

Translation into English - The original press releases (in German) are to be found here https://www.tuwien.ac.at/aktuelles/news_detail/article/10087/ and here <http://www.cs.or.at/deutsch/caritas-socialis/presse-und-kampagnen/presse/itoilet---automatisierte-toilette-unterstuetzt-aktives-leben-internationales-forschungsprojekt-in-wien-gestartet.html>

iToilet - An Automated Toilet Supports Active Life

An international research project involving partners from Austria, Hungary, Slovenia and Italy aims at developing an intelligent toilet to ease the life of older persons

What is the best way to support older persons living alone at home when they are using a toilet? In the research project iToilet a computerized toilet system is now being developed, which aims at providing new means for old persons to live at home autonomously and safely and use the toilet while protecting their privacy and dignity. iToilet also shall be used in institutions where the aim is to reduce the burden of caregivers when providing physical assistance on the toilet. On April 22th, 2016 the kick off meeting of the project took place in the premises of CS Caritas Socialis in Vienna.

25% of very old persons are afraid of falling on the toilet

Studies have shown that a significant number (nearly 25%) of old persons state that when using a toilet they are always afraid that something serious could happen to them (e.g. falling). More than 50% agreed that it applies at least to some extent that they avoid going out longer in order not to need to use an inadequate toilet.

iToilet will be optimised

The iToilet project addresses these needs of older (or physically disabled) persons when using a toilet by envisioning a supportive ICT enhanced toilet adapting to the individual user needs of older end-users. An existing height and tilt adjustable toilet module serves as base for adding several significant enhancements and services, e.g. control via voice, automatic recognition of and adaptation to user preferences when entering the toilet room, recognition of potentially dangerous situations (e.g. a fall) and other functionalities (e.g. interface to care documentation, providing guidance to persons). The project also addresses the needs of care persons when providing assistance to primary users in the toilet room.

Users involved right from the beginning in the project

iToilet follows a strictly user centred approach and includes continuous ethical review and supervision. End-users are involved right from the beginning for eliciting user requirements and for participatory design activities. iToilet will iteratively evaluate prototypes with end-users in a laboratory and in the field. The final prototype will be tested at 2 sites [consider to add more details about test site in case of Hungarian press release] over a period of at least 4 months involving at least 25 primary and 5 – 7 secondary end-users on each field test site.

Independence for end users, reduced demands for carers

The iToilet will bring independence and dignity to end-users, by its ability to enhance body stability when sitting on the toilet (individually adjustable optimum height, hands are free for handles), by supporting the sitting down and standing up process (dynamic adaptation of tilt and height), and by increased safety via emergency detection. For care persons the burden on their shoulders when assisting the end user on the toilet will be reduced. This will also

enhance health and well-being of the employees at institutions. Results shall be available at completion of the project within 30 months.

The iToilet project consortium: Institute for Design & Assessment of Technology, TU Wien, Vienna, Austria; Santis Kft., Debrecen, Hungary; Smart Com d.o.o., Ljubljana-Črnuče, Slovenia; Carecenter Software GmbH, Linz, Austria; CS Caritas Socialis GmbH, Vienna, Austria; Országos Orvosi Rehabilitációs Intézet, Budapest, Hungary; Synthema srl, Ospedaletto - Pisa, Italy

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The iToilet project in the Internet: <http://www.itoilet-project.eu>

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