

Secure Electronic Parcel Lockers

Postal Industry Overview

November 2010

Secure Electronic Parcel Lockers

Table of Contents

1. Key Learning.....	3
2. Introduction	3
3. Key Benefits.....	4
4. General Concept Description	4
5. Manufacturers of Secure Electronic Parcel Lockers	5
6. Secure Electronic Parcel Lockers among IPC Members	6
Deutsche Post DHL	6
Norway: Norway Post	6
Austria: Österreichische Post AG	7
Belgium: bpost	7
Finland: Itella	7
Denmark: Post Danmark	8
France: Groupe La Poste	9
7. Secure Electronic Parcel Lockers among non-IPC Members	9
Poland: InPost	9
Turkey: Turkey Post PTT	10
Estonia: Estonia Post	10
8. Staffed Drop-Off Solutions integrated in E-Commerce	10
Switzerland: Swiss Post	10
The Netherlands: TNT	11
Luxembourg: PTT Luxembourg	12
Kiala	12
GLS Germany	13
9. Non-Postal Secure Electronic Parcel Lockers	13
UK: myByBox	13
Service Features for Consumers	14
Service Features for e-Retailers	14
Pricing to Consumers	14
Staffed Collection Service.....	14
10. Sources.....	15

Secure Electronic Parcel Lockers

1. Key Learning

- Over the past five years, European postal operators have invested in secure electronic parcel lockers as a new delivery option, delivering greater convenience to consumers. This is positioned as an alternative to home delivery.
- Secure electronic parcel lockers are alternative delivery locations that can be used either as a delivery address or as part of a redelivery strategy with home deliveries. If first-time a consignee cannot be reached, the redelivery can be made to a locker box.
- Postal and non-postal operators are today offering secure electronic parcel lockers, with a range of value-added services targeted at consumers, e-retailers and mail order companies.
- Other existing alternative delivery networks (eg: Kiala) are based on providing staffed drop-off points. This option offers extended access both in terms of location and opening hours and is established in key European markets (Germany, France and Belgium).
- Significant expansion of secure electronic parcel locker services, primarily offered by private postal companies has taken place in East Europe. The additional security and ability to pay on collection of the parcel is supporting the growth of cross-border e-commerce in the region.

2. Introduction

Change and developments in first mile, last mile and reverse logistics over the last decade have been driven by the growth of B2C and C2C e-commerce and the challenge of meeting consumer expectations in terms of parcel delivery effectively and efficiently.

- Consumers have grown accustomed to being able to shop any time, any day from anywhere
- Consumers are looking for 24/7 convenience when receiving goods purchased online

The share of successful first-time deliveries is decreasing for private households as people are working longer hours, traditional morning delivery hours increasingly do not match modern lifestyles and the number of single households rises (specifically in urban areas).

New concepts in last mile delivery 'pick-up points' and first mile access 'drop-off points' have been developed ('PUDOs' for short). These can be classified as staffed or automatic PUDOs.

- Staffed PUDOs are generally located in easily accessible business outlets with long opening hours. These are equipped with barcode scanners and via electronic data interchange (EDI), the drop-off and pick-up of parcels are automatically recorded.
- Automatic, or unstaffed, PUDOs are electronically secured containers that come in various sizes. Parcels can be picked up or dropped off at any time of day.

This report focuses primarily on outlining:

- Market developments of automatic PUDO points: **secure electronic parcel lockers**
- Developments in the integration of staffed PUDO points in e-commerce platforms

3. Key Benefits

Through implementing alternatives to home delivery, operators gain efficiencies from:

- Bundling and consolidation of parcels and packages
- Increased number of successful first-time deliveries
- Optimisation of delivery routes
- Lower operational costs

In addition, deliveries to drop-off points enhance communication with consumers, providing additional information relating to delivery status.

Alternative solutions for home delivery also contribute to:

- A reduction in energy consumption (lower carbon footprint, less congestion on the roads)
- An improvement of transport efficiency (no failed deliveries, effective returns, night time delivery models)
- An improved e-commerce experience (less uncertainty, lower delivery costs)

4. General Concept Description

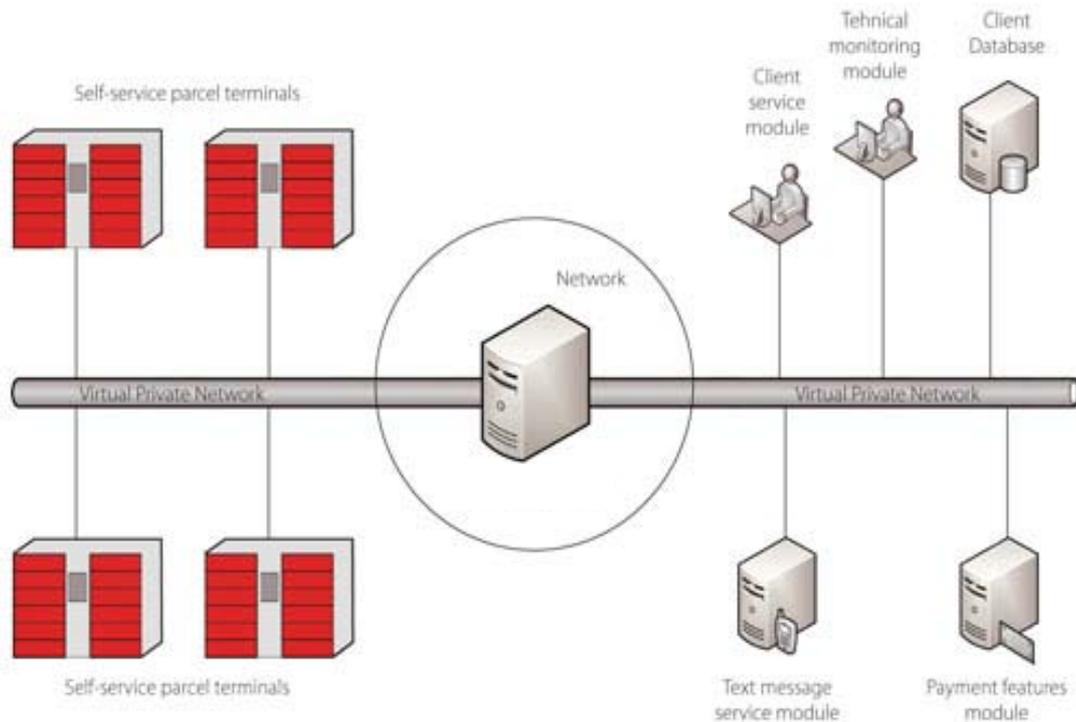
Secure electronic parcel lockers are automated booths for the self-service collection of parcels, packages and oversize letters. These lockers are most often located inside or outside high pedestrian traffic zones (eg: stations, shopping malls) or in purpose-built designated locations accessible 24 hours a day, seven days a week. Some parcel lockers include a range of locker sizes.

Consumers generally need to register to use these services and are notified of a pick-up/collection from their selected locker by e-mail or SMS.

Additional services offered from secure electronic parcel locker facilities include:

- Sending parcels (often at lower rates than from post offices)
- Printing of self-adhesive postage labels
- Printing of receipts as proof of posting
- Payment for postage by card
- Card On Delivery services when collecting parcels
- Return services

Retailers link into IT platforms which manage all aspects of secure electronic parcel locker usage.



A range of security tools are used to access lockers (eg: smart cards, personal codes) as well as a unique code communicated to consumers when a parcel or package is ready for pick-up.

Current limitations in the development of secure electronic parcel lockers include:

- High investment costs, including management, maintenance, repairs, running costs (eg: electricity)
- Efforts in obtaining a suitable location. (eg: negotiations with public authorities, lease arrangements, legal considerations)
- Postal and logistics companies are investing in their own individual secure electronic parcel lockers, available for use only by that company and its customers (e-retailers and mail-order companies)

5. Manufacturers of Secure Electronic Parcel Lockers

LogiBag (part of ByBox group of companies since 2005)

LogiBag has installed over 54,000 secure electronic lockers in 22 countries, primarily to the airline industry. Its manufacturing facilities are based in Le Mans France. LogiBag was acquired in 2005 by ByBox, a full-service locker network and software management company based in the UK.

ByBox is the largest UK company in Field Service, offering a night-time delivery model based on consolidating multiple parcel deliveries into a single locker location. In January 2007, ByBox launched its Field Service in France with further expansion into the Republic of Ireland in 2009.

In April 2009, the company diversified into consumer solutions and launched MyByBox, centralized parcel drop-boxes for B2C parcel deliveries. In addition to supplying lockers, ByBox also offers full management services for its installations.

In 2007, ByBox secured a contract with Coliposte, the parcel division of Groupe La Poste to supply, install and maintain next-generation postal lockers at locations across France. There are currently 31 established Cityssimo locations, primarily focused in metropolitan areas.

Environmentally-friendly technologies, such as solar paneled roofs and energy saving functions have been incorporated in the newest range of electronic delivery lockers.

Models without the need for fixed power sources are installed more cheaply, quickly and easily without requiring ground and electricity works.

Greater flexibility of location is also achieved.



KEBA (Package logistic solutions company based in Austria)

Keba is the largest supplier of electronic secure lockers to the postal industry, providing KePol designs to Austria Post and Deutsche Post DHL among others. It is currently operating test locations and pilot programs in various European countries including Belgium.

KePol designs include compartment system and rotation systems, incorporating service solutions tailored to individual postal companies. Keba also provides support services such as IT-operations, a hotline, rollout management, service, customer service and replacement parts logistics.

6. Secure Electronic Parcel Lockers among IPC Members Deutsche Post DHL

- Launched in 2002
- 1.5 million registered users (Nov 2010)
- 2,500 Packstations (Nov 2010)
- Primarily placed outdoors



Packstation is an alternative to a traditional home delivery, which consumers can use to collect parcels, packages or letters at no additional cost to standard postage.

Packstations achieved national coverage by 2010 (approximately 90% of the German population is able to access a Packstation within ten minutes of their home). Since 2009, the number of large corporations locating packstations at their offices has grown, increasing accessibility and convenience for employees.

Prior registration for receiving parcels at Packstations is required and includes membership in a loyalty programme.

When purchasing online, consumers insert the shipping address of their chosen Packstation. Upon delivery of the parcel at the locker, consumers receive an e-mail or SMS notification. In order to retrieve parcels, consumers require their smart card (provided upon registration) and pin (sent with the notification).

In addition to receiving parcels, customers can use the facility to post parcels. Bar-coded labels can be created, printed and paid for at the Packstation. Postage price points are € 1.50 cheaper for sending parcels from a Packstation. The barcode is swiped by a sensor when placed in an empty compartment, which is then locked. A receipt is then automatically issued for the deposited item.

Norway: Norway Post

- Bring Express offers secure electronic locker services in Denmark, Estonia, Finland, Norway and Sweden
- In Norway, 42 secure electronic parcel lockers (KePol models) are located in the seven largest cities
- Branded: MyQuickBox
- Placed inside and outside



Sweden Täby Centrum

A same-day delivery solution is offered for products ordered online. Consumers are able to reserve a suitable locker when completing the ordering process. Online purchases made from Bring's e-shopping partners early in the day are available for collection by five o'clock in the afternoon; later purchases should be available no later than nine o'clock the following morning.

Consumers receive SMS notification with a retrieval code as soon as a package is available for pick up. They can choose to pay for goods on collection at the MyQuickBox station.

Austria: Österreichische Post AG



- Launched Post.24 in November 2006
- 24 fully automatic parcel stations in Vienna
- Parcel collection or return
- Consumers are notified by SMS and provided with a unique code required for collection of the parcel

Belgium: bpost

A pilot test will be launched in 2011 and there are plans to install 150 to 200 'Packstations' (based on a similar model to Deutsche Post DHL) in Belgium. These will be located in areas of high pedestrian traffic and initially will be used for receiving parcels only, but the service could be extended to C2C deliveries in the future.

Finland: Itella

Itella first piloted secure electronic parcel lockers in 2008.

In July 2010, Itella acquired the parcel business of SmartPOST OÜ in Estonia. The agreement included the SmartPOST brand, service concept, existing customer agreements and 38 parcel terminals located in shopping centers across the country. SmartPOST OÜ will continue to exist as a separate company, focussing on the manufacturing and development of parcel terminal technology.

SmartPOST OÜ has a 25% share of the consumer parcel business in Estonia with a client base of distance sellers and online retailers. The business acquired by Itella will be known as OÜ Itella SmartPOST.



SmartPOST established the Delivery Point Solution in 2009 and includes 90,000 registered users in Estonia. It offers an alternative delivery option to postal and courier services targeted at online retailers. Consumers can collect, or send parcels with the additional facility of paying for their delivery on site.

When notified of their delivery by SMS, consumers are provided with a security code for retrieving their parcel. The code is entered into the secure electronic parcel locker screen to access payment facilities, prior to the automatic locker opening allowing the consumer to retrieve the parcel.

When sending a parcel from the secure electronic parcel locker, consumers receive a code by SMS which enables them to open a locker in which they place their parcel.

In July 2010, SmartPOST licensed SmartPOST's Delivery Point Solution to SDA Express Courier, a subsidiary of Poste Italiane which is piloting the concept in Milan. Further markets for expansion include Russia.

Denmark: Post Danmark

Post Danmark launched its first ten secure electronic parcel lockers in Copenhagen in April 2008 under the name "Døgnposten". By 2009, 102 Døgnposten facilities were available in all major towns.



In addition to parcel collection, consumers can send national parcels and packages under 10 kg from Døgnposten facilities. Lower price points are offered for items delivered sent and received at the parcel stations to reflect the reduced transportation by Post Danmark.

France: Groupe La Poste

Cityssimo is the secure electronic parcel locker service offered by Groupe La Poste. Registration and service is free to the end-user. The lockers are located indoors in secured locations, accessible 24 hours, 7 days a week using an access card issued following registration. There are currently 31 Cityssimo facilities in metropolitan areas, 27 in Paris, and one in each of Lille, Nantes, Lyon and Aix en Provence.

7. Secure Electronic Parcel Lockers among non-IPC Members

Poland: InPost



InPost, an independent postal services provider in Poland offers secure electronic parcel services via its Paczkomaty facilities. Each parcel station has 76 locker boxes in three sizes, accessible 24 hours, 7 days a week.



Users must register in order to access the parcel locker service. Consumers can select a Paczkomaty delivery from selected e-retailers with parcels ready for collection within 48 hours. SMS notification is provided including a delivery code, which together with the user's mobile number is required for collection.

Parcels must be collected within three days. A reminder is sent to consumers by e-mail or SMS after two days. After three days parcels not collected from the lockers are taken to the nearest InPost Service Point. Parcels are returned to sender after eleven days.

Additional services include insurance and pay on delivery service. Registered users can also send parcels to registered receivers from a locker facility. Proof of posting and scanning barcode facilities are available to track and trace parcels.

Turkey: Turkey Post PTT



The Turkish PTT piloted the introduction of three secure electronic parcel lockers in Ankara and Istanbul in June 2010, with a total of ten facilities planned in the near future. The service is free to consumers, who retrieve the parcel via a barcode number and password received by e-mail or SMS notification. The service will include facilities for sending parcels from KargoMatik machines.

Estonia: Estonia Post

Following a three month pilot of an automated parcel terminal Keba, Estonian Post has invited bids for supplying machines in Estonia, Latvia and Lithuania.

8. Staffed Drop-Off Solutions integrated in E-Commerce

Switzerland: Swiss Post

PickPost is a service offered by Swiss Post which allows users to select their preferred location for collecting items (parcels, registered letters and court documents). When purchasing online or by mail order, consumers indicate at the time of purchase, their preferred location from which they would like to collect their goods. E-retailers and mail-order companies integrate PickPost in their order process as a delivery option.

Consumers must pre-register with the post or with an online retailer offering integrated PickPost in its ordering process, to receive a personal 8-digit PickPost customer number. This code must be included with the specific delivery address of the desired PickPost collection point when placing an order.

Consumers are notified by e-mail or SMS and must present proof of identity on collection.

There are approximately 350 PickPost points across Switzerland and include railway stations, filling stations, post offices and two distribution centers (Zurich and Givisiez).

This service is free to consumers and retailers. Consumers select their preferred delivery location based on opening timings when placing their order without leaving the retailers' website.

Swiss Post also offers Parcel Boxes. These are not secure electronic parcel lockers as they do not interface with retailers' operations, but they do maximise success of first-time home deliveries. Individual households have access to parcel boxes in their own residence and are provided with a key/code for accessing their locker through their private letter box.

- Parcel boxes are large, lockable storage boxes placed in the entrances of larger multi-family homes.
- Parcel boxes can be used to leave almost any parcel safely at its destination, thereby maximizing first-time delivery success (around 90% of parcels are delivered directly).
- COD items or items requiring a signature cannot be delivered to parcel boxes. In the case of very large parcels, absent recipients will receive notification for collection at the postal retail outlet.



The Netherlands: TNT

The PakjeGemak service is a similar service to PickPost offered by TNT and enables consumers to select the most convenient pick-up point when placing an order online. Locations and opening times for 2,000 pick-up points are integrated in the ordering process of the webshop.

Standard service levels of TNT Post Parcel Service apply. PakjeGemak parcels (up to 31.5kg) are delivered to pick-up points within 24 hours, available for collection from 4.00pm the day after dispatch. Track and tracing is available on PakjeGemak parcels. Value-added services for e-retailers include notification to consumers via e-mail or SMS that the parcel has been sent to the pick-up point (€0.25), parcel collection services, signature on receipt and COD services.

Extension of opening hours:

Weekdays	Number of locations
Open until 5pm	150
Open until 5.30pm	450
Open until at least 6pm	700
Open until at least 7pm	50
Open until 8pm	200
Open until at least 9pm	27

On extended-hour shopping days, more than 600 pick-up points are open until 8.00pm, with 1,600 also open on Saturdays.

Luxembourg: PTT Luxembourg

Pack-up is the service offered in Luxembourg for packages and parcels of more than 250g. As with Switzerland and the Netherlands, the Pack-up location and opening hours are integrated in the e-retailers website.



Consumers pre-register for the service and receive a unique 'Pack-up' client number, which is required when placing an order online. Specific information is required when sending a parcel to Pack-up points. Each point has a unique number which is entered instead of a postal code.

M. Jean Muller (Name)
Pack Up 5000123 ("Pack Up" & client number)
L - XXXX Pack Up (Postal code is the number of the Pack-up point and 'Pack Up')

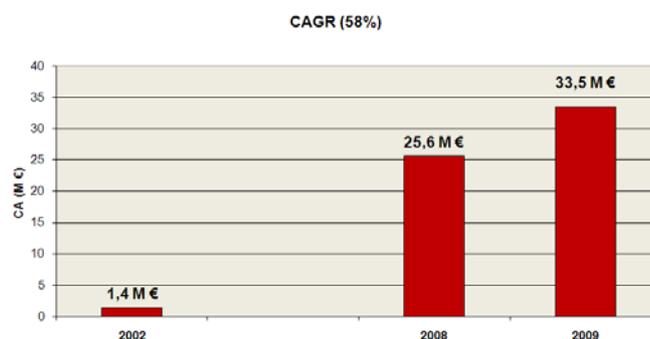
An SMS notification is sent on delivery to the Pack-up point. The parcel number and the client Pack-up number are required for collection along with official identification. If not collected within 30 days, parcels are returned to the sender.

Kiala

Established in 2001 in Belgium and Luxembourg, Kiala Points extend to the Netherlands, France, Spain and Austria. Around 136,000 items are handled every day at 5,400 Kiala Points across five European countries.

Parcels are collected from retailers' distribution centers and delivered directly to Kiala staffed drop off points, offering extended opening hours. The customer is informed that a parcel is ready for collection by SMS, email or phone.

The annual revenue growth between 2001 and 2009 was 58% and Kiala Points are connected to 220 retailers.



GLS Germany



GLS Germany has launched a ShopDelivery-Service offering parcel recipients the option to collect at a specified parcel shop when making online purchases.

GLS has a network of 5,000 parcel shops in Germany. Last year it offered parcel recipients the option to collect from their nearest parcel shop if they were not at home when GLS made the first delivery attempt.

With ShopDelivery-Service, recipients can specify delivery to their most convenient parcel shop. They will be alerted by SMS or email when their parcel is ready for collection. Parcels are held for ten days and recipients receive a reminder to collect after five days.

9. Non-Postal Secure Electronic Parcel Lockers

UK: myByBox

The direct-to-consumer service from ByBox, 'myByBox' allows users to receive all their parcels in secure electronic lockers, 24 hours, 7 days a week at 400 locations across the UK. ByBox expects to expand its service to 1,500 locations by 2014.



ByBox collects the package from the retailer warehouse, sorts, consolidates and delivers it to a dropbox (locker) during the night.

Consumers register with ByBox and receive a unique delivery address, used in the ordering process when shopping online. Consumers are notified by email or SMS that their parcel is ready for collection and are provided with a unique code to access their parcel.

Service Features for Consumers

- Parcels are available for collection within 48 hours of placing an order online.
- Packages can be picked-up before midnight following notification. In cases where parcels or packages are not collected within the timeframe, a second free drop is arranged ByBox. If that is not successful, a postal delivery is charged to the consumer.
- ByBox insurance liability limited to £50 in case of loss/damage.
- Packages must be less than 15 kilograms and smaller than 89cm x 51cm x 66cm.

Service Features for e-Retailers

myByBox is integrated in the MetaPack delivery management system used by some of the largest e-retailers in the UK. Selections of delivery partners are made automatically from a range of carriers according to size, weight, value and delivery post-code.

Parcels are collected from e-retailers on a daily basis, with collection times extended into the evening to maximise the consumer's buying opportunity (e.g.: order by 8.00pm, deliver by 8.00 am).

myByBox also accepts returns, enabling e-retailers to offer 'free' returns within 24 hours of purchase.

Pricing to Consumers

Deliveries to myByBox are charged per usage, or by subscription services. ByBox accepts payment by credit or debit cards through WorldPay.



Staffed Collection Service

In October 2010, myByBox extended its drop-box service by introducing staffed collection points at five London rail terminals. At some locations, the service uses existing left-luggage counters.

Additional security is provided by scanning technology at the ByBox sortation centers which, combined with a complete audit trail from purchaser to destination, reduces the possibility of rogue items entering the system unchecked.

10. Sources

This report was compiled in November 2010 from Posts 2010 Annual Reports, corporate websites, IPC publications, as well as secondary research in secure electronic parcel locker manufacturers.

While every care has been taken to ensure the accuracy of this report, the facts, estimates and opinions stated are based on information and sources which, while we believe them to be reliable, are not guaranteed. No liability can be accepted by the International Post Corporation, its directors or employees, or by the authors of the report, for any loss occasioned to any person or entity acting or failing to act as a result of anything contained in or omitted from this report, or our conclusions stated.

This document and all of its contents is for the exclusive use of IPC members. Any dissemination or use of this information by a person other than the intended recipient is unauthorised and may be illegal.