



UDM Tool - Checklist for service assessment

F. Di Ciommo, A. Kilstein and G. Rondinella
(cambiaMO | changing Mobility)



Checklist for service assessment

This co-created UDM-V1 primarily focuses on the digital interface part of digital mobility and delivery services, but the service itself should also ensure accessibility and inclusivity. The structure of the IT system usually derives from the physical system. Therefore, to provide an inclusive digital service the base-system should be assessed with an inclusivity and accessibility approach.

The service assessment contains aspects and requirements for different subsystems and from different viewpoints regarding the targeted user groups. The goal of the assessment is to give operators and developers an insight into universal design, and as they perform the assessment process themselves, they obtain important information about inclusivity and get familiarized with the general needs and requirements of vulnerable-to-exclusion people.

As a result of the assessment, operators and developers can determine the performance of their service on the different axes of capabilities and limitations. On the one hand, this result may encourage them to improve the accessibility and inclusivity of the service if the scores prove to be low and it also aids to identify the main areas of possible improvement. On the other hand, it aids the development or updating process of the related application in terms of focusing resources: if the service itself could be reached with a specific level of capabilities but the application's insufficiency prevents it, actions should be taken to improve the related sub-systems. Ideally, both the service provided and the related digital interface should have similar ratings on every axis of the capabilities-limitations spectrum.

The main process of any service may consist of several subsystems, but the whole service can only operate in an accessible and inclusive way if all of these subsystems are suitable and designed universally. This guide summarizes the main requirements for the potential components of a general service. Not every service will contain each subsystem but in order to effectively improve the service, those factors should also be assessed by the same manner.

Service access point

- Service location itself is accessible:
 - Visual impairment: tactile paths, signs, Braille displays, audible announcements (if possible)
 - Mobility impairment: barrier-free and spacious facilities, enough seats
 - Auditory impairment: texts /captions / visual signs for audio information, dynamic adaption of volume (if possible)
 - Accessible with children (enough space, child seat)
 - Accessible with large baggage, pets (incl. guide-dogs) etc.
- Route to service access point is accessible:



- Mobility impairment: barrier-free and spacious facilities
 - Careful placement of access point (e.g., point of aggregation of communities)
 - Connection to transport services (e.g., public transport)
 - Accessible with children, pets, baggage (enough space)
- User is led to the service access point:
 - Service point (if it is physical) itself is signed clearly, it is easy to identify
 - Clear and understandable information along the route:
 - Clear information about temporary changes, e.g., diversions, constructions, closures;
 - Accessible information on orientation:
 - Visual impairment: tactile paths, signs, Braille displays, audible announcements (if possible)
 - Auditory impairment: texts /captions / visual signs for audio information, dynamic adaption of volume (if possible)
 - Universal icons and signs
 - Texts are available in several languages
- Service time:
 - Service hours as long as possible
 - Allow users enough time for the service process, so they do not have to hurry
- Safety, security:
 - Safe and quiet place
 - Secure environment
- Coverage:
 - Geographical coverage as large as possible
 - Customizable access point (if possible, e.g., boarding point for ride sharing)
 - Personal access point (if possible, e.g., a locker)

Vehicle

- Vehicle itself is accessible (at least as an option):
 - Mobility impairment: barrier-free and spacious, enough seats, same level of vehicle floor and platform
 - Accessible with children (enough space, child seat)
 - Accessible with large baggage, pets (incl. guide-dogs) etc.
- On-board information is accessible:
 - Vehicle is indicated clearly, it is easily recognizable from outside
 - Vehicle characteristics are available
 - Visual impairment: tactile paths, signs, Braille displays, audible announcements (if possible)
 - Auditory impairment: texts /captions / visual signs for audio information, dynamic adaption of volume (if possible)



- Universal icons and signs
- Texts are available in several languages

Physical interface / Product

- Physical interface/product is accessible:
 - Visual impairment: tactile signs, Braille displays, audible announcements (if possible), different shaped objects/buttons for different parts/functions, touch-screen equipped with text-to-speech options (with physical button to switching it on), physical buttons for number input is preferable
 - Mobility impairment: interface/product can be used from wheelchair (adjusted height) and with one hand
 - Auditory impairment: texts /captions / visual signs for audio information, dynamic adaption of volume (if possible)
 - Description is available in several languages
- Contact to the interface:
 - As few actions needed from users as possible (e.g. activating interface)
 - Simple and understandable instructions
 - Clear feedback about the process
- Wide range of product options:
 - Options of users with health diseases, limitations, e.g. allergies

Service personnel (direct contact)

- Good manners, appearance:
 - Introduce themselves (if contact is direct)
 - Know user's name (if contact is personal)
 - Tidy outfit and appearance
 - Uniform or clearly distinguishable outfit (if possible)
- Contact with user:
 - Profile and personal data are displayed
 - Notifying user before arrival (if contact is direct)
 - Possibility of contact before use, to arrange details (if needed)
 - Speaking slowly and in a clear way
 - Offering support if needed
 - Trained about inclusivity
 - Assigning the same personnel for the same user if possible
 - Capable of communicate in English (or other additional languages)

Booking

- Option of booking in advance (if possible)
- Alternative channels to order:
 - WhatsApp/Viber/Messenger etc.
 - Phone number

- Customizable booking:
 - Accessibility options (if they are not universal throughout the whole service)
 - Special needs, e.g. children, pets, baggage
 - Choosing the gender of personnel (if contact is direct and can be relevant)
 - Available information about the presence of other occupants/users (e.g. children, pets; if it can be relevant)

Payment

- As wide variety of payment forms as possible:
 - Cash (if not increases security risk significantly)
 - Credit/Debit card
 - Digital wallets (e.g. Paypal)
 - In advance / after use
 - Personal account
- No minimum amount of purchase
- Affordable and transparent pricing:
 - Clear and understandable fares/prices
 - Indication of actual price
 - Budget options
- Secure place for payment
- Optional (and not mandatory) connection/integration of account with other services

Customer service

- Possibility of getting human assistance:
 - Assigning the same personnel for the same user if possible
 - Include person with impairment in staff
 - Reliable, friendly, and empathic staff
- Alternative channels:
 - Personal assistance, support (if possible) at contact points
 - Remote help via phone
 - Remote help online (in video, audio, or text)
 - Assistance chat for people who cannot speak / cannot speak the language
- Availability in 24/7 if possible, or at least during service working hours
- Accessible in several languages

Dissemination

- Letting know possible users about the existence of service via as many channels as possible:
 - Electronic media, online
 - Social media, influencers
 - Integration in electronic services, e.g., Google Maps

- Local, printed media
- Flyers, brochures
- Local organizations, associations
- Advertisements in local stores, services, schools
- Facilitating user involvement:
 - Clear communication of advantages
 - Clear description of registration process
 - Manual/guide available in own language

Covid-19 protocol

- Establishment and communication of cleaning protocol
- Actions to prevent infection:
 - Disinfection, ventilation of service area
 - Personal hygiene equipment
 - Control of crowd, keeping distance