



TAKING  
**COOPERATION**  
FORWARD

 Digital final conference | 9-10 March 2022

 **Smart traffic management system for the Budapest Freeport**

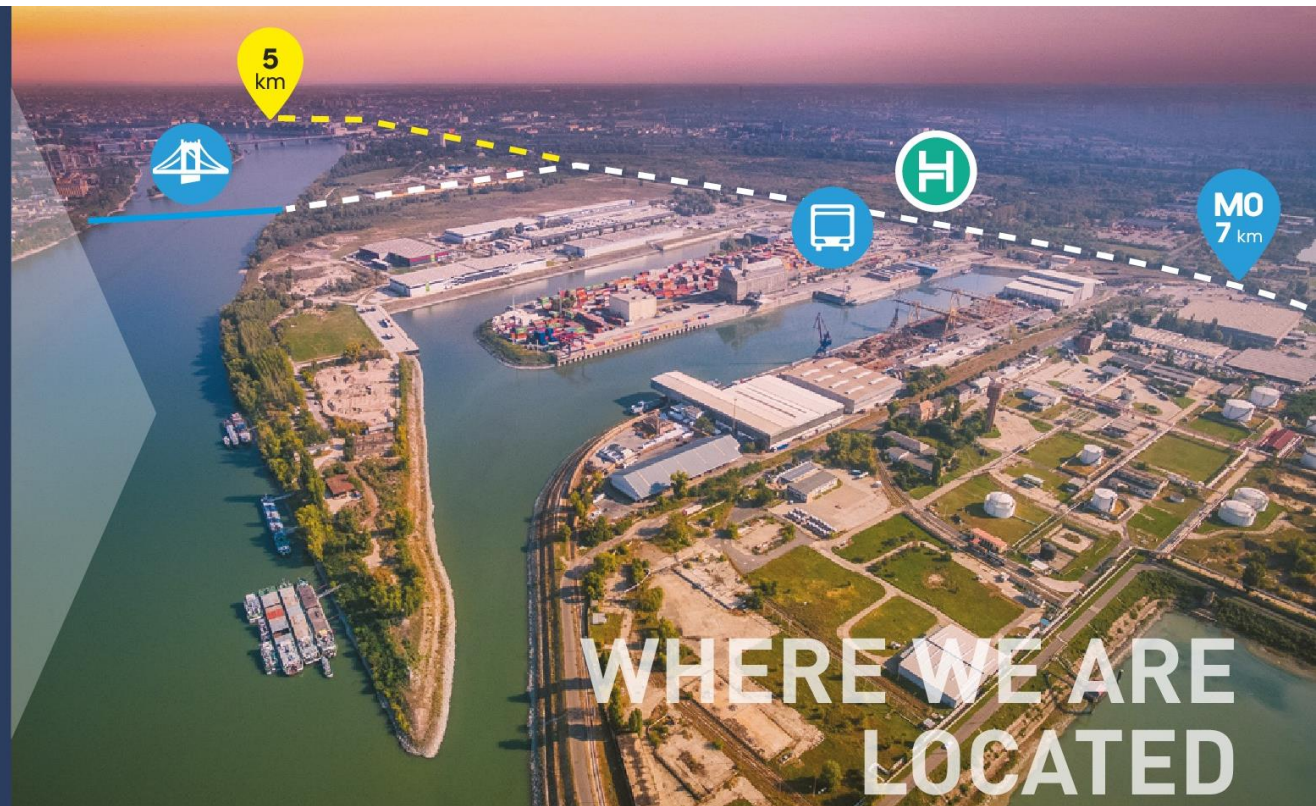
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# FREEPORT OF BUDAPEST

- Port owner: MAHART Freeport Plc (Hungarian State)
- Port manager: Freeport of Budapest Logistics (FBL)
- 70+ tenants/ service providers including: EKOL, Arcelor Mittal, Masped, Mahart Container Center, Ferroport, Ghibli, SYNLAB
  
- 30 000+ wagons
- 1 000 000 t + IWW throughput



# FREEPORT OF BUDAPEST



Proposed Galvani Bridge



City Center: 5 km



M0 Ring Highway: 7 km

## Means of Public Transport



Buses: 179, 979, 979A



Local train: H7

# WHERE WE ARE LOCATED



# FREEPORT OF BUDAPEST



- A trimodal logistics centre
- Area of 153 ha
- 157 000 m<sup>2</sup> roofed warehouse
- Over 12 000 m<sup>2</sup> office space
- 34 ha development area
- Complete services of warehouse logistics, railway operation and port services
- The only trimodal container terminal in the country

# CHALLENGES ADDRESSED

- Challenges in access control: over 5000 road vehicles daily in peak season
- Need for internal navigation
- Need for internal traffic management, buffering



No solution on the market for such type and size intermodal logistics centres



# SCOPE OF THE PILOT ACTION

## Standardised and harmonised IT system / Tailormade solution

- Automatic access control at the gates (license plate recognition cameras)
- Digital (smart) info panels and WIFI system
- Communication via a kiosk
- Multi-language software
- User interface for FBL and for the tenants and GPS Navigation / Database
- Mobile app (Android and iOS)

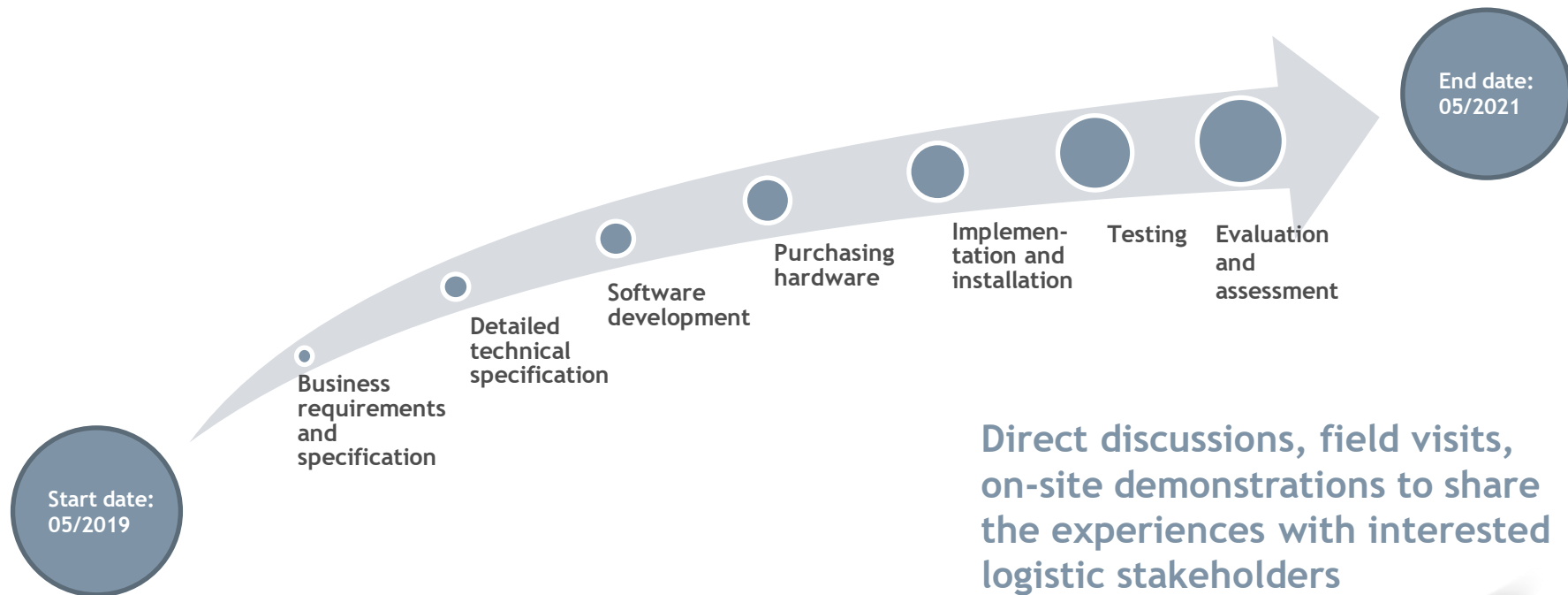
Offline (kiosk, smart screens) and online (DOCKApp) route planning



# PROGRESS AND ACHIEVEMENTS

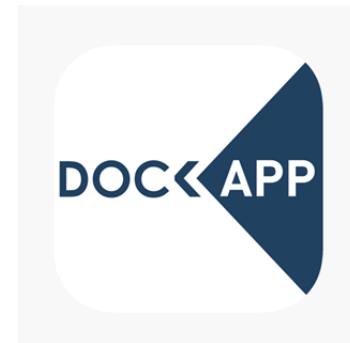


## Timeline





# RESULTS ACHIEVED





# RESULTS ACHIEVED

- ✓ Navigation application (DOCK App)
- ✓ Reduction of congestions and long queues at the gates
- ✓ The ability to notify tenants about arrivals of vehicles to gates is a breakthrough
- ✓ The time of loading and unloading can be recorded
- ✓ The statistics function of the administration platform visualises these data for FBL
- ✓ Offline navigation system --- language extensibility, printed map
- ✓ Navigation to tenants got simpler and different functions are available both for FBL and for the tenants



# LEARNINGS AND FOLLOW-UP

- Properly and continuously operating system
- There is an opportunity for continuous development and expansion even for the entire area of the logistics centre
- Transferability - target groups:
  - River ports in the CE region connected to road freight transport
  - Czech-Saxon intermodal sites within the consortium
  - Any other intermodal logistics site facing similar challenges as the FBL



# THANK YOU FOR YOUR ATTENTION!



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