




TOILET FOR ME



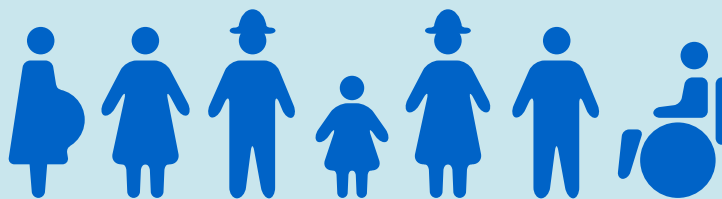
AAL

The project T4ME2 is funded in part by AAL and national research funding agencies. AAL is a European programme funding innovation that keeps people connected, healthy, active and happy into our old age. They support the development of products and services that make a real difference to people's lives – for those facing some of the challenges of ageing and for those who care for older people if they need help.



Happily out of home thanks to a flexible and smart toilet

One of the things that keeps people with a disability or elderly from going out, is the lack of toilets that are publicly available and accessible. The European AAL project Toilet For Me Too (T4ME2) wants to change this by developing an ICT enhanced toilet, adapting to the individual user needs, with modern functions like stand-up support, adjustable height and a shower-WC. A smart toilet that allows people with mobility restrictions to use the toilet independently. Approachable, clean, safe. Allowing them to take part in social life in an active way.



To gain insight into the requirements of a smart accessible public toilet, research among people in need of accessible public toilets has been conducted. The needs of users and their (informal) caregivers have been researched in an extensive way, as part of the Toilet for Me Too project.

CONCLUSIONS USER RESEARCH 2020-2021

Generally there is a need for more adapted toilet systems in the semi-public space. Currently there is a lack of such toilets and existing public toilets do not have the needed functions or are not as clean as needed. More adaptable, inclusive toilets will enable a larger part of the elderly population and people with disabilities to leave home for taking part in societal activities outside the own living area. A clean, safe and accessible toilet is crucial for this. The general public is often not aware of this issue, therefore awareness raising is needed.

ACCESSIBLE PUBLIC TOILETS

Research among users of accessible public toilets (users and their caregivers, 154 respondents in total in 3 countries; The Netherlands, Belgium and Poland) through an online poll, showed that accessible public toilets/disabled public toilets are often (on average by 78%) used by elderly and people with disabilities and their carers. However, more than 70% of these users indicates there is a **lack of such toilets** in semi-public and public spaces like gas stations, restaurants, hotels, trains, libraries and shopping malls. Furthermore, these public toilets are often **not clean** and have **insufficient functionalities**. Desired functionalities mentioned most in our online poll are a **show-er-WC** (bidet function, spray of cleansing water and air dryer), **stand-up function** (tilt seat), a **changing table** for adults and **vertical lift** (height adjustment).

In additional research (interviews) 100 users in total have been involved, 61 primary users (elderly and people with disabilities) and 39 secondary users (informal and formal caregivers). The main findings concern the most important functionalities as described on the next page.



TOP 5 GENERAL FEATURES OF ACCESSIBLE TOILETS

FEATURES RANKED IMPORTANT OR ESSENTIAL BY PRIMARY USERS (61)



FEATURES RANKED IMPORTANT OR ESSENTIAL BY SECONDARY USERS (39)



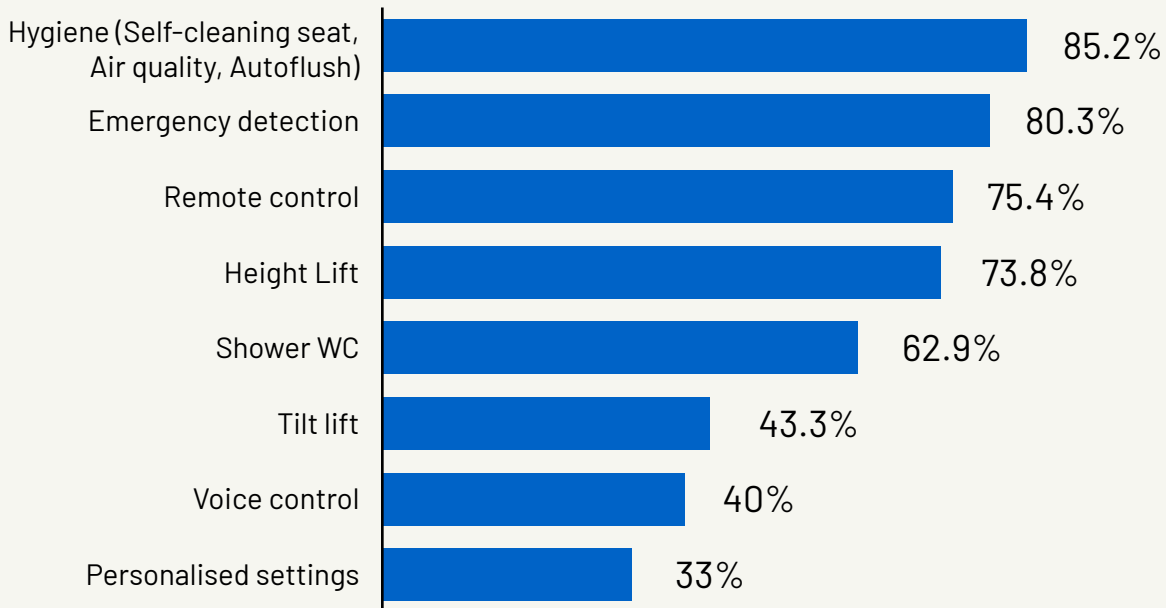
'A nice design makes me feel better about myself'

(User)

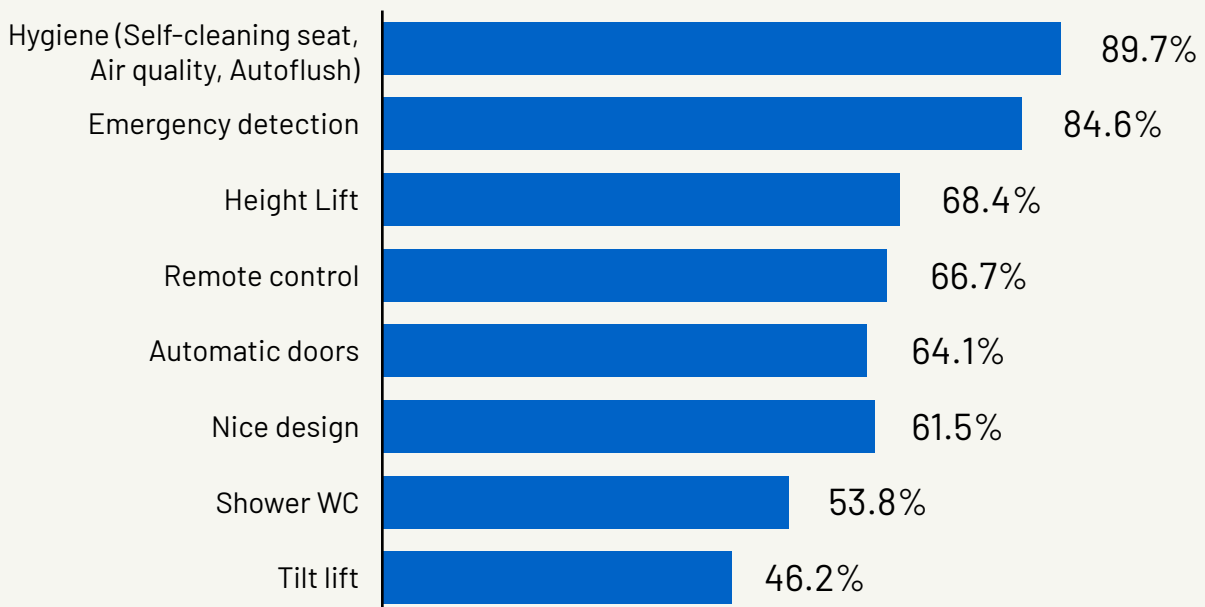
SPECIAL FEATURES (TOILET FOR ME SYSTEM)

The results of the interviews with both users and their (informal) caregivers show that overall most of the modern requirements such as shower-WC, height lift, tilt lift for a Toilet For Me System are considered important. It can be concluded that for the design of the toilet system it is of paramount importance to offer an intuitive way of interaction between user and system.

FUNCTIONS RANKED IMPORTANT OR ESSENTIAL BY PRIMARY USERS (61)



FUNCTIONS RANKED IMPORTANT OR ESSENTIAL BY SECONDARY USERS (39)



'Height lift is important, because it enables me to adjust height of a toilet for my individual need and makes it easier to sit down on the toilet.'

(User)

TOILET ROOM

Users also commented about toilet rooms in general. Within the Toilet For Me Too project the focus is on a supportive toilet with modern functionalities. However, recommendations given in the research are helpful for accessible toilets in general. Respondents missed, as in most toilets, an adjustable mirror, trash bin, disinfection spray, hangers for clothes. All within reach for wheelchair users. A non-slippery floor is also mentioned regularly. Furthermore, the toilet room has to be spacious. The door has to be easy to open from both sides. A ceiling lift and a changing table for adults were mentioned. Other things that were missed: UV-C cleaner for disinfection of the entire room, automatic odour freshener, lights that stay on as long as the door is locked.

TECHNICAL SUGGESTIONS

Technical suggestions are made on robustness, intuitive design, maintenance should be easy, toilet should be ergonomically and easy to locate by use of an app.

PARTNERS

A consortium of European partners with different areas of expertise cooperated to develop Toilet For Me Too: TU Wien (Austria), Sanmedi (The Netherlands), Golden Days (The Netherlands), Sanitronics (The Netherlands), Sacred Heart (Belgium), Care Center software (Austria), Beia Consult Int. (Romania), On-site Foundation (Poland), Cogvis (Austria) and Santis (Hungary). The user research is led by Golden Days (Charity foundation for the elderly) and On Site Foundation (NGO that strengthens local communities).

MORE INFORMATION

The full research report “Requirements of primary and secondary end-users” of the Toilet For Me Too project (A study on supporting active living in (semi-) public environments by suitable toilets) can be found on www.toiletforme.com/publications