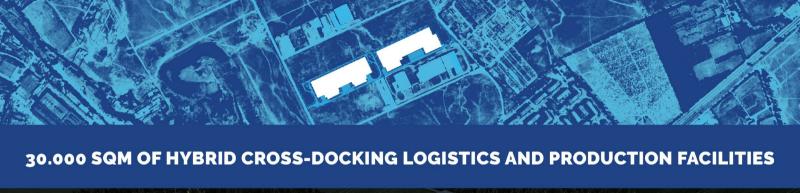
# IUS

// BRASOV // SMART CITY LOGISTICS & PRODUCTION //









access to Romanian airports, ports, railways and customs.





- Approx. 6 ha of development land
- 30.000 sqm of premium logistics and production facilities
- 264 car parking spaces
- 34 truck docks and parking spaces





- **01** HYBRID CROSS DOCKING CENTRE
- **02 PRODUCTION FACILITY**
- **03 CAR PARKING**
- **04 TRUCK PARKING**

- **05 LPR CAMERA SMART ACCESS**
- of GATE SECURITY
- **07 INCOMING DOCKS**
- **08** OUTGOING DOCKS / GATES

Concrete structure, sandwich wall panels

Loading docks (with dock levelers): 40

Automatic ventilation system Sn

Smart smoke vents Gas fired heating system

Maximum column spacing 12m x 24m

Clear height maximum 12m

Exterior maximum height 15m

32m for exterior trucks maneuvering

nt 1m Floor loading 5t/sqm

Modern office spaces

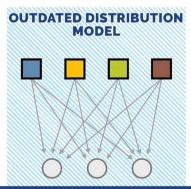
Docking height 1m

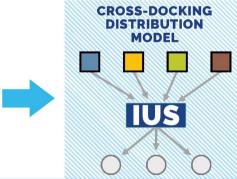
# // HIGH TECH WORK FLOW //

- **01** Automatic number plate scan with LPR cameras
- **Q2** Automatic weigh-in station with CRM integration
- **03** Automatic loading dock assignment
- **04** Cargo scanners inside of loading docks for automated sorting





























# // HIGH TECH D.N.A WITH CROSS-DOCKING PLATFORM //

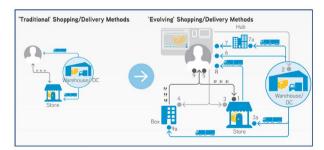
#### LAST MILE LOGISTICS

The urban environment is a specific challenge for logistics companies. **The last mile** of the logistics chain, which accounts for a large proportion of shipment costs and complexity of operations, **is often the most inefficient**. This distribution inefficiency in urban areas comes from low load factors, long dwell times at loading and unloading points and a high number of delivery requirements to individual customers within a short time.

Logistics providers and retailers are under pressure to improve load factors, while reducing air pollution, noise emissions, congestion and time loss. The attempts to tackle the environmental problems in cities are leading to more expensive and complicated logistics processes, particularly in Europe. This is why alternatives such as electric and hybrid freight vehicles are being developed and considered. It is also why cross-docked distribution centers on the edges of towns and cities are growing as a go-between nation/pan-regional distribution centers and the variety of urban logistics and retail fulfillment options which are sprouting up across cities globally, by servicing them with smaller transit vans as

#### **URBAN WAREHOUSING**

As the essential element in improving urban logistics is to limit deliveries to the shortest possible route, e-commerce retailers have started to include smaller urban warehouses in their network in order to shorten delivery routes and be able to provide quick delivery services to online customers. In recent years Amazon has added a network of smaller regional hubs to its fulfillment centers in the USA and UK, allowing the retailer to carry out same day deliveries. In 2015, Amazon introduced one-hour delivery on selected items for customers in east and central London, a move which would not be possible without a closely located warehouse such as IUS.



- 1. BUY/ORDER IN STORE
- 2. ORDER PLACED IN DISTRIBUTION CENTER
- 3. DELIVERY TO STORE
- 3a. ORDER ONLINE FROM STORE
- 4. ORDER ON-LINE
- 5. PICK-UP IN STORE

- DELIVERY FROM DISTRIBUTION CENTER
   DELIVERY FROM HUB
- 7a. DELIVERY TO HUB
- 8. DELIVERY FROM STORE
- 9. PICK-UP BOX 9a. DELIVERY TO BOX

### **DEMAND FOR NEW LOGISTICS**

**Demand for smart cross-docking facilities** is being driven by increasingly sophisticated distribution needs. particularly as e-commerce demand continues to grow. As a matter of operational efficiency, retailers and logistics companies have been engaging with a full range of mobile technologies and the deepening utilization of sales data analytics. which are essentially spun off from their digital platforms, to help formulate process-driven facilities. One of the key features of e-commerce being progressively incorporated into smart distribution centers is Radio Frequency Identification (RFID) which is a proven, effective feature for managing and receiving stock, picking, inventory and security control, sortation, conveying and shipping. This is enabling logistics providers operating fulfillment centers to link up the various parts of the supply chain, to provide accurate inventory management reporting. It also allows operators to collect product characteristics (e.g. expiry date, batch size, color and size) of their customers, which translates into useful business analytics to help service their customers. Products can increasingly be delivered from distribution centers to high-street shops and shopping malls as well as a number of smaller hubs located close to the sub-markets where retail customers are living.

# // FUTURE //

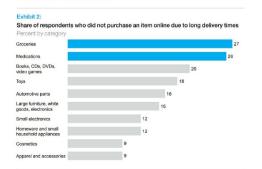
#### SIMPLIFYING THE LAST MILE

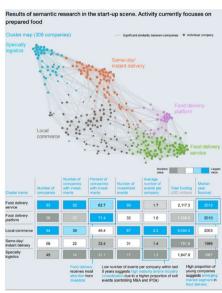
A growing group of consumers desires faster home delivery, yet most are highly price sensitive. With the rise of e-commerce, consumer preferences have moved more and more to the center of attention in the formerly business-oriented parcel delivery market. Large e-commerce players as well as various start-ups have identified last-mile services as a key differentiator vis-à-vis their competitors. In fact, the variety of delivery options and the perceived quality of the delivery service are major decision criteria for online customers and hence directly impact e-commerce players' success in the marketplace. With this in mind, vendors are working hard to provide their customers with the best customer experience possible, especially by improving delivery times. However, there still seems to be little consensus as to the kind of delivery services consumers actually desire and whether or not they are willing to bear the costs of added convenience. Hence, a comprehensive survey with 4.700+ respondents in China, Germany. and the US, revealed a type of conjoint analysis to better understand consumer's relative preferences for different delivery options, including their willingness to pay.



#### **INVESTING IN SPEED**

To differentiate themselves, many e-commerce players and start-ups are offering ever faster delivery, such as same-day and instant delivery enabled by improved fulfillment processes. In fact, 20 to 25 percent of consumers would pay significant premiums (up to EUR 3, and USD 3 in the respective region) to receive their items on the same day. However, only ~ 2 percent of all consumers are willing to pay much more than that for instant delivery (assuming the consumer would have to bear the additional cost of this extremely fast service). This is somewhat surprising, as many start-ups and some large e-commerce players target precisely this small niche with their offering. Given consumers' reluctance to pay, sellers or senders will probably have to pay the additional cost of delivery if the instant delivery segment is to significantly expand its share of total last-mile volume. In any event, same-day and instant delivery will likely reach a combined share of 15 percent of the market by 2020, as estimated in earlier publications, and are likely to significantly grow further beyond this date thereafter, especially if the service is extended to cover both urban and rural areas to some extent.





# IUS PROJECT - SMART CITY LOGISTICS & PRODUCTION

All considerations have been taken to reliably assert that Project IUS is a need and thought governed proposal, ready to implement high technological standards and means, and to provide best in class technologies and methodology that would shape logistics and production in the region. From smart access through LPR to integrated tracking through RFID and integrated CRM, IUS is ready to take on any client need.





