

Same-day delivery market and operations

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Sectors in the UK same-day delivery market

- **B2B document, letter and parcel deliveries** – a long-standing sector serving industries such as banking, insurance and law but reduced due to technological change (fax machine, email)
- **Other B2B deliveries** in industries including healthcare, retail and field service in which the courier provides parts and equipment to engineers and technical workers or is trained to carry out the work themselves, such as parts for automotive, computing and other equipment
- **B2C parcels and packages** – growing rapidly in recent years from a small base due to several factors including the rise of ecommerce and online shopping and its ethos of rapid response, the development of technology to support same day order processing and the emergence of customers ordering online prepared to pay for premium same-day
- **B2C grocery** – a very recently established sector with online food retailers such as Tesco and Amazon starting to offer same day grocery deliveries in selected urban areas in the last year
- **B2C restaurant meal / takeaway deliveries** – has grown rapidly in the last 3 years as a result of the formation of platform providers such as JustEat, Deliveroo and UberEATS

Typical vehicle speeds in central London

- Walking: 2-3 miles per hour
- Manual and electric bikes, mopeds and motorbikes: 10-15 miles per hour
- Cars and vans: 8 miles per hour

Issues likely to affect future market size of same-day delivery sectors over next five years

Same-day delivery sector	Issues facing the sector
B2B parcels and documents	<ul style="list-style-type: none"> • Continuing digitisation and electronic transmission of documents and products
B2B healthcare and medical	<ul style="list-style-type: none"> • Ageing population leading to growing demand for medical services • Continued development of new tests and treatments • Public funding shortfalls for healthcare • Increase in remote/electronic and non-invasive medical testing and treatment
B2B technical and fieldwork	<ul style="list-style-type: none"> • Continued outsourcing of maintenance services • More remote maintenance and repair work that does not require physical vehicle trips
B2C non-food deliveries	<ul style="list-style-type: none"> • Continued increase in online shopping • Preparedness to pay for same-day delivery preference • Convenience of delivery response/timing offered • Lack of local distribution infrastructure among many retailers for widespread, cost-effective same-day deliveries
B2C grocery deliveries	<ul style="list-style-type: none"> • Continued increase in online shopping • Range of products offered for same-day options • Convenience of delivery response/timing offered • Preparedness to pay for same-day delivery preference
B2C takeaway meal deliveries	<ul style="list-style-type: none"> • Lack of time/interest in meal preparation at home • Increasing preference for delivered meals at home (rather than eating out) due to convenience and lower price

Estimated current expenditure on same-day delivery services in the UK by sector

Same-day delivery sector	Expenditure on same-day delivery services (£ million)	% of total same-day expenditure (approx.)
B2B parcels and documents	1,000	65%
B2B Healthcare/medical, technical and fieldwork	200	15%
B2C non-food same-day deliveries	10-20	0.1%
B2C grocery same day-deliveries	10-20	0.1%
B2C takeaway meal deliveries	350	20%
TOTAL (approx.)	1,600	100%

Comparison of purchase costs and CO₂ emissions of same-day delivery vehicles

Vehicle type	Approx. purchase cost (£)	CO ₂ at point of use (g/km)
Manual bicycle	£100-£2,000	0
Cargo cycle	£2-2,500	0
Electrically-assisted cargo cycle	£2-4,500	0
Moped	£1-5,000	82
Motorbike	£5-15,000	82-133
Car	£10-15,000	118
Small van	£10-15,000	148
Medium van	£15-20,000	233
Large van	£15-25,000	274

Typical attributes of vehicles used for same-day delivery

Vehicle type	Carrying capacity (m ³)	Carrying capacity (kg)	Range limit – one-way distance per journey (miles)	Daily distance limits (miles)
Human on foot (using wheeled bag)	0.2-0.3	15-25	0.5	5-10
Cycle with shoulder bag or insulated food box	0.01-0.02	1-3	2-5	50-100
Two-wheeled standard cycle with baskets fitted to front and rear	0.03-0.05	20-40	2-5	50-100
Two-wheeled specialist cargo cycle (inc. with baskets fitted to front and rear)	0.2-0.8	50-125	2-5	50-100
Cycle with cargo trailer	0.2-2.1	50-150	2-5	50-100
Three-wheeled cargo cycle	0.2-1.5	50-300	2-5	50-100
Electric cargo cycle	0.25	Up to 250	15-20	50-100
Moped	0.1	5-8	50	100
Motorbike	0.1	5-8	Unlimited with refuel	500
Car	1-2	400-700	Unlimited with refuel	500
Car-derived van	2-4	400-700	Unlimited with refuel	500
Medium van	6	750	Unlimited with refuel	500
Large van	5-10+	1000-1750	Unlimited with refuel	500

Future predicted parcel delivery models within 10-20 years

Overarching product categories	Increasing drop density/decreasing cost			
		Rural areas with low pop. density	Towns (up to pop. 200K) and outer areas of larger settlements	Inner and central areas of larger settlements over 200K pop.
X2C (including B2C and C2C)	Regular parcel	Autonomous ground vehicles with lockers / collection points	Clean vans / motorbikes	Autonomous ground vehicles with human porter
	High reliability (i.e. time window)			
	Same-day Instant	Aerial drones (same-day)	Bike and cargo-cycle couriers	
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	High reliability (i.e. time window)			
	Same-day	Aerial drones (same-day)	Bike and cargo-cycle couriers	

Same-day parcel sector – possible initiatives

- Consolidating parcel collections by grouping them together
- Merging together same-day sectors
- Green delivery pricing
- Use of cleaner vehicles

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