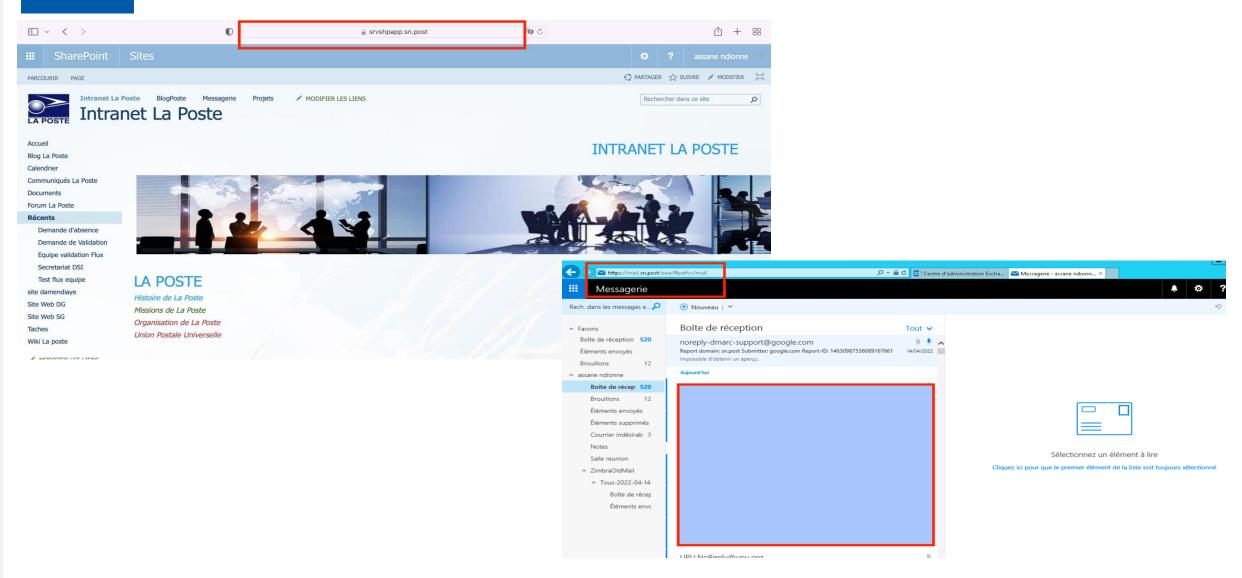


View all Collections





## .POST Showcase - SENEGAL

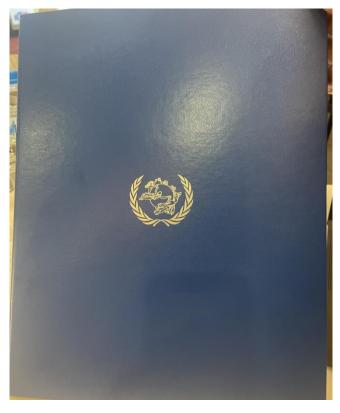






## Pioneer award ceremony for SEYCHELLES.POST at the first SIDS Postal Leaders Forum – March 2024











## A sample of the UPU's .POST Online Footprint

- https://ems.post
- https://address.post
- https://www.wnsstamps.post/
- https://www.oscar.post/#/dc
- https://cds.post
- http://globaltracktrace.ptc.post/gtt.web/Search.aspx
- https://udp.post







## **APPLY NOW: .POST Starter Package**









#### **Promoting Cyber Hygiene**

- An online Cybersecurity & Cyber Resilience portal being established by the UPU.
- Will serve as a central gateway to cybersecurity and cyberhygiene awareness, sensitisation, and training resources.
- Leverages the security and trust of the .POST Top Level Domain.









Our content partners





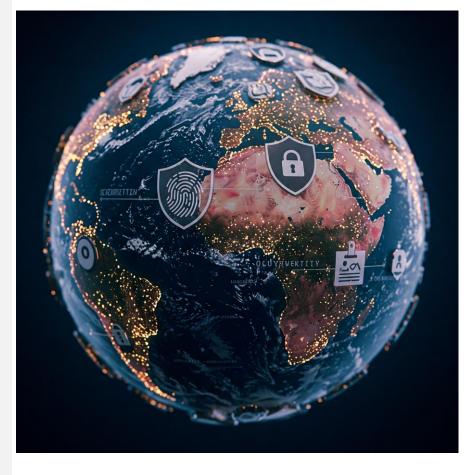








## **Benefits**



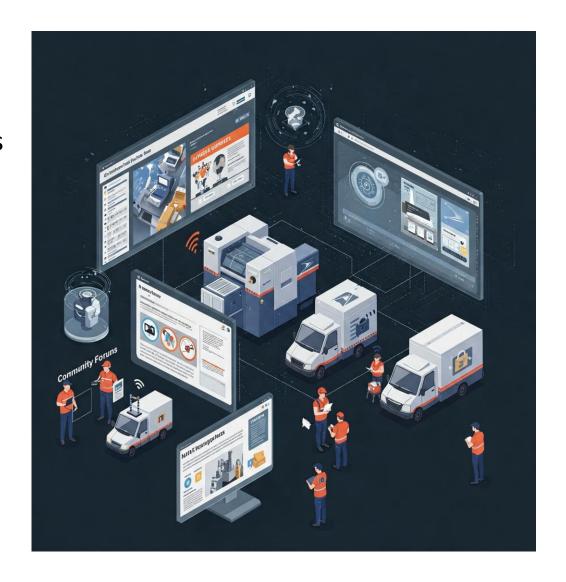
- Improves cybersecurity posture and mitigates cyber threats.
- Enhances resilience and ensures continuity of essential services.
- Provides global reach and coordination regardless of location or language.
- Offers a cost-effective solution with free or low-cost training and resources.
- Acts as a secure and trusted platform for reliable cybersecurity information.
- Aids in reputation management by demonstrating commitment to cybersecurity.
- Positions the UPU as an industry leader in cybersecurity.





### **Features**

- Cybersecurity best practices for postal and logistics organizations
- Awareness and training materials for employees and customers
- Cybersecurity news and updates on emerging threats
- Information on cybersecurity tools and services
- Cybersecurity forums and communities
- Access to materials from partners







## **Promoting Industry Collaboration**

- Information sharing platforms (e.g. UPU's POST-ISAC initiative, SECURE.POST, etc.).
- Joint threat intelligence and mitigation efforts.
- Coordinated response planning for largescale attacks.
- Partnerships with cybersecurity experts.





## **SECURE 6 POST** Approved Partners (Phase 1)















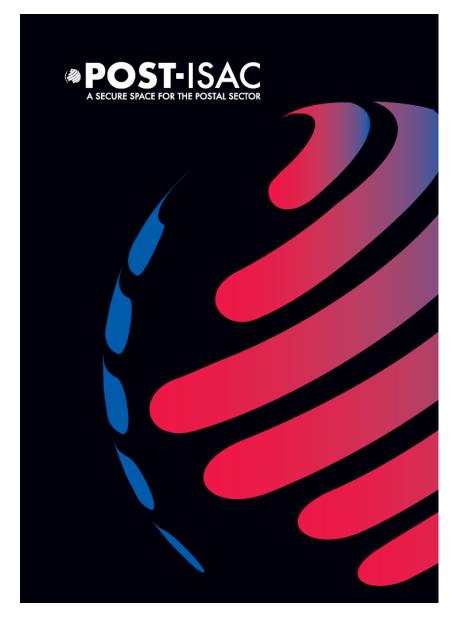






#### The POST-ISAC: Collaboratively Strengthening Cyber Resilience

- What is it?: An initiative to design and develop an Information Sharing and Analysis Centre (ISAC) for the global postal and logistics sector.
- Centralized platform: Sharing critical information about security threats, incidents, and best practices.
- Enhance safety and security:
   Provide UPU members and stakeholders with the necessary information and resources.







## **POST-ISAC:** Key Objectives

- Facilitating timely and secure sharing of cybersecurity threat intelligence.
- **Encouraging cooperative efforts** in developing cybersecurity strategies.
- Coordinating incident response efforts and sharing lessons learned.
- Collaborating on vulnerability management activities.
- Providing resources and support to improve cyber resilience.
- Addressing sector-specific cybersecurity challenges.
- Developing and delivering training and awareness programmes.
- Potentially facilitating collaboration with government and law enforcement.
- Conducting research and analysis on emerging threats.
- **Fostering a sense of community** among members.





## **POST-ISAC Pilot Onboarding**

- UPU has launched the POST-ISAC pilot onboarding initiative in 2025.
- Early engagement opportunity with this vital project
- Pilot participants will help shape POST-ISAC's development
- Benefits include enhanced situational awareness, improved security posture, and strengthened cyber resilience.
- Access to timely threat information, and collaboration opportunities.
- Contact us today at <a href="mailto:hello@trust.post">hello@trust.post</a>

Your participation in the pilot will be instrumental in demonstrating the value and impact of this critical undertaking.



A Trusted Digital Space for the postal and logistics sector. The UPU-sponsored .POST Top Level Domain and its accompanying Shared Services Platform is intended to increase the security of postal digital services and serve as a digital trust infrastructure for the sector.





SECURE.POST:
The Cybersecurity Awareness
Portal for the global postal and
logistics sector. This online
portal will serve as a central
gateway to cybersecurity and
cyberhygiene awareness,
sensitisation, and training
resources for postal and
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The UPU has established a cybersecurity framework that includes recommended .POST Security policies aimed at reducing common cyber threats such as domain hijacking, phishing, and spoofing.





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### The Future is NOW

- Cyber threats to the postal sector will **undoubtedly continue and potentially evolve in their sophistication**. The attacks we've discussed today are a reminder of this ongoing challenge.
- Proactive prevention isn't merely important; it's a **non-negotiable investment** every postal operator must make.
- Industry-wide **collaboration and intelligence sharing** are vital for staying ahead of the curve. By pooling knowledge and resources, we strengthen the collective defense against cyberattacks.
- Investing in cybersecurity isn't just about protecting data and services in the present; **it's about enabling trust**. Customers and businesses must feel confident that their information and transactions are safe when interacting with postal services.
- Cybersecurity should be woven into the fabric of postal innovation. As we adopt new technologies and expand digital offerings, **security has to be a central design principle**, not an afterthought.





## **APPLY NOW: .POST Starter Package**







#### **HOW YOU CAN HELP**

We strongly encourage your organisation to seize this opportunity and join our pilot onboarding initiative for the POST-ISAC scheduled to commence in 2025. Your active participation will be invaluable in shaping the future of cybersecurity collaboration within the postal and logistics sector, contributing to a safer and more secure global network.

We would be delighted to provide you with further information on our other cybersecurity initiatives, including the .POST Top Level Domain, the .POST Shared Services Platform, SECURE.POST and the UPU .POST Cybersecurity Framework.

We believe that by working together, we can significantly enhance the cyber resilience of the global postal and logistics sector and ensure the continued delivery of essential services in the face of evolving cyber threats.

We look forward to your active engagement in these critical endeavours.

Scan to join:







Postal Technology Centre
.POST Business Management Unit
International Bureau
Weltpoststrasse 4
3015 BERNE
SWITZERLAND

email: hello [at] trust [dot] post website: https://isac.post





## **UPU-CTU MoU**

- Bern, Switzerland 3rd March 2023: The Caribbean Telecommunications Union (CTU) and the United Nations Universal Postal Union (UPU) signed a Memorandum of Understanding (MoU) to collaborate and promote digital transformation in postal services in the Caribbean region
- Under the terms of the MoU, the CTU and the UPU will collaborate to promote and carry out the deployment of the UPU's Digital Readiness for e-Commerce assessment in the Caribbean in order to contribute to the harmonisation of the region's digital transformation agendas. The aim is to provide seamless end-to-end e-commerce and e-government services throughout the Caribbean Region.
- Speaking from the UPU headquarters in Bern, SG Rodney Taylor stated, "The
  partnership between CTU and UPU will be a crucial element in promoting digital
  transformation and e-commerce in the Caribbean region. We believe that the
  deployment of the UPU's initiatives will greatly benefit the citizens and
  businesses in the region."







- The MoU will also explore the adoption of the UPU's sponsored .POST top-level domain within the postal sector in the region in order to enhance the authenticity and cybersecurity of the associated services provided by the UPU.
- The parties further agreed to the implementation of the UPU's CONNECT.POST initiative in the region with a view to ensuring complete internet access of all of the region's post offices.
- Importantly, the collaboration will greatly assist in the CTU's efforts to bridge the digital divide and promote digital inclusion in the Caribbean and to provide opportunities for growth and development in the postal and telecommunications sectors.







**Postal Modernization and Digital Transformation Assessments** 

**Barbados** 

Onsite Mission in September 2023

Final Report delivered to the Government.

Follow-up implementation of some of the recommendations, e.g., development of an analytical accounting system







**Postal Modernization and Digital Transformation Assessments** 

## **Trinidad and Tobago**



Final Report delivered to the Government



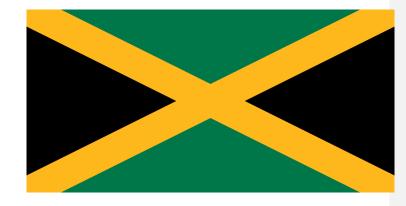




Postal Modernization and Digital Transformation Assessments **Jamaica** 



Final Report delivered to the Government







**Postal Modernization and Digital Transformation Assessments** 

#### **Belize & Grenada**



Final Reports anticipated to be delivered in Q4 2025









#### **Caribbean Postal Union (CPU)**

- Locked out of existing site
- UPU & CTU helped CPU transition to CPU.POST
- Website and email successfully migrated to CPU.POST







# Cyber Resilience in the global Digital Economy:

## A Focus on e-Commerce Logistics

August 2025
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