Partner: analysys mason

Last Mile Experts

Out of home delivery in Europe 2023

PUDOs and automated parcel machines

June 2023

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ABOUT THIS REPORT

Background to the report

According to Effigy Consulting data, the European CEP (Courier, Express and Parcel) market is projected to have experienced a 9.1% decline in volume in 2022 when compared to 2021. This decline is expected to result in around 16.5 billion parcels, down from 18.1 billion in 2021. The previous rapid growth of the CEP industry, driven by increased e-commerce volumes during the Covid-19 pandemic, has abruptly halted due to inflation and general uncertainty caused by the Russian-Ukraine war, though Europe's CEP market remains larger than before Covid. In addition, there is a possibility of a general business slowdown and potential economic crisis in 2023 that could have an impact on the growth of the European parcel market, although the extent of the effect remains uncertain as it would depend on various factors.

Over the past few years, there have been significant shifts in market shares of parcel types, particularly between B2C (business to consumer) and B2B (business to business) as well as in first- or last-mile delivery channels, including P2P (point to point) and D2D (door to door).

OOH (Out of home) delivery, including PUDOs (pick-up and drop-off points) and APMs (automatic parcel machines), is playing an increasingly important role.

Our updated and improved report covers market structure, countries, players, growth and key trends.

In this report we seek to understand what is behind the OOH delivery trends and to assess what future impact this will have on the various stakeholders.

What can you find in this report?

- The report covers all key players in the European market for OOH operations.
- We define the OOH market as encompassing PUDOs and APM parcels. These mainly include B2C and C2X (consumer to anybody) parcels and cover the P2D (point to door), D2P (door to point) and P2P channels. OOH can be used in the first and last mile.
- We analyse the evolution of B2C parcel volumes before, during and after the pandemic so as to bring the right market insights on 27 EU countries plus the UK.

Who will benefit from our report?

The report is intended for:

- Owners and operators of OOH networks.
- CEP companies.
- Online retailers.
- Investors in these businesses.
- Market regulators and policy makers.
- Journalists and editors of newspapers and magazines.
- Analysts, consultants and other stakeholders.

ABOUT THIS REPORT

The market is served by a combination of carriers, ranging from the national postal operators to parcel locker operators and indeed CEP players. The report also covers new types of OOH delivery providers.

There are a number of new OOH factors and players which have become more relevant in recent years, such as a growing understanding that PUDO and parcel locker networks are not complementary but in fact necessary for any optimised OOH model.

LME has in-depth knowledge of this market and has made various studies on OOH delivery in Europe and elsewhere. Our team has a strong entrepreneurial background, including the creation of DPD Polska (formerly Masterlink Express, a leading player in the Polish CEP market) and the integration of companies as was the case with UPS Poland. Our consulting work involves providing advice and guidance to numerous companies, including e-commerce businesses and carriers, on the establishment or enhancement of nationwide PUDO/locker models and the implementation of supporting IDM tools.

What are the sources?

The main sources for the report are:

- Extensive desk research on the OOH market and its operators covering company press releases, websites and other sources.
- Analysys Mason internal research and data.
- UPIDO AG internet search algorithm outcomes to estimate B2C parcel volume growth in 27 EU countries plus the UK.
- Published information on key market drivers such as economic data and estimates of home shopping levels and practices.
- Interviews with CEOs, senior-level CEP and e-commerce executives, experts and retailers to develop our core database.
- LME's own in-depth, expert knowledge.

Important notes:

- **Despite our best efforts, we have not yet been able to accurately reflect the number of APM cells or the theoretical capacity of PUDO points in this report.**
- **There are various reasons for this, including a lack of source data, issues with interfaces, and even operators' reluctance to provide the necessary data.**
- **As a result, this year's report focuses on the number of PUDO locations and APMs as a benchmark for size and network density, rather than the capacity of each specific location.**
- **The analysis of PUDO points and APMs contained in this report reflects the situation as of the end of December 2022.**
- **We can produce tailor-made, more detailed country reports if needed. If this is of interest, please contact info@lmexpert.com for more information.**

METHODOLOGY

OOH is not a new parcel delivery solution, but it is still developing fast. To ensure that the collected information* is up to date, we have conducted:

- **Extensive desk research** on PUDO and APM networks in Europe, using company accounts, websites, press reports and other sources.
- **Several interviews** with CEOs, other senior-level management, experts on the CEP industry and PUDOs, APM operators and retailers.
- **Evaluation and analysis of 28 countries** (EU plus the UK) **and 276 networks** (network by network for each country in scope).
- Where actual or published data was not available, estimations have been made based on our market knowledge.

In comparison to last year's report, we have excluded integrators/brokers which lacked their own PUDO points or APMs, resulting in the removal of some networks. Conversely, in certain countries, new players have emerged either as brand-new operators or through the expansion of their existing coverage.

Moreover, we have partnered with UPIDO AG, a company which has created several proprietary algorithms that enable it to exploit internet search data in order to monitor and predict the evolution of e-commerce and B2C parcel volumes.

** It is not possible to state the exact numbers of PUDOs or APMs for all companies. Many companies do not provide figures at all or provide outdated figures.*

TERMS & DEFINITIONS

Definitions and abbreviations used in the report.

APM	Automated Parcel Machine
BOPIL	Buy Online Pick up In Locker
BOPIS	Buy Online Pick up In Store
B2B	Business to Business
B2C	Business to Consumer
C2C	Consumer to Consumer
C2X	Consumer to Anybody
CEE	Central and Eastern Europe
CSEE	Central, Southern and Eastern Europe
CX	Consumer Experience
D2D	Door to Door
D2P	Door to Point
DD	Due Diligence
DIY	Do It Yourself
ERP	Enterprise Resource Planning
EV	Electric Vehicle
FTD	First-Time Delivery
GSA	General Service Agent
IDM	Interactive Delivery Management
LAST MILE	Leg of a journey comprising the movement of goods from a distribution centre to a final destination
LME	Last Mile Experts
OOH	Out Of Home
P2D	Point to Door
P2P	Point to Point
Paczkomaty®	Reserved name for InPost parcel locker
PUDO	Pick-Up and Drop-Off location
ROS	Return On Sales
RPL	Residential Parcel Locker
SB	Supervisory Board
SLA	Service-Level Agreement
USO	Universal Service Obligation

OOH PROVIDERS

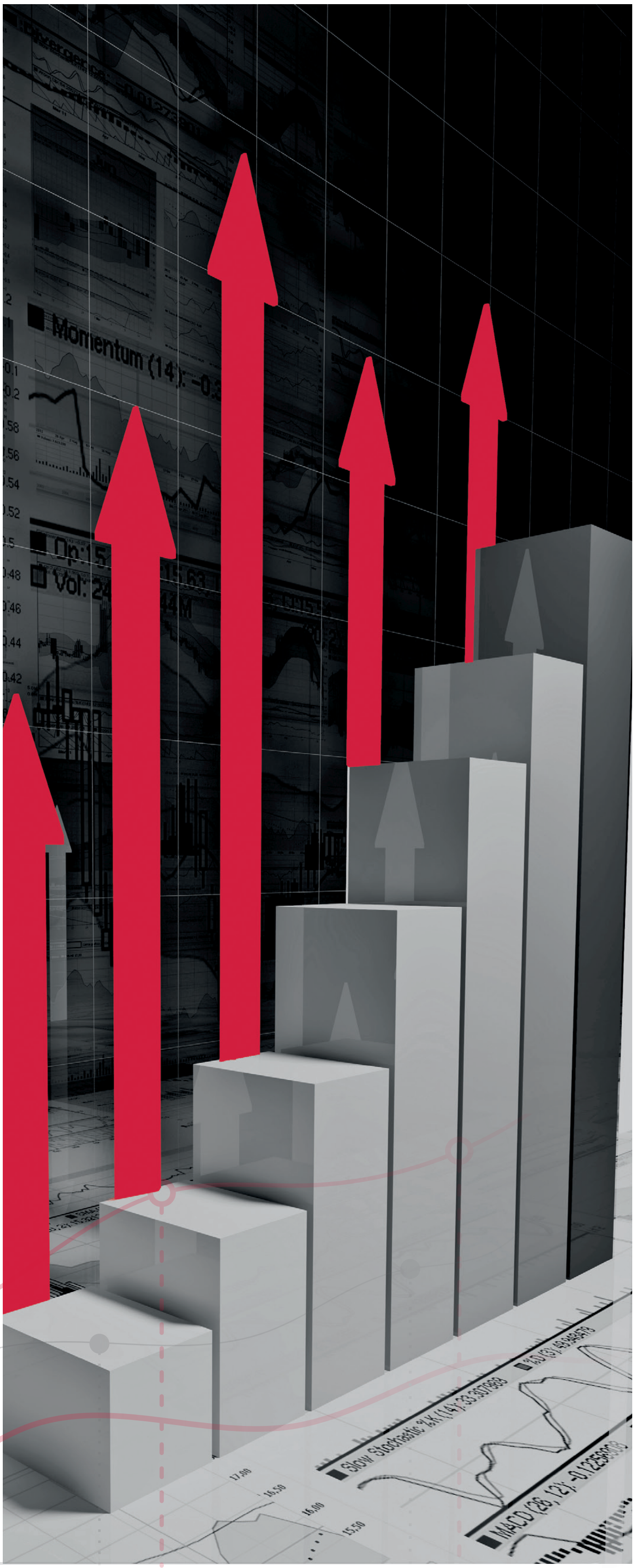
OOH are provided by various players:

- **National postal operators** which historically had the largest last-mile infrastructure, usually with a mixture of traditional postal outlets, third-party agency/PUDO points and, increasingly, lockers.
- **CEP companies** such as DPDgroup, DHL, InPost/Mondial Relay, UPS, Evri/Hermes, GLS or FedEx and local heroes such as Zásilkovna, Matkahuolto, Sameday or Colis Privé have their own PUDO.
- **E-commerce** - Amazon and AliExpress as well as local heroes such as eMAG or Allegro as OOH providers. Re-commerce players, notably Vinted, have become increasingly involved in OOH.
- **Retail point owners** such as 7-Eleven, Żabka, Orlen, Lidl and PayPoint.
- **Infrastructure owners** such as public transport, rail companies, local or city authorities or, more recently, private (parking) infrastructure owners/operators.
- **IT platforms/consolidators**
  The evolution of courier brokers such as Apaczka, Asendia, Auctane or Seven Senders involves the adoption of IT solutions that integrate various forms of delivery and the establishment of physical PUDO points.

ADVANTAGES OF OOH

- OOH offers ever more **consumer-centric** and flexible last-mile services.
- Almost **100% first-time delivery.**
- **Proximity** to customers (best-in-class urban networks are <350m away) so they can pick up their package "on the way", e.g. when shopping or coming back from work.
- **Convenient – 24/7** (outside APMs) or extended PUDO opening times.
- **Contactless** (APMs).
- Cheap and **easy returns.**
- More flexibility; **long period of storage** (5+ days in most PUDOs).
- **Operationally and financially efficient.**
- **Ecologically superior where the PUDO or locker is proximate to customer homes.**
- Fast and relatively cheap **means of increasing capacity*.**

* Where operating at reasonable capacity.

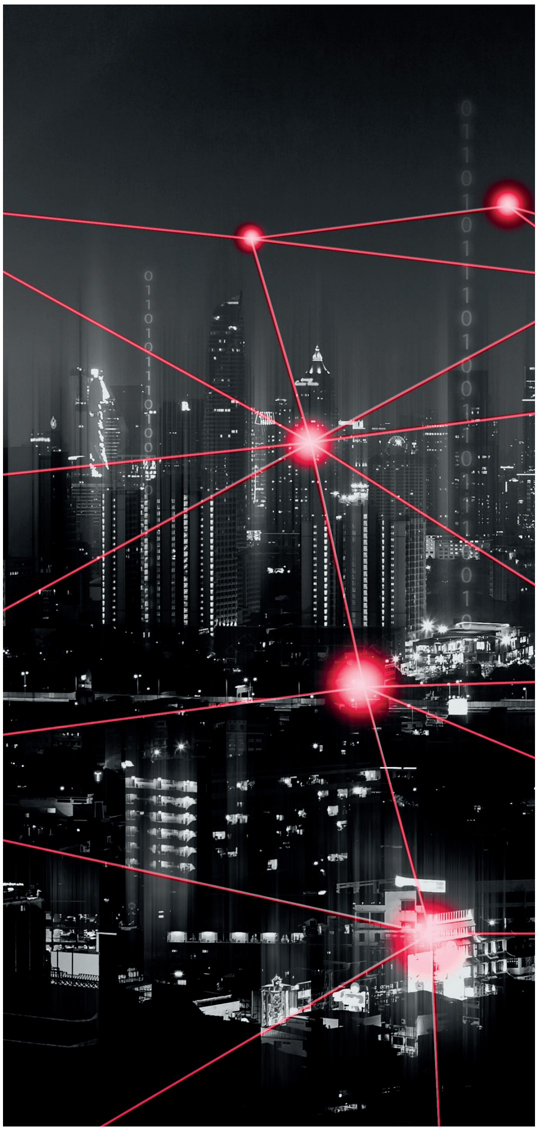


OVERVIEW OF ALL COUNTRIES

Numbers presented in the first section below reflect unique points and this is followed by the number of available delivery points across all operators covered by this report. Values are rounded to the nearest ten. In many cases, a single PUDO point or parcel locker can serve multiple carriers and operators. As a result, the tables include networks with some duplicate locations, as consumers may collect parcels from multiple carriers at the same location, which is also advantageous from a sustainability perspective.

Germany is the leader on PUDOs, just ahead of France, with over 51,000 locations. Meanwhile, with almost 30,000 parcel locker locations (double that of the UK or Germany), Poland can be described as "Lockerland".

- Key markets for unique PUDOs:
  - Germany 51,090
  - France 49,200
  - Italy 47,740
  - UK 45,340
  - Poland 29,520
- Key unique APM markets:
  - Poland 28,880
  - UK 15,460
  - Germany 13,450
  - France 8,750
  - Czech Republic 7,480



120,390 unique APMs, which is 51% up on 2021.
Total number of PUDO points grew by 7% year on year.

- OOH locations offered by key multinational carriers in countries analysed:

Deutsche Post/DHL	100,300 PUDOs	23,930 APMs	124,230 OOH points in total*
DPDgroup	66,860 PUDOs	14,040 APMs	80,890 OOH points in total*
GLS	52,090 PUDOs	5,800 APMs	57,890 OOH points in total*
InPost	24,420 PUDOs	28,240 APMs	52,660 OOH points in total*
UPS	41,910 PUDOs	5,700 APMs	47,610 OOH points in total*

** Including partners and shared points.*

CONCLUSIONS

- In 2022, the European CEP market recorded over 16.5 billion parcels delivered, which was a 9.1% decline when compared to 2021 (18.1 billion).
- The milestone of 20 billion total annual B2C parcels is forecast to be reached at some point between 2025 and 2026, and the 30 billion level between 2028 and 2029.
- OOH delivery efficiency is above 99%.
- Last-mile delivery is responsible for 40–60% of total distribution costs for carriers.
- OOH is increasingly important in many EU markets – with OOH expected to make up over 50% of deliveries in the Nordics, France, Germany, the Baltics, the Czech Republic, Hungary and Poland.
- Poland has the most APMs in Europe, beating the second market, the UK, by over 85%. The third country is Germany, which has just over 46% of the locations available in Poland.
- Based on Last Mile Experts MVP (minimum viable product) rule, a dense network should have at least 1 point per 10,000 inhabitants.
- Poland has overtaken the Czech Republic and Denmark to become the European leader in terms of OOH density with almost 40 points per 10,000 inhabitants.
- PUDOs still have the greatest impact on the number of OOH delivery points and density, but lockers are growing in importance.
- There is a significant opportunity for bigger APM networks in at least 17 of the 28 countries.
- Without continued investments in OOH delivery networks, the EU and the UK will increasingly suffer from serious delivery infrastructure gaps, leading to last-mile capacity issues and increasing costs.
- More and more open/agnostic networks are being developed, which support cost optimisation and environmentally friendly delivery. They also allow for greater OOH network expansion in markets where availability of additional locations and partner shops is becoming a challenge.
- According to Business Market Insights, Europe's smart parcel delivery locker market is expected to grow from USD213.3 million in 2021 to USD531.1 million by 2028 (a CAGR of 13.9%). Players in this market are adopting and developing new products to cater to the demands of evolving online marketplaces, emerging businesses, retailers and consumers.

THE FUTURE OF OOH

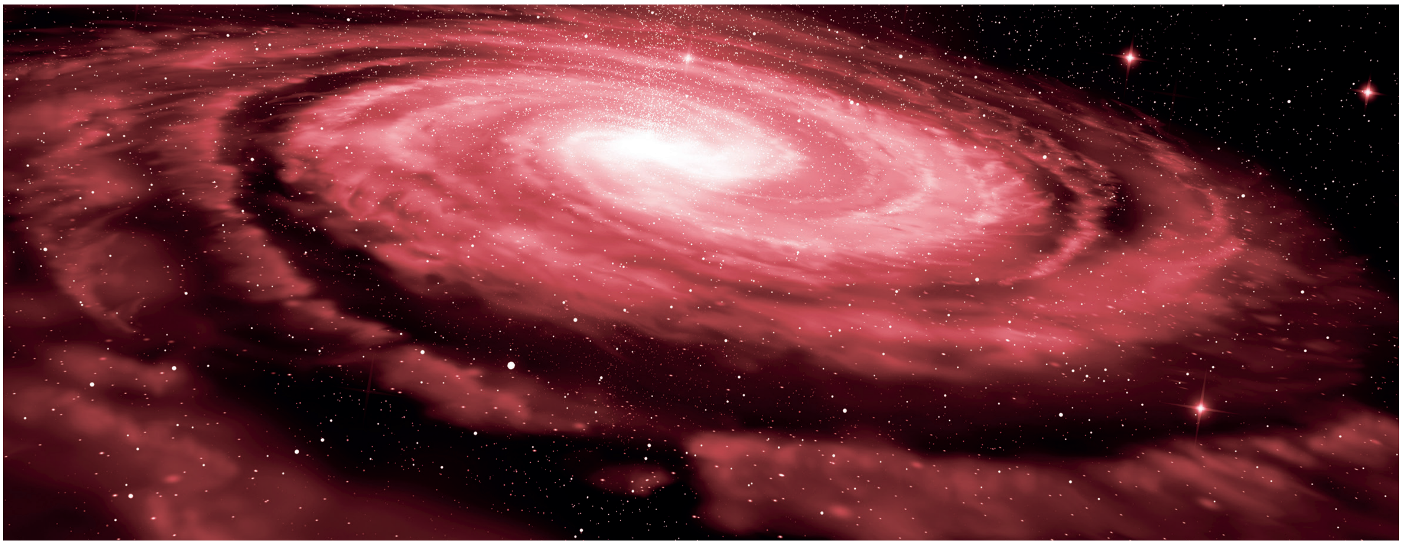
- Almost all industry experts expect an increase in the percentage of B2C parcels going OOH for the following reasons:
  - as the proximity of points increases, they become more convenient and closer to a "home delivery".
  - capacity demands make this the only viable or cost-effective option; especially for the increasingly important re-commerce sector.
  - ecological matters favour proximate OOH delivery.

- While the most developed OOH markets in Europe have up to 90% of volumes going through OOH, we expect that the optimal split for OOH/D2D parcel volumes will range from 40% to 60%, depending upon market-specific and cultural factors.

- Good examples of how APM deliveries are an efficient solution for both operators and customer are not only the Polish giant InPost, but also Pošta Srbije (Serbian post). Both operators saw great potential in building an APM network, which they are using in an exemplary manner. Pošta Srbije average turnover is above 1 parcel per compartment per day, with peaks up to 1.8 or even 2 on in some days. Currently, the operator is continuing its dynamic network expansion based on MultiSpace parcel lockers.

- Some segments will still require home delivery, such as heavy and bulky items, premium "on demand" or e-grocery services. For these to be more efficient, there is a need to develop new technologies such as smart locks (e.g. Amazon Key) for in-home delivery, and refrigerated lockers or robots to make "click & collect" more effective.

- This sector continues to develop so fast that even by the time this report is published some data will already be outdated. Accordingly, we can expect further dynamic change in the next edition.



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