



Presentation contents

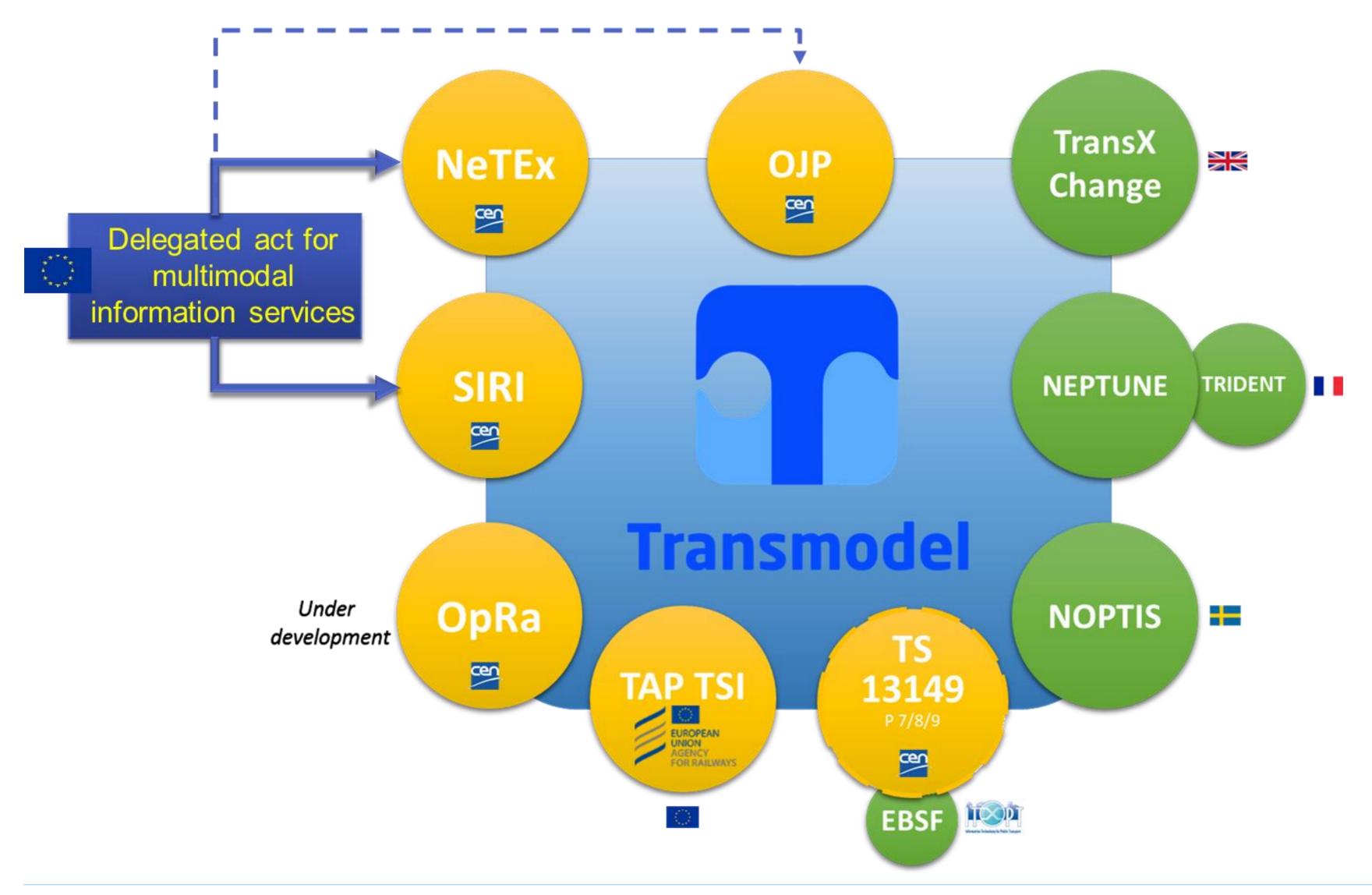
- 1.Context work
- 2.CEN ITS PT Alternative Modes: Project overview
- 3. Potential Liaison with SIRI





Context work: Transmodel ecosystem

As regard to the EU regulation

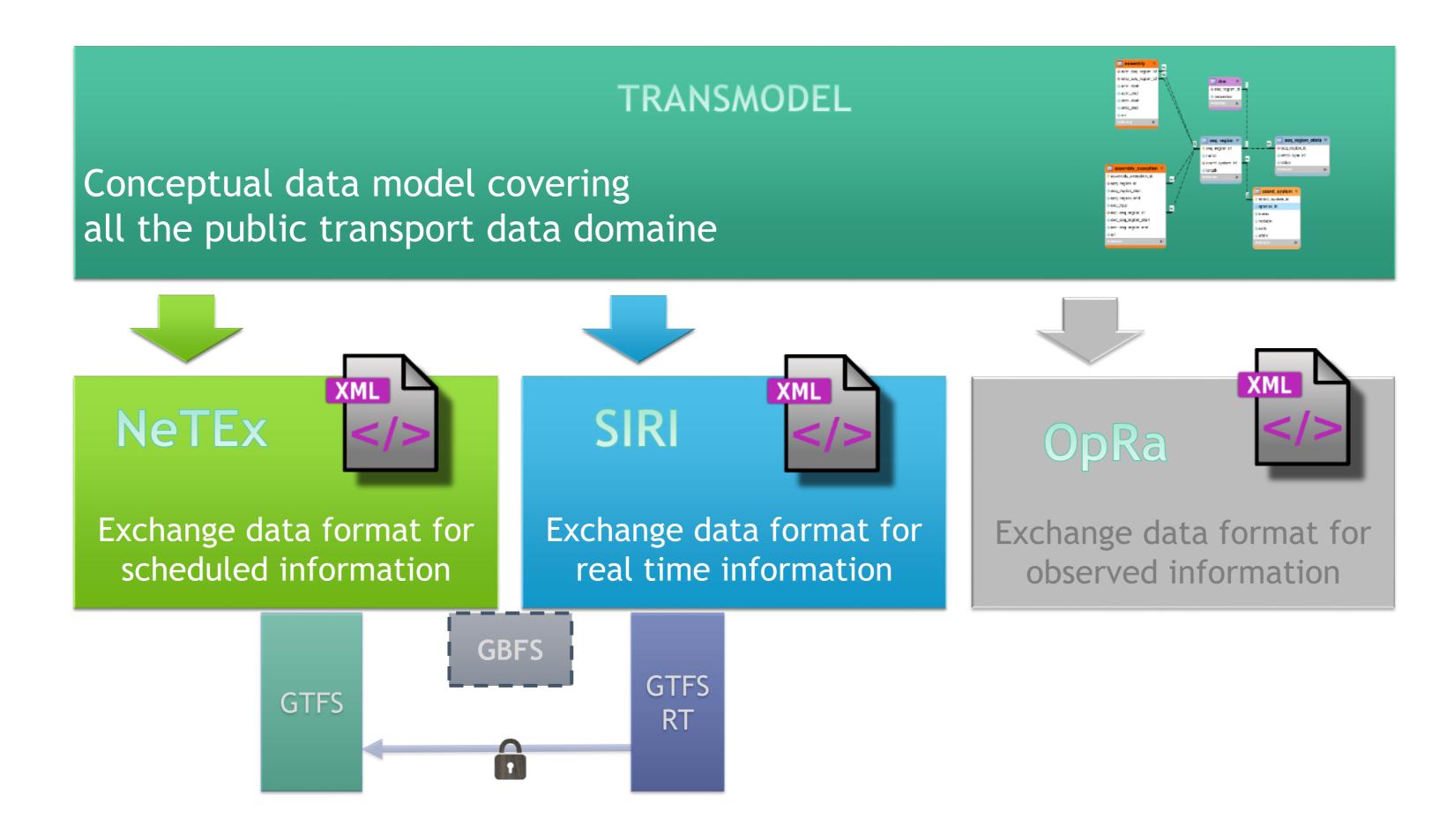






Context work: Transmodel ecosystem

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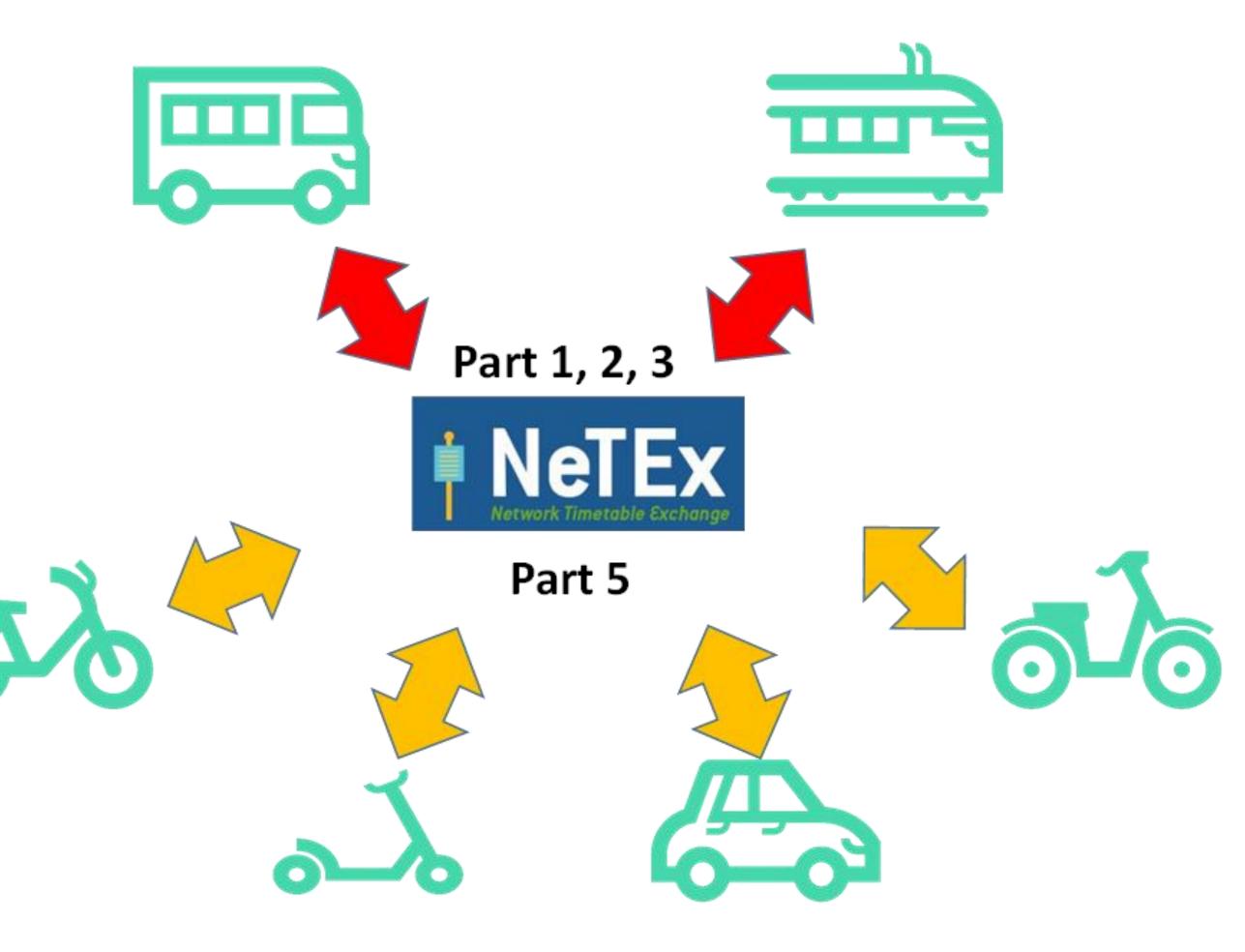


New Modes Extension

 June 2020 CEN set-up PT0303 working group for Technical Specification definition regarding NeTEx protocol extension to New Modes of Transportation, based on the Transmodel UML Model as specified by the project team PT1711

 Main Scope: development of a data exchange format dedicated to the publication of data concerning 'Alternative Modes', in particular car sharing, cycle sharing, carpooling, car/cycle rental.

 NeTEx context, it is primarily oriented towards static data (describing the service that is offered and associated infrastructure, more than its current running status).







New Modes Extension

- <u>Important task</u>: Liaise with groups developing standards (DATEX II, WG3, WG17, etc.) which may overlap or complement in order to harmonize the work. Liaise with DATA4PT who supports the development and deployment of European public transport data standards Transmodel, NeTEx and SIRI.
- The technical work (XSD and UML) is expected is finalised, it will be followed by the CEN formal work (European ballots, etc.)





PT0303 Project team

- Nick Knowles and Christophe Duquesne : - Andrej for review (specially against inputs)
 technical production (XSD and UML)
- 2. Paul Burton and Andrej Tibaut: documents production (based on technical production work)
- 3. Fabrizio Arneodo and Christophe Duquesne: communication and liaisons
- 4. And open to members of the CEN NeTEx group (already 15 members requested to be involved)





Expectation from the EU Regulation

Mode of operation	Type of mode of operation	Type of mode according to the Commission Delegated Regulation (EU) 2017/1926	The Commission Delegated Regulation (EU) 2017/1926: examples
Conventional mode of operation	Scheduled mode of operation	Scheduled mode	Air, rail including high speed rail, conventional rail, light rail, long-distance coach, maritime including ferry, metro, tram, bus, trolley-bus.
	Flexible mode of operation	Demand-responsive mode	Shuttle bus, shuttle ferry
Alternative mode of operation	Vehicle sharing (car sharing, cycle sharing)	Demand-responsive mode	car-sharing, bike-sharing
	Vehicle pooling (carpooling)	Demand-responsive mode	car-pooling, taxi
	Vehicle rental (Car rental, cycle rental)	Demand-responsive mode	car-hire, bike-hire.



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Project Overview: NeTEx

Definitions

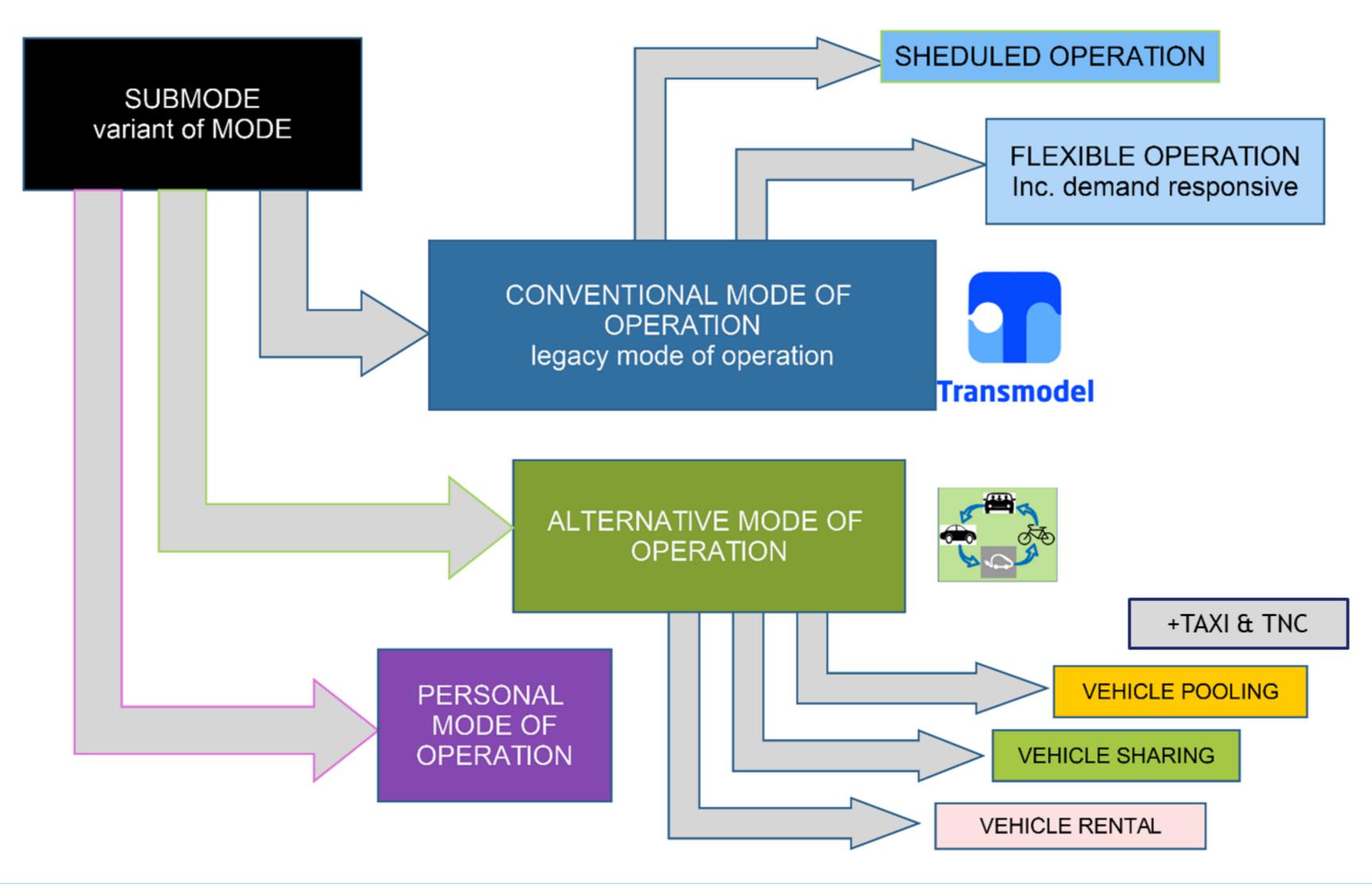
- **conventional mode:** Covers legacy public transport including some flexible public transport provided as a scheduled and/or flexible publicly advertised transport offer relying on a set of features:
 - drivers are employees;
 - > the fleet is owned by an operator or an authority;
 - > the network topology is defined well in advance and is based on lines and journey patterns

• alternative mode: publicly advertised mode of operation <u>different from the conventional mode</u> of operation, in particular vehicle sharing, vehicle rental and vehicle pooling





Main concepts







Covered concepts

- Mode of transport and modes of operation
- Fleet of vehicles
- New mode services and associated online/mobile access
- Meeting points (i.e. pick-up and drop of points for car pooling): can be free or a dedicated infrastructure
- Single Journey, running only once (can be planed, even a short time ahead)
- Parking (for car pooling drivers, for bikes, for meeting points, taxi stand, etc.)
- Connections (multimodal)
- Passing times
- Vehicle path (Routes)
- Refueling/recharging
- Specific Equipments (for example Vehicle Release Equipment)
- Vehicle Access (code, etc.)
- Vehicle profiles
- Passenger Trip (multimodal)
- Booking
- Planed availability
- Fare offer for new Modes





Coordination to be managed

- Possible already known overlaps to be managed:
 - > Parkings (DATEX II, APDS)
 - Charging Stations (DATEXII II, OCPI)
 - > GBFS (Bike sharing availability, slowly extended to Vehicle sharing)



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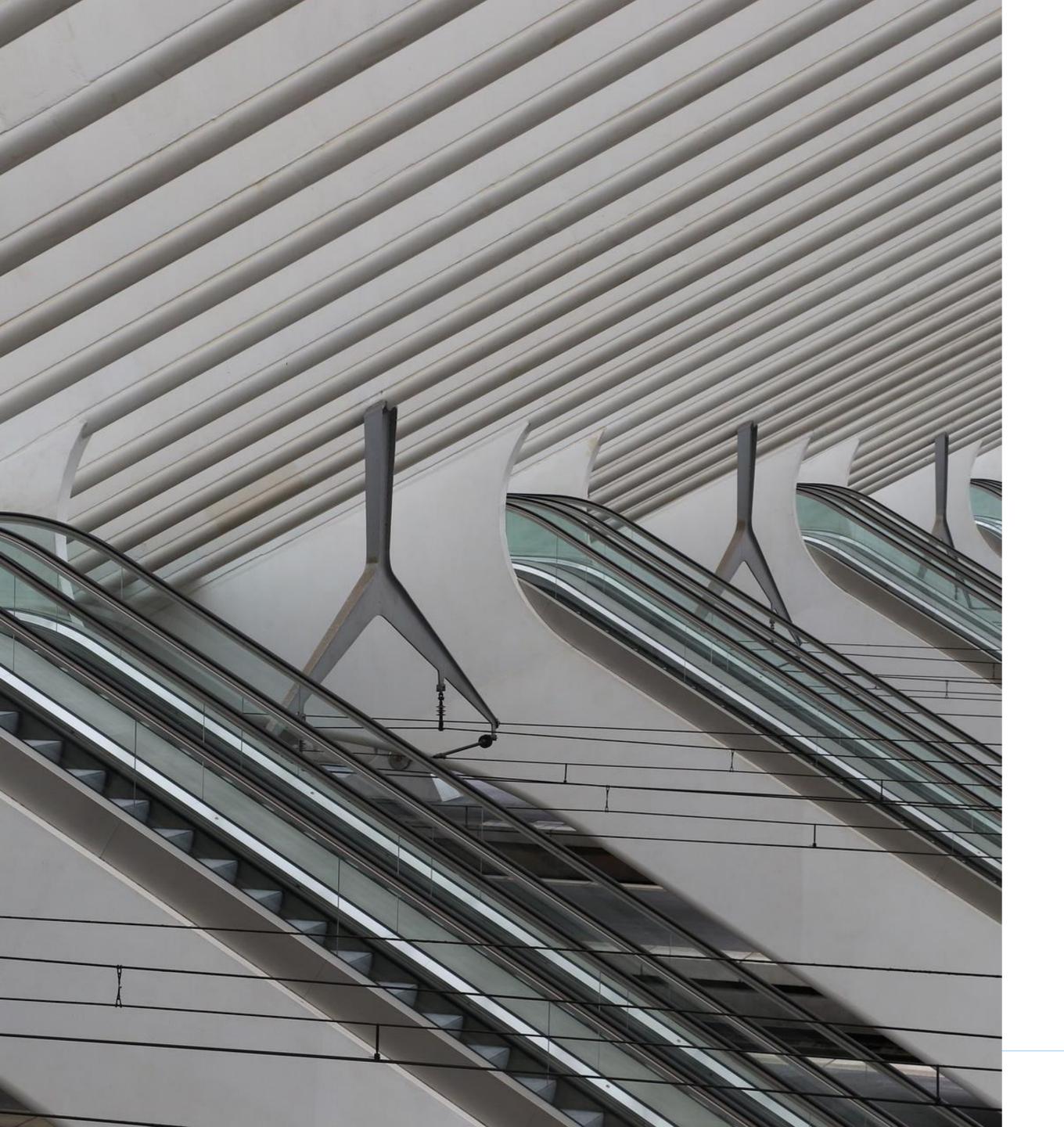
Potential Liaison with SIRI

New Modes Real-Time

- A Change Request 71 was initiated to provide information about New Mode availability (mainly Vehicles and places) but has been generalized
 - > Add counting monitoring to FacilityMonitoring
 - > Generalised to any type of Vehicle (bike, car, scooter, motorbike, etc.)
 - ➤ But also to seat availability (in Stop Places Areas/Point of Interest/Vehicles...) or any similar facility (lockers, audio guides etc.),
 - Suitable for a simple Passenger Counting.
 - > Covers some simple measurement (fuel available in a Refueling Equipment, etc.).

 - > Takes into account reference information from GBFS and DATEX II
 - > Vehicle location for free floating







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