Report of MaaS-API working group

24/7/2019, session #5
10:00-12:00, CROW, Jaarbeursplein 22, Utrecht

Attended by:
Edoardo Felici (Ministry of IenW)
Roberto Reyes Garcia (UTwente)
Ross Curzon-Butler (Cargoroo)
Gaby Costa Grillo (Urbee)
Diego Chavez (Urbee)
Stefan de Konink (Stichting OpenGeo)
Rob Verkerk (Nazza)
Stefan Bollars (Innovactory)
Tjalle Groen (Taxistop) – *via teleconference*

1. **Summary of decision points & feedback from actions from previous working session**
   Edoardo walked through the decision points and tasks from the Report of session #3. All points have been approved by the attendees.

   The following tasks were defined during the previous sessions:

No.	*Context*	*Task*	*Status*
3.1	In NETEX stop definitions are standardized. It is important that Accept uses this as well in their base code tables, as NETEX will be mandatory starting Dec 1st	Edoardo will refer this to Accept	To-do
3.2	Ross brought up GDPR issues related to fraudulent customers. The obligation to remove end user data might allow misuse, as customers can sign up again	Edoardo will refer this issue to the End user data working group to address	To-do

	without blacklisting. Stefan mentioned that GDPR does allow exceptions to prevent fraud, but this asks for a central organization to keep track of the blacklist on behalf of MSPs/TOs.		
3.4 3.5	The logic and clarity between the Planning and Booking API-modules was addressed, as some confusion appeared as to which functions take place in which modules.	Gerke, Ross and Himanshu proposed to set up a sub-working group to try and create clarity in these processes. (3.4) Gerke has implemented a similar process logic and is willing to share the insights with the working group. (3.5)	Work-in-progress
3.6 3.7 3.8	The semantics and functions of the Booking state were addressed based on Pim's comments on Github. Main feature is to introduce an Option state during which the User is presented with the different travel options, without the obligation for the TO to keep the asset temporarily reserved. Himanshu proposed to go through the semantics for each different modality in the next WG-session, as the booking process/relevant wording can be different for each.	Pim will update the issue #9 based on the suggestions (3.6) The sub-WG (see 3.4) will make first suggestions for this (3.7) Edoardo will add this point to the next agenda (3.8)	Work-in-progress
3.9 3.10	Ross put forward different methods for implementing webhooks. Different options were discussed. Himanshu mentioned that Accept already has authorization keys implemented which can be re-used.	Ross will summarize these options on Github, so WG members can start looking into their preferences. (3.9) Edoardo will check possible re-use of Accept authorization processes (3.10)	Work-in-progress To-do

4.1	Risk of price discrimination and distortions	Edoardo will refer this risk back to the MaaS-programme team at IenW. Regulation to avoid this kind of discrimination might be necessary (i.e. taxis are not allowed to refuse short trips).	Done
4.2	Edoardo will share the press release of June 3rd, when the API-blueprint v1.0 was presented to representatives of the MaaS-alliance, Benelux and Nordrhein Westphalen.		Done

2. **Approval of report of previous working session**
   The report of the previous working session has been approved without comments and will be added to Github.

3. **Walkthrough list of current pull requests & issues**

   Using https://github.com/efel85/TOMP-API/

   Approved during the meeting:

   - none

   Issues discussed during the meeting:

   - Stefan addressed the idea that MaaS Service Providers could arrange wholesale possibilities with Transport Operators, effectively bypassing the need for API-queries for availability checks as the MSP would be the sole user of the TO's assets. Edoardo responded that this will depend on business arrangements between MSPs and TOs and is not part of the scope of this working group.
     - As homework for all it was decided that we should have an overview of business models that TOs use, as a check that we are incorporating all the necessary scenarios in the API specifications (5.1)
   - A discussion was held around reservation types and the business models that companies around the table have. This highlights the need for insights into the different models as described above.
   - Gaby mentioned the need to determine what happens in case of cancellations and related knock-on effects. If one leg is cancelled, it has impact on all other legs and bookings. E.g. will customers have a right for replacement of a leg? Edoardo responded these are business-related issues concerning operating

conditions and arrangements between MSPs and TOs. The API specification should keep in mind that these issues can arise, requiring modifications of a booking etc.

- Stefan pointed out a potential issue with language packs. Will English be the standard or is a translation package to be supplied? A single reference pack is required, e.g. the European Key Registry for Addresses or the Inspire publications.
  - Stefan will add a link to the Inspire publications on Github (5.2)
- Edoardo summarized what has been determined in the past two meetings about the various booking phases.
  A reservation can be made in two types:
  - For here & now: a reservation with a start time, an end time and an expiry time. If the asset is not claimed before the end of the expiry time, the reservation expires. The start time and end time are timestamps. Optionally, a TO can ask a fee for reservation, a fee for cancellation or a fee for extending the expiry time of the reservation.
  - For future: a reservation with a guarantee, which reserves the asset (or asset class) for a specific start time. Optionally, the guarantee can have an expiry time after the specific start time, in case of no-shows.

  After the availability of an asset is queried, the booking state changes to PENDING and the asset is on-hold for a predetermined amount of seconds, as decided by the TO. This allows the user to view the different travel options as offered by the MSP and to choose one.
  The booking state changes to CONFIRMED if the reservation has been selected by the user.
  Once the asset is in use, the booking state changes to STARTED.
  When the asset is returned to the TO, the booking state changes to FINISHED
  The booking state can change to CANCELLED if a leg can no longer be completed. This can be because a user has cancelled (either user triggered or system triggered), or because an asset is unavailable (due to damage, empty battery, blockage on route, or the route is unavailable).
  - Edoardo will make a sequence diagram to clarify and decide on this for the next meeting. (5.3)

4. Determine tasks for next meeting

- See numbered tasks above
- Everyone is requested contribute to the issues on Github relating to the discussion mentioned above (issues #9, 12, 34, 39, 41, 45, 46)

- The 'lower states' that are possible during Trip Execution (e.g. creating a secondary booking within a booking for an asset) will be discussed during the next meeting.

5. **Any other business**
    - The next meeting will take place on 7/8 from 10:00-12:00 at CROW in Utrecht (Jaarbeursplein 22), room FIETS.