

An Interview with the Postal Technology Center (PTC), UPU

- **Interviewee:** *David Avsec, PTC Account Relationships and Product Management Coordinator*
- **Interviewer:** *APPU Bureau*

Q1: E-commerce development is a crucial aspect of the UPU's Regional Development Plans. What future IT solutions does the PTC recommend for APPU members to integrate e-commerce solutions into their postal operations?

Mr. David Avsec: At the PTC, we have prioritized enhancing our compliance tools. For example, we are launching UPU-SAVE (Secure Address Verification system) to verify the quality and deliverability of postal addresses. We are also finalizing an agreement with third-party providers to integrate lookup functionalities into our Customs Declaration System (CDS), which will include HS codes, denied parties, and prohibitions and restrictions. Additionally, we plan to introduce a landed costs calculator to support a Delivery Duty Paid (DDP) product. We encourage all APPU members to adopt these forthcoming features, which will be available as out-of-the-box options in the CDS. Since nearly all APPU member postal operators already use CDS, a simple upgrade will be required to access these e-commerce enhancements.

Q2: How do the recent technological advancements, such as the DPS system (Domestic Processing System), DPS-Track-IT, and POS (Point of Sale) system, collectively contribute to the optimization of the entire mail operation, from mail acceptance to final delivery? Can you elaborate on any domestic digital initiatives or IT solutions that the PTC is spearheading to streamline domestic mail and parcel services?

Mr. David Avsec: Over the years, we have observed two prevalent situations. Posts with weak domestic operations often struggle with their end-to-end international performance, particularly in capturing first and last mile events. Additionally, some Posts have had negative experiences with developing or sourcing systems for their domestic networks.

Recognizing these challenges, the PTC is naturally moving towards enhancing domestic systems, understanding the complexity and need for flexibility. Our DPS system allows flexibility to accommodate different postal workflows, while our POS system adapts to a broad range of products and services in post office networks.

The core principle of DPS and POS is to design robust software architectures that are adaptable to local conditions yet maintain uniformity to minimize maintenance costs through economies of scale and cooperative development. DPS-Track-It, as a mobile extension of DPS, simplifies complexity by hosting a DPS instance in the cloud, allowing Posts to deploy a mobile app for efficient mail collection and delivery scans.

Q3: With cybersecurity being a critical concern for digital operations, what measures is the PTC implementing to ensure the safety and security of digital data across the postal network?

Mr. David Avsec: The PTC has invested significantly in securing the products and networks provided to APPU member postal operators. Since 2019, our core data management processes, including Post*NET, cloud services, and big data, are certified under ISO 27001 Information Security Management System (ISMS).

Furthermore, we are enhancing the cyber resilience of the UPU's International Bureau to secure digital assets more robustly. This internal expertise in cybersecurity will ultimately be leveraged to offer solutions and tools to APPU members, aiming to secure their IT networks.

Additionally, we support the .post shared services platform (<https://trust.post>), where members can register .post domains and purchase digital certificates and secure email and website hosting services at discounted rates, thereby extending traditional postal trust to the online space.

Q4: Considering the potential security risks associated with handling personal information during digital transformation, does the PTC have or plan any products to help Posts protect data systematically, balancing efficiency and security?

Mr. David Avsec: Aligning with our ISO27001 certification, the PTC is also working towards achieving ISO27701 – Personal Information Management System (PIMS) certification. This certification focuses on risk management, controls, and processes to protect personal data.

We are actively incorporating these data protection mechanisms into future releases of IPS, CDS, and DPS, ensuring compliance with national laws and UPU data protection regulations. Thus, APPU member postal operators can continue to rely on UPU technology, confident in their compliance with data protection standards.

Q5: Despite being digitally connected and compliant with EDI standards, the full benefits of digital transformation are often not realized. From the PTC's perspective, how should Posts effectively use IT technology to maximize the value of their technological capabilities?

Mr. David Avsec: The PTC strongly recommends that APPU member Posts review the capabilities of UPU technology (IPS, CDS, DPS, etc.). We often observe that the extensive capabilities of these solutions are not fully utilized. By doing so, postal operators can maximize their value without further increasing technology costs.

Q6: With some Posts using old versions or locally developed mail processing systems, what are the starting steps for integrating these with PTC systems, and which new technological solutions do you recommend?

Mr. David Avsec: The IT landscape of businesses has increasingly become API driven, which addresses numerous issues by allowing smaller, more manageable modules that are easier to replace and source from different providers.

For legacy systems, APIs offer the possibility of phased replacement by functionality. This approach mirrors that of postal competitors, where APIs provide the agility needed for supply chain organization.

It is essential for Posts to adopt this model, and the PTC supports this trend by offering an increasing number of APIs for integrating our software and services, which are publicly available on the UPU website at <https://upu.int/api>. We also integrate APIs from 3rd party vendors, making them available through our software.

Q7: Looking ahead, how do you see emerging technologies further enhancing the standardization of processes within the postal sector? Are there any particular plans members should look forward to?

Mr. David Avsec: The integration of public postal sectors with private logistics is an emerging trend. The PTC's API strategy facilitates the easy integration of UPU technology. Additionally, the recent launch of the UPU-TechCert program (<https://upu.int/upu-techcert>) tests and certifies private sector technical interfaces against UPU technology, ensuring stable, secure, and real-time data exchange, thereby enhancing collaboration in postal business.

Artificial Intelligence (AI) is also becoming increasingly significant in our product line. In the second half of 2024, we plan to release the Dangerous Good Search Tool (DGST), which uses AI and machine learning to detect prohibited items in the mail, leveraging the vast amount of data available in our Big Data infrastructure.