Agenda IT Arch fullteam meeting 7 March 2022

DP Rail organisation

DAC Migration

MARS status update

Process Map

WP Dossier

MARS will enable smaller RUs to digitalize first / last mile and transit operations

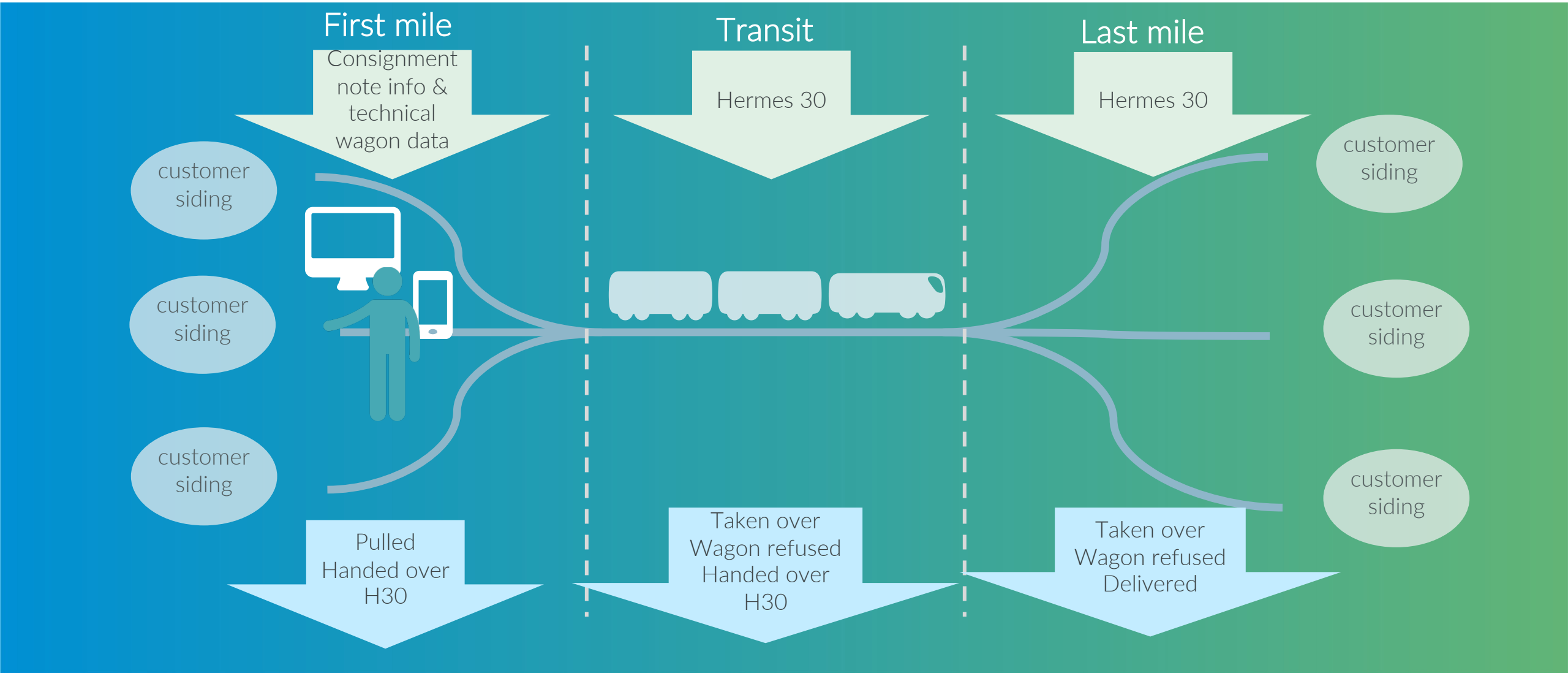## MARS – Mobile Application for Railfreight Services

MARS overview

- A user-friendly web application to ensure the communication flow between small RUs operating in the first mile, last mile and transit on behalf of a lead RU

- MARS replaces the tool WDI 1.0 at RailData

- The operating RU will be able to produce WSM Pulled / Delivered and Hermes 30 (H30) in the application

- Manual insertion of data will be avoided to the extent possible by pre-configuring objects by using information from the consignment note (ECN) and the technical wagon data from the GCU Broker

Project status

- Sprints ongoing (sprint 8 from 1 Mar to 15 Mar 2022)

- MARS screen design accepted by DBC and Lineas

- Requirements specification further detailed

- Lusis & Evolit further precised their development schedules with development ready in July

- Set up of user validation in progress – initial partners nominated by DBC and to be nominated by Lineas

- MARS marketing folder in progress

MARS to create WSM and H30 based on available data from ECN / GCU / H30

Divided role concept, template handling and offline capabilities some of the user features in MARS
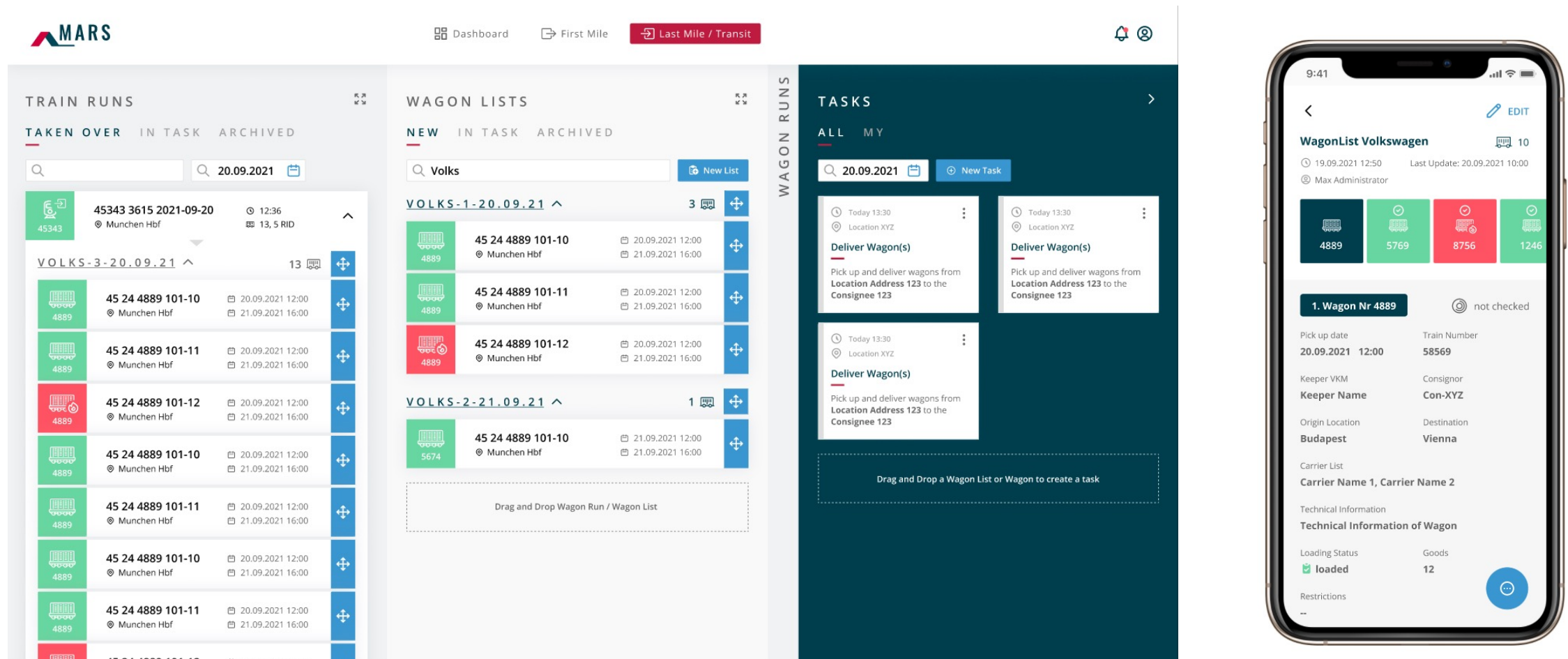
MARS user content

- MARS role concept divided in:
  - Backoffice for definition of tasks, planning and admin purposes (Backoffice frontend)
  - RU staff for performing tasks on site (Mobile frontend)

- Simplified handling and support via templates

- Technical wagon information from trusted sources (GCU Broker) whenever available

- Offline capability for the Mobile frontend

- Exception handling foreseen (e.g. manual process possible if ECN is missing)

- MARS must meet the TAF requirements (wagon movement) and will support H30 2.0 and ECN 1.5

Backoffice frontend and Mobile frontend with intuitive user interface supporting easy to use functions as "drag and drop"

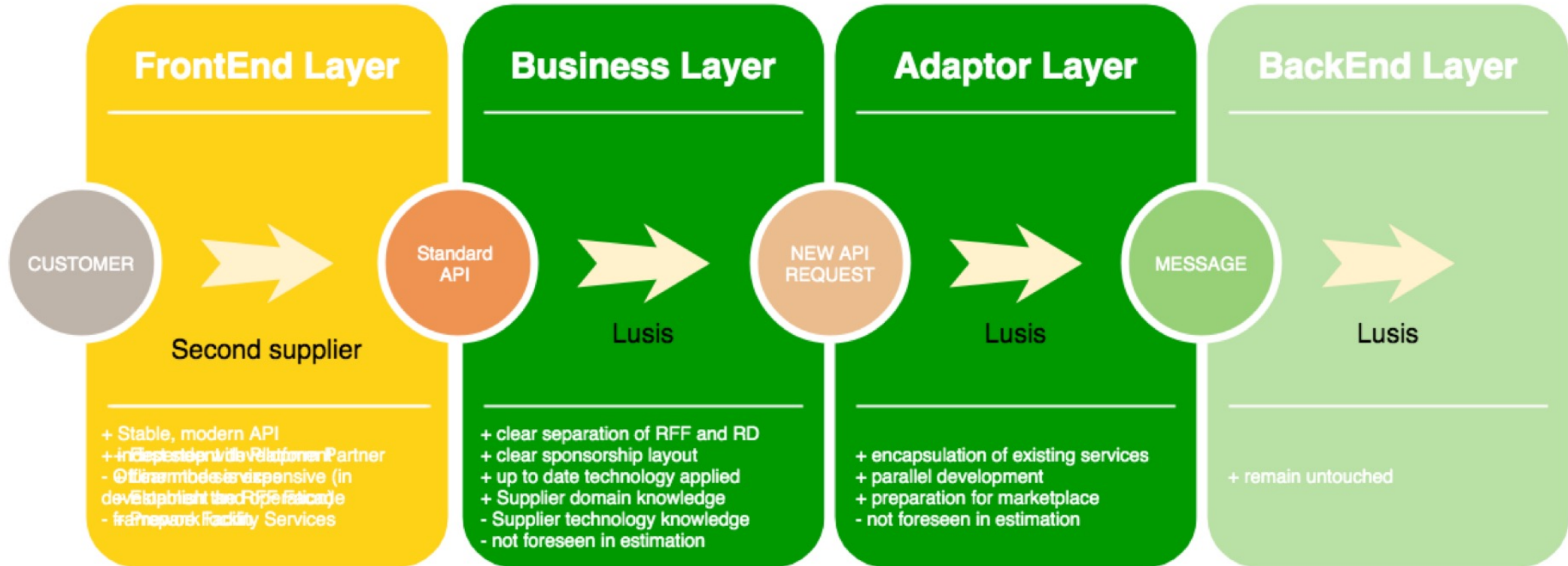MARS Backoffice frontend and Mobile frontend

A set of defined tasks serves as the basis for the user when executing the first / last mile and transit processes in MARS

MARS task management

- **Create empty train**: creating an empty train either by a predefined template or by manually entering the train settings via the web frontend

- **Pickup tasks:** task is performed in the backoffice based on available consignment note and GCU broker information to generate a wagon pick-up

- **Train composition**: lists of wagon in the state "Pulled" are put together in a specific sequence

- **Take over a train:** based on H30 a task is automatically created which then will be managed by the appropriate staff member

- **Hand over a train:** this task enables shunting staff to check train information via mobile device (e.g. Wagon sequence) and correct the given information if necessary. Closing the completed task generates and sends a Hermes 30 message

- **Delivery tasks for location:** back office plan a delivery and composes based on location and delivery date a task for the shunting staff

Actual MVP MARS architecture

Planning based on supplier input, DP-RAIL specification work extended – user validation and acceptance testing to be planned

MARS – Planning overview

Component	Activity	Q4 / 2021		Q1 / 2022			Q2 / 2022			Q3 / 2022		
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
BackEnd Adapter Layer												
BackEnd Business Layer	APIs											
	Last mile					◆ API finished incl. Last mile data						
	Transit, First mile											
	Other development											
	Internal testing											
FrontEnd	Web application											
	Mobile: Last mile						◆ First release (Last mile)					
	Mobile: Transit, First mile											
	Other mobile development											
	Internal testing									◆ Ready for UAT		
Integration / Acceptance testing												◆

Updated after joint supplier JF on 23.2.2022