

## Chapter 7

# Industrial Online E-Postage Systems

### 7.1 INDUSTRIAL ONLINE E-POSTAGE

A few postal operators have started their online e-postage system infrastructures and encouraged e-postage providers and mailers to follow. In the following sections, we review the (cryptographically secured) online e-postage systems that exist worldwide. Our emphasis is on industrial scale online e-postage systems that are supported by a postal operator and at least one e-postage provider. We present these e-postage systems in terms of the general model introduced in Chapter 2 on page 25.

### 7.2 THE ONLINE E-POSTAGE MARKET

Worldwide, there are two postal operators who invite e-postage providers to sell (cryptographically secured) online electronic postage. The US Postal Services announced their IBI Program for centralized systems [102] in August 2000, while Deutsche Post launched their Internet postage service [23] in August 2001. Both programs are good for franking letters and parcels. As of 2005, the US Postal Services supports IBIP for centralized systems in the US and US territories, while Deutsche Post supports Stampit for first class mail in Germany and for parcels and higher value letters throughout Europe.

The IBI Program for centralized systems has attracted 5 e-postage providers in the US offering online postage through their respective web sites. The US Postal Service lists them online at <http://www.usps.com/onlinepostage/>.

1. *Stamps.com* got approval for their online postage service in 1999 and for their NetStamps service in 2002. They have more than 300,000 active customers, mostly small offices and home offices.
2. *Endicia.com* got approval for their Internet postage service in 2000. It supports printing indicia for certified mail including delivery confirmation, and also for insured mail, international mail, parcel post, media mail, bound printed matter and library mail.
3. *Click'n'ship* is the online postage service of the US Postal Services. It supports most classes of mail and asks no monthly fee.

4. *eBay* offers an Internet postage service that integrates into the eBay Client application. Sellers can pay their postage and monthly fees through PayPal, eBay's Internet payment instrument.
5. *Shipstream Manager* is an Internet postage service of Pitney Bowes. Mailers can produce shipping labels for parcels, packages, and over-sized envelopes.

The PC franking program of Deutsche Post attracted considerable interest when it was announced in 2000, but until 2005, only one e-postage provider has launched its service: Deutsche Post itself started a product called *Stampit* in September 2001. Stampit is available in three flavors: Two PC software applications, *Stampit Home* and *Stampit Business*, and one web application, called *Stampit Web*. Stampit Home and Stampit Business integrate into Microsoft Word and Open Office such that indicia can be printed also in the upper right corner of the address window of a letter. This saves a separate print of the indicia onto an envelope or label. StampitWeb integrates into the eBay web client and addresses eBay sellers throughout the European Union who ship their goods through Deutsche Post. Deutsche Post has licensed several customized versions of Stampit Home and Stampit Business to other European postal operators to support their domestic postal network.

1. Swiss Post has offered *WebStamp* in Switzerland since 2002.
2. Royal Mail started *SmartStamp* in the United Kingdom in 2004.
3. Estland Post started a trial of a customized version of Stampit Home in 2005.

IBI for online e-postage devices is an open standard of the US Postal Services that is supported by several private e-postage providers in the US with respective products.

Stampit is a proprietary standard of Deutsche Post. Documentation for Stampit is available only under a confidentiality agreement. E-postage providers for Stampit are Deutsche Post and a couple of universal postal operators who have licensed the Stampit system from Deutsche Post. Stampit Client software is available for Microsoft Windows. An open source project 'GNU-Stamp' was launched in August 2005 to develop Stampit Clients for other operating system platforms such as Linux or Mac OS X [60]. It remains an open question if Deutsche Post will support such approaches to develop Stampit towards an open standard.