2.6 Summary

The POSEIDON project on developing assistive technologies for people with DS pursues a user centered approach. This includes requirement analyses and usability tests. Center of the requirement analysis is an online-questionnaire on their everyday living, their interests, and the extent they are familiar with modern information or assistive technologies. It addresses people who take care for people with DS. The questionnaire was provided in English, German and Norwegian. Although the population of people with DS is small (both In Germany and in the UK a population of up to 50.000 people is estimated according to Wikipedia-articles in German and English) many questionnaires were answered (267 in the UK, 106 in Germany, and 18 in Norway). 85.3 percent of the respondents were parents having a child with DS.

The everyday competencies of people with DS vary highly. The results of our survey show that persons with DS in our sample can do only a few things completely on their own; but they also show that many things can be done with differing degrees of help. This includes the use of modern information or assistive technologies.

The limitations of our questionnaire do not allow for differentiated explanations. We especially do not know why people with DS are doing things not on their own. We cannot say to what extent they are not able to do them and to what extent they are not doing them because of an overprotective system they live in.

The survey provides a broad overview on the problems people with DS have in their daily life. Questions were asked on time management, handling money, traveling, health behavior, communication, and school/work/learning. Depending on the objective of the POSEIDON project the focus of the analyses was on the use of modern information and assistive technologies.

A majority of people with DS in our sample uses modern Information-technology as there are Laptop/PV (81.9%), Tablets (85%), and smartphones (56.4%).

About half of them need help when using these devices. Most easy seem to be the use of tablets (only 44.9% need help using them). 45.8% own a tablet. 62.3% are using apps on their tablets.

Modern assistive technology (as e-learning) is regarded as helpful, although many carers don't feel sure on the chances these technologies offer, maybe due to not being well informed.

Social integration varies highly between work/school and leisure time. Carers say that 38.4 percent are well integrated at school or work but only 23.0 percent in leisure time.

For all daily activities a support for independence and autonomy could be helpful. Most important seem to be supporting communicating and socializing while supporting household tasks is regarded of minor importance.

Carers see also chances to make their own work easier. They hope to get better informed about the whereabouts of their protégés (e.g. whether they have reached a destination safely), or setting alerts to remind them of doing certain things.

The overall impression is that carers generally are well aware of the chances modern information technology offers for people with DS. Most of them have already provided their protégées with technologies as smartphones or tablets. They seem to be prepared to try new smart devices if these are secure, motivating, adaptable to individual needs, could be used everywhere and are not too complicated to handle. Finally they should give themselves the feeling to care better for their protégées. One respondent of our survey puts it the following way: ”He is so proud when he does something by himself. Being independent would be a huge boost to his self esteem and give him the confidence to try harder challenges.”

We have already demonstrated that according to their carers people with DS are better socially integrated in work/school/learning than in leisure time. This holds true especially for the group of the younger ones, while the difference concerning work/school, learning is only minimal.