LL12 Terminal track and Trace /ZAILOG

(Information derived from previous input)

In the pilot, the development of a software solution will implement track and trace application (T&T) able to manage the reservations of truck entrances in the intermodal railway terminal, to perform an improved process for drop-off or pick-up of ITU, to allow a better and more efficient management of the terminal, reducing the waiting times of trucks for access to the terminal.

IOT devices that will be installed by Codognotto on their Boxes and Trailers, will be possible receive and share real-time GPS position of the ITUs (e.g to obtain data about position of intermodal loading unit in the yard).
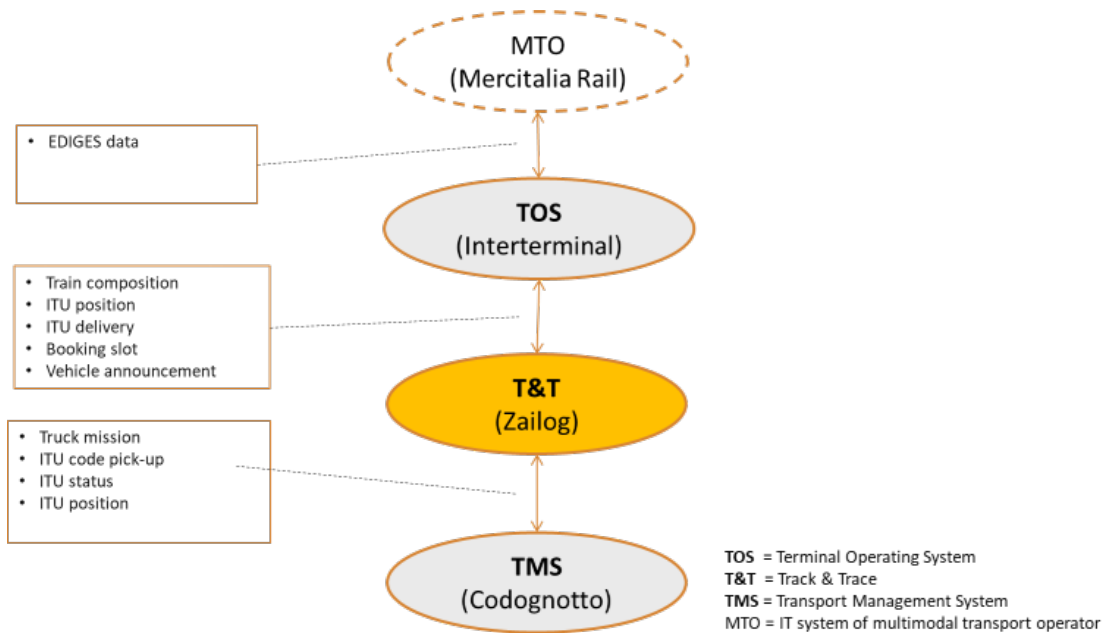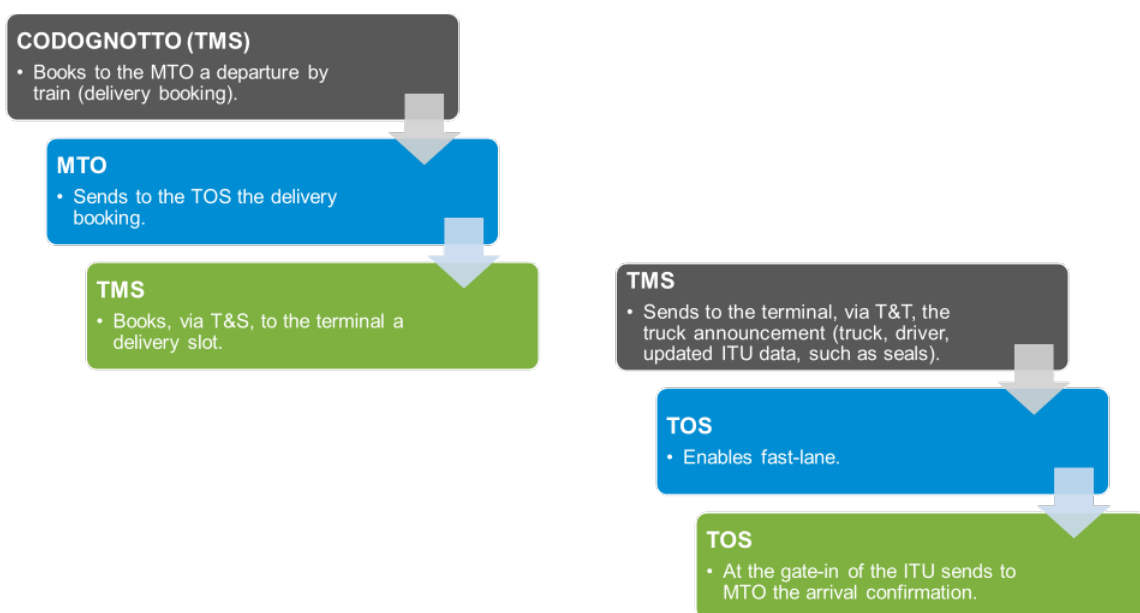

Figure 7 - IT systems in focus LL#12

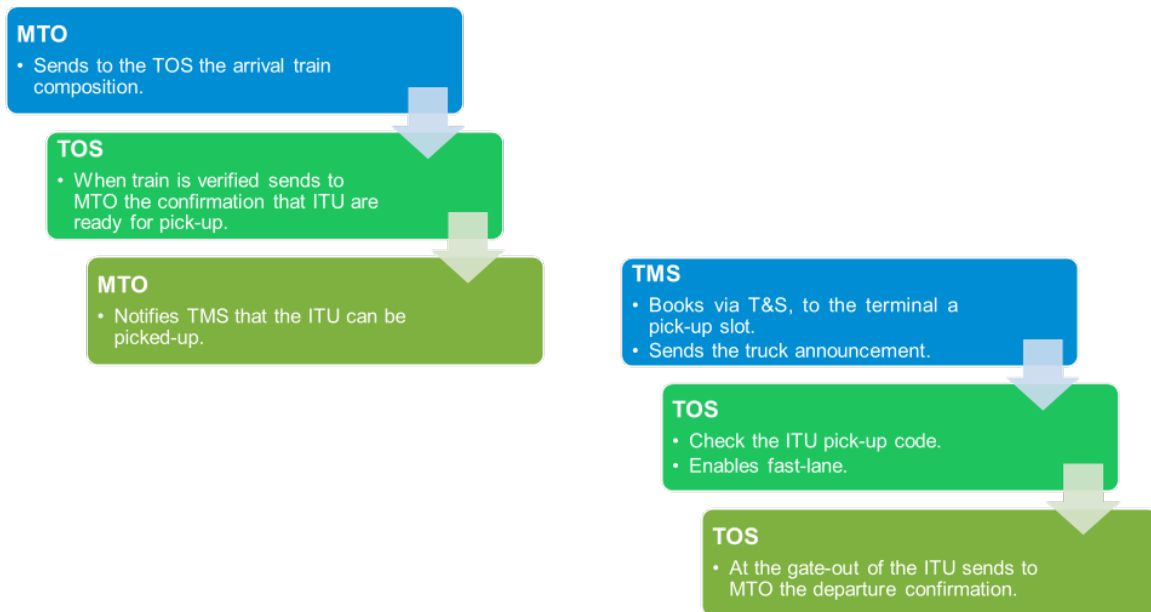*Figure 2 - Delivery of ITUs (export flow)*

Figure 3 – Pick-up of ITUs (import flow)

Concept

- Semantic model – Living Lab 12 has developed its own semantic model. Sharing data between carrier and intermodal terminal, is done using Track and Trace (T&T) an IT solution that provides slot booking and exchange of data for all parties involved.
- Mapping of data flows -– Covered by the semantic model
- Mapping of data objects – Covered by the semantic model
- Interactions and their structure – Data flows covered by the semantic model implement sharing data using REST APIs with JSON
- Identification relevant architecture
  - Identification and authentication –TBD until Q4 2022
  - Service Registry – TBD until Q4 2022
  - Visibility/index – TBD until Q4 2022
  - Access policies – TBD until Q4 2022
  - Data transformation – In this use case, data transformation is not necessary
  - Data storage – Data is stored as part of T&T module.