Report of MaaS-API working group

10/7/2019, session #4
10:00-12:00, CROW, Jaarbeursplein 22, Utrecht

Attended by:
Edoardo Felici (Ministry of IenW)
Roberto Reyes Garcia (UTwente)
Ross Curzon-Butler (Cargoroo)
Gerke Henkes (Nazza)
Robert Baart (Paxx)
Himanshu Gautam (Radiuz)
Edwin van den Belt (DAT Mobility)
Martijn van der Linden (Mobiliteitsfabriek)
Stefan de Konink (Stichting OpenGeo)
Fleur Schraven (Urbee)
Adrien Debono (Cityway)
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 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.	Edoardo will refer this issue to the End user data working group to address	To-do
3.3	The enumeration for type-of-asset was discussed. Suggestion by Himanshu to re-use the features within the Accept-API to start with. Stefan suggested to re-use the Datex II transport type or vehicle type definitions.	Himanshu and Stefan will place the relevant documentation and examples on Github.	Done
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	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

	WG-session, as the booking process/relevant wording can be different for each.		
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
3.11	Ross suggested to set up a Slack channel for communication. Github will remain the 'official' API-implementation platform	Ross will setup a Slack channel	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:

   - PR40: fixing issue #32, object with lon/lat to array of lon/lat

   Issues discussed during the meeting:

   - Ross, Gerke and Roberto prepared work on the planning and booking flow logic (see issue #41). Starting point was to view this API as something to be implemented by TOs, so it should not contain any planning logic as this not a TO-related concept but rather an MSP process. The suggestion is to bring the necessary endpoint at TO-side down to two: one for 'static information' and one for real-time asset availability information.
     - In the static information exchange, the GBFS operator information is shared (system-information, station-information, system-calendar etc.), including a timestamp and time-to-live to determine when this information should be updated. This can be offered as a subscription to MSPs. An optional 'chance of availability' to be provided by TOs is

suggested, so that MSPs can evaluate the offerings without having to do a real-time availability check.
    - The type-of-asset that a TO has available should be added to station-information, so an MSP knows which kind of transport offer they can expect from a TO.
    - NOT in the static information exchange is the current asset availability, current asset location, current service disruptions and current pricing (in case of dynamic pricing models).
    - When a user wants to start a booking, the MSP queries the TOs relevant to that query through a POST-request. The TOs return real-time availability information and a webhook to subscribe to asset availability updates. Once a user has chosen an asset (or asset class) for the leg of the trip as presented by the MSP, the status changes to PENDING, with a time-to-live for this status. The MSP then can align the different legs to PENDING based on the choices of the user. Once all the legs are aligned to PENDING, they are updated to BOOKED.
- Stefan pointed out there may be missed opportunities for TOs if they only want to receive calls that fit within their current business possibilities. Wouldn't a TO want to know which kind of calls are being done which do not fit their current offer, to be able to expand business opportunities? Edoardo mentions this will be up to the TO to determine how 'narrow' the operator information is delivered– e.g. only in the specific cities or operating hours which are currently in the offer, or wider even though the TO does not currently have an offer there. Also, governments will have responsibilities to analyze (lack of) current offerings based on mobility use, and adjust permits/policy accordingly to allow new mobility offers to expand and be directed to new business opportunities.
- Stefan also points out the risk of discrimination against users who do not fit the TOs preferred business model. E.g. a shared bike might be available for a user who wants it for a whole afternoon, but the TO discriminates against this user in favor of other potential users that need the bicycle for a shorter amount of time, thus allowing more users to use that specific bike in the same timeframe (and potentially achieving a higher profit margin).
    - Edoardo will refer this risk back to the MaaS-programme team at IenW (4.1). Regulation to avoid this kind of discrimination might be necessary (i.e. taxis are not allowed to refuse short trips).

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)

- Issue #9: Define Booking state and the logic of trip vs journey planning should be discussed next meeting and decided on.

5. **Any other business**
    - Edoardo asked if we can define a milestone before Jan 1st, to determine an ambition for the following weeks. He suggests publication of API-blueprint v1.1 and corresponding technical specs by Oct 1st, with an updated planning & booking logic and definition on what is to be exchanged. After Oct 1st, the remaining work items regarding trip execution can be worked on. The group agrees with this ambition.
    - Ross requests information on the international ambition of this API.
        - 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.
    - The next meeting will take place on 24/7 from 10:00-12:00 at CROW in Utrecht (Jaarbeursplein 22), room FIETS.