EUROPEAN STANDARDS DEVELOPMENT

An update on activities
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In the lead up to full liberalisation of the European Market for postal services, most operators understood that the markets upstream and downstream of the core postal service provision would be keys to their future. The way in which society communicates has continued to change fundamentally over the last ten years, a process which has run parallel with the opening up of the postal market in Europe.

Solid base for standards established

The European Commission gave mandates to the European Committee for Standardisation (CEN) based upon the various framework directives leading to full postal market liberalisation. Fifteen years ago CEN created the Technical Committee Postal Services (CEN/TC331) structured into five Working Groups (WG): quality of service; hybrid and electronic postal services; automatisation of postal core processes; postal trays and receptacles; and letter and parcel acceptance devices.

Since hybrid means of communication had not traditionally been covered by the postal universal service obligation, previous work undertaken by Working Group 2 (WG2) was not the focus of the European Commission's mandate to standardise postal service. However, from 2008 onwards the picture changed considerably. The Universal Postal Union laid the foundations for extending postal service provision into the internet, and WG2 then actively ensured that the spirit and aim behind liberalising the European market for postal services was not jeopardized by new and exclusive areas dedicated to the incumbents.

WG2 sought to ensure equal and non-discriminatory access to hybrid postal services and converted UPU technical specifications into CEN format. Moreover, it is in the process of revising existing standards, and aims to develop new technical standards for hybrid mail.

Step one: defining and developing hybrid mail

Hybrid mail, as defined by WG2, is an electronic based postal service. The sender posts the original message in either a physical or an electronic form and the message is then electronically processed and converted into a letter post item for physical delivery to the addressee. Where national legislation permits, and where the sender or the addressee requests, the postal operator effecting the delivery may convert the original transmission received either into non-physical means, such as fax, e-mail, or SMS, or into multiple means.
Where delivery is physical, the information is generally transmitted →

by electronic means for the furthest possible distance before being physically reproduced at premises as close to the recipient's address as possible.

The leading technical specification "CEN/ TS 14014:2006 Postal services - Hybrid mail - Document type definitions for customer to operator: a common set of default tags", is under revision in 2012.

Most communications, even letter post items, have their origins in digital media. Letters are overwhelmingly composed and written using IT-based output systems. So it is true to say that "the original is digital" and is stored and archived digitally. The printed mail piece is simply a copy. Therefore, more and more postal services providers are extending their core postal service offerings into upstream markets. Hybrid mail has become a vital value proposition for postal services and output management providers.

Step two: Secured electronic Postal Services (SePS)

Whilst defining hybrid mail was the first step, the important second step was to extend standards to Secured electronic Postal Services.

The progression from a digitally composed mail piece to secured electronic distribution, whether driven by governments or postal services, is a process of evolution rather than revolution. Most would say that this evolution is due for completion sooner rather than later. It is therefore no surprise that postal services, in countries where third party players are large enough to have an impact on the letter post market, have decided to actively drive forward the evolution from physical mail to secured electronic mail themselves.

WG2 has supported these developments by actively participating in converting global postal standards in this field into European Postal standards, with defined interface specifications for SePS and for the Electronic Postal Certification Mail (EPCM) service created by early 2011.

The core service provision of postal providers offers a unique proposition to the two parties involved in any letter post communication: authenticity, integrity and trust. These principles are safeguarded globally by national and international legislation. This is the Trusted Third Party concept that postal service providers use as the cornerstone for

future service offerings.

Enshrined in the postal service provision, this cornerstone of the postal service obligation was extended to e-mail through the development by CEN of a functional specification for postal registered electronic mail. This specification was also instrumental in transforming the ETSI (European Telecommunications Standards Institute), REM (Registered E-Mail) standardisation and providing technical standardisation for any interoperability for a postal service provision extended to digital communication means. E-Delivery and certain aspects of electronic cross border identification were therefore made interoperational, supporting the evolution of the postal network which is by definition universal and becoming increasingly multi-channel.

Step three: reverse hybrid mail

Reverse hybrid mail will specify the technical processes and means for converting physical mail into digital form for delivery to electronic mailboxes. The electronic mailbox (e-mailbox) in the digital world will serve a similar purpose to the traditional mailbox in the physical world. It can be argued that everyone

online already has an e-mailbox. The answer is both yes and no; it is only partly true. Currently e-mailboxes are not quite the same as traditional mailboxes: the legal obligations associated with a physical mailbox are not yet valid for e-mailboxes.

However, as you read this, posts globally are going through the evolutionary process of adopting the concept of secured electronic mailboxes. All these developments are based on international standards and principles which aim at establishing global SePS networks, parallel to the physical networks which were established by postal service providers around one hundred and twenty five years ago, and which have been maintained ever since.

The concept of a postal electronic mailbox was enshrined in the letter post convention of the UPU in June 2011. A postal electronic mailbox enables the sending of electronic messages by an authenticated mailer, delivery to the authenticated addressee, and access, management and storage of electronic messages and information by the authenticated addressee.

As a result, and to ensure the equal and non-discriminatory access to reverse hybrid postal services, WG2 started work on standardising the processes and technologies already in use. The results and first drafts will be ready by the end of 2012.

New work items for 2012

As delivery of mail and addresses, and sender and recipient identification, become fully multi-channel, the extension of postal service provision into new means of digital communication at both national and global levels requires new standards. This becomes even more important as personal and sensitive data, profiles and preferences all need to be protected, authenticated and secured. Data is the new commodity in a market driven economy.

Data protection legislation, copyright and consumer protection are increasingly changing the way we communicate. Across the world states and businesses are tackling the issue of identification in order to

know who their clients are, and to ensure that people only get access to the information and services to which they are entitled. Yet again, postal services find themselves in the important role of a trusted mediator. The postal address is core to several levels of postal "In-Person-Proofing" services offered by most postal service providers today, whether for secured delivery, first class or second class mail, parcel services or postal financial services. In the same way, user identification and authentication are essential if many cross border services are to become successful and secure.

Accordingly, WG2 is currently working on two new technical standards.

Preference Database:

Postal markets are dynamic and are quickly evolving in conjunction with the ever widening markets for communication, advertising and electronic commerce. Facilitating the interoperability of postal industry stakeholders along the postal value chain becomes increasingly important.

Postal services rely on addresses. Paper based mail and new means of communication, and therefore distribution and delivery, require highly standardised addresses to identify recipients and deliver document based communication. As addresses become multi-channel, access to those channels will be based on consent and opt in mechanisms. This new work item will focus on technical specifications for distribution and delivery on a European level, clearly identifying different ways of delivery by different means of addressing recipients and their preferences.

Mail Switch for postal processing:

Similarly, outgoing mail applications follow the preferences of recipients and senders. Switching between different means of delivery, combining paper based mail streams with new added value offerings in the ICT based world, leads to new business models and integrated mail solutions. The security and integrity of digital documents, using existing standards, ensures that delivery is based on the preferred media of any recipient. The documents may

be transactional, legal, personal, confidential, governmental, health related, marketing or informational, and as presented to recipients will offer different standards of security and different levels of non-repudiation. A service such as this can only be offered by a trusted party, providing a trustworthy, fast and efficient service based on technical specifications. Postal services, as well as related services, are ideally suited for this service.

The current lack of a standardised interface offering results in proprietary solutions being created. This prevents software providers from adopting a single common interface, again preventing competition in the market for the service, both for users and for service providers. Building on work done in the past in the fields of SePS, EPCM and PrEM, WG2 will work to provide technical standardisation for the switch between media for delivery channels, taking into account different levels of authentication and non-repudiation. ∎

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