Provision of Assistive Technology in the Nordic Countries

Second Edition

MAY 2007
Foreword

The first edition of this report was published in May 2004, as a translation of the Scandinavian version published a year earlier. Since then both small and significant changes have occurred in the systems of the different countries - hence the need for this update.

The introductory chapter discusses the challenges the Nordic countries face in the field of assistive technology and participation. Then, the systems for provision of assistive technology in the five Nordic countries Denmark, Finland, Iceland, Norway and Sweden are described. Provision of assistive technology has many similarities in these countries, most important that it is financed with public means, whereas the distribution of costs on a local, regional and national level is different. The systems are complex but the report aims to make the national descriptions as comparable as possible.

The Nordic countries face the common challenge to adjust the activities within the assistive technology field to new requirements and maintain the principles of publically financed systems, including actual involvement of the end users. Here, Nordic co-operation has great significance. This co-operation has since 1990 been made real through NUH, the Nordic Development Centre for Rehabilitation Technology, which is a subsidiary under NSH, the Nordic Co-operation in the field of Disability.

NUH has enabled a great number of development projects and networks that helped giving assistive technology more significance in these countries. The fundamental basis of the co-operation is the near contact between the national institutes or equivalent in the five countries. The national actors, who wrote the descriptions in this report are Hjælpemiddel-instituttet in Denmark, Tryggingastofnun ríkisins on Iceland, STAKES in Finland, NAV Hjelpemidler in Norway and Hjälpmedel Institutet in Sweden.

With this report NUH hopes to contribute to improved systems for provision of assistive technology and participation for all in the Nordic countries.

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Introduction

Accessibility and Participation for People with Disabilities – Unsolved Issues in the Nordic Welfare States

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The Nordic welfare states are affluent and have highly developed and encompassing public systems of income maintenance and services aiming at an equalization of life chances and opportunities. The provision of assistive technology has been an essential part of this policy tradition. All five countries have a national system for the allocation of assistive technology based on discretionary evaluation of the needs of the individual but with some differences: Some systems are centralized or standardized (Norway and Sweden) while others are based on local discretion and administrative control (Denmark). In some systems all services are administrated entirely by public authorities (Denmark, Norway and Sweden) whilst others have a larger involvement of disability NGOs in the provision of technical aids (Iceland and Finland).

This is in line with earlier findings which suggest that there are systematic differences among the disability policies of the Nordic countries. Yet, the five countries face many of the same challenges:

• First, growing public expenditures to assistive technology is a common concern to all five countries. Many technological devices are allocated to the elderly and the needs will not be smaller with an aging population. Arguably, the strengthened social rights of disabled people in the European Union and an increased focus on the human rights of disabled people in the United Nations and the Council of Europe – especially the last decade – have imposed new legal and
moral obligations on the member states to ensure accessibility for all citizens, although not necessarily through assistive technology.

- Second, the technology development is accelerating and technological devices becoming more common in the daily life, work places, health care, and education. Partly it requires constant reconsideration of what are products that all citizens have and can afford, and technology that are reasonable for the state to finance to compensate for disadvantages related to socially constructed barriers to participation or impairments. Partly the technology development opens up new opportunities but also creates new barriers against participation, perhaps especially in the field of Information and Communication Technology (ICT).

- Third, what reasonably can be called disability policy covers many policy areas and broad sectors of society. All five countries distribute responsibilities for the provision of assistive technology in different agencies, whether it be generic or impairment specific agencies, depending on the reason for granting assistive technology (participation in employment, education or daily activities) or the reason why the need has occurred (war veterans, injuries at work, old age or sickness, or inborn impairments). In any case, coordination between the different agencies is needed. It is a risk that individual agencies will disclaim responsibility and the claimant will become a shuttlecock in the system.

Policies to promote capability and effective freedom of all

The Nordic welfare states are not uniform but all assume a large degree of public responsibility to guarantee social services to its citizens. This has been through publicly funded service provisions to cater for all needs and the whole population, mainly financed through fiscal revenues. The income-security systems have been generous and the official aim has been to provide income maintenance benefits that enable people to maintain the same level of living during periods of life without gainful employment. Different from some other European countries, the assumption has not been that the public authorities should intervene only in cases where the family is unable to provide care and assistance. Rather, the public authorities have assumed responsibility for care services for the sick and elderly, and the provision of kindergartens. To be able to maintain a generous welfare state the countries have to varying
degrees emphasized the objective to achieve the highest possible employment rate in the working age population, both among men and women ("full employment"). This goal has been reflected in that the Nordic countries generally have spent more on active labor market measures than other European countries. Although it has represented an expense on the public purse in the short run, it has been assumed that improved skills and competencies in the labor force will benefit the national economy in a longer time-perspective.

In the Nordic countries a dominant part of what could be called ‘disability policy’ has been income maintenance for people without paid work, supplemented with cash benefits to compensate for extra costs (diets, technical aids, transport, etc.) and services to assist people with disabilities in their daily life. There has been an emphasis on promoting participation in employment through provision of ‘rehabilitation’, vocational training and job placement services, and in some cases also publicly subsidized and sheltered jobs. There has been a notable trend away from special provisions, such as by means of separate institutions, to the inclusion in general provisions and services to promote independent living for people with disabilities. Such ‘mainstreaming’ has involved that the same universal public provisions and services should cater for all people, regardless of whether they have disabilities or not. In this way one has sought to avoid that people with disabilities are stigmatized and socially excluded from the main arenas of society. In other words, the official objective has been that a disability perspective should not be seen as the sole responsibility of departments of social protection, labor and benefits in kind but be considered a horizontal issue and systematically incorporated in all policy areas where disabling barriers may occur. In practice the degree of mainstreaming has varied dependent on the type of impairment. For instance, Norway and Sweden have been more mainstreamed on intellectual disability than Denmark and Finland.

**Social regulation in the Nordic countries**

These largely tax-financed and redistributive measures have to some but variable extent been complemented with forms of *social regulation* (Majone 1993). The latter involves government efforts to influence the functioning of markets and the behavior of non-governmental actors (e.g. private employers) through legislation, financial incentives or
persuasion, with the aim to promote social objectives. In the Nordic countries, early regulatory measures have included legal provisions giving employers particular duties in relation to employees and job-seekers with impairments, such as strengthened job security through the general labor code. While Sweden has had one of the strongest frameworks of labor protection legislation, Denmark has been among the OECD countries with least labor protection and obligations for employers (OECD 1999, 2003). Iceland, Finland and Norway have been in intermediate situations. Of the Nordic countries, Sweden has practiced a stricter enforcement of employers’ obligations to accommodate the workplace and given higher priority to wage subsidies for employees with disabilities.

Although the main emphasis has been on inclusion through the regular welfare state services and legal provisions, the Nordic countries have since the 1990s increasingly found inspiration and policy learning from the USA, especially the Americans With Disability Act of 1990 and provisions on market regulation and accessibility requirements in the Rehabilitation Act (Section 508) (cf. Blanck, et al. 2004). Different from the established policy tradition with an emphasis on ‘mainstreaming’, new social regulation policy measures have sought to prevent and remedy discrimination on grounds of disability in separate legal provisions. Rather than compensating for disadvantages this approach promotes social regulations that intend to ensure equal opportunities to participation in the market. Again this trend has been more developed in Sweden. Sweden has adopted non-discrimination in working life (1999), higher education (2001), in the trading of goods and services (2003) and to protect children and school students (2006). The other Nordic countries have – influenced by the European Union policy development in this area – introduced legal provisions against discrimination in employment and occupation: Norway and Finland in 2004 and Denmark in 2005 (corresponding to the Employment Framework Directive 2000/78/EC). Per 2007 Iceland is reviewing whether they should introduce similar provisions. Finland is the only of the five countries that has adopted a legal provision against discrimination on grounds of disability in the constitution (2000) but non-discrimination provisions inserted in the penal code and the constitution tend to be mainly symbolic (Quinn & Degener 2002).
Nordic policy-makers have intended a mutually supportive and interdependent relationship between regulation and redistribution policy. But there are several indications that redistributive and compensatory measures are more strongly developed and elaborated than regulatory measures. Until recently, the authorities have focused more on individual accommodation when the needs arise and the provision of technical aids than on product standardization and social regulations to promote general accessibility. In other words, the provision of assistive technology to compensate for individual impairments is generally more developed than social regulation of the environment to prevent barriers to participation, whether it be in regard to access to physical spaces, information, or goods and services.

**Universal design and assistive technology**

As of 2007 the situation is that the Nordic countries emphasize voluntary commitment, information, education and persuasion to promote universal design, accessibility and usability of goods and service from public and private enterprises and employers. Proposals for systematic social and especially legal regulation of this area have been met with uncertainty, especially on the part of the business community. It is suggested that legal regulation will be experienced as an infringement of freedom of the market and the prerogatives of producers, despite emerging findings to the contrary from studies in the US and elsewhere (see, e.g., Blanck et al., 2004).

**Accessibility provisions in the Nordic countries**

It is the case that the accessibility provisions require further clarification, particularly given emerging new technologies such as hand-held and wireless devices. In many legal acts accessibility requirements are not explicit and one has to infer these requirements from the overall purpose of the act, or through subsequent regulatory guidance or legal proceedings. Alternatively the actual requirements depend on gatekeepers’ use of discretion. Given that accessibility for people with disabilities is considered to have a justifiable economic and social basis, the government could take accessibility requirements into consideration in concessions granted, for instance, to enterprises in public transport, telecommunication and broadcasting. In other cases, there are
opportunities for the local authorities to grant exemption from accessibility requirements to buildings and open space. In consequence, stated norms of accessibility and usability have either been non-binding or not enforced. The Danish government in particular has preferred consultations and voluntary agreements to binding standards.

A major deficit in the Swedish legislation referred to above has been the lack of statutory provisions that would clarify inaccessibility to goods and services as discrimination. Denial of access to a restaurant on grounds of disability would be discrimination under Swedish law but not lack of accessibility or individual accommodation when the needs arise, such as access to the building or internet site of the restaurant, or menus in brail or read by the waiter for those with a reading difficulty. To date, Norway is the only Nordic country that has adopted public procurement regulations that require the state, municipal and county authorities and government-liable bodies to allow for ‘universal design’ during the planning of public procurements (in force from January 2007 and corresponding to Directive 2004/18/EC). Both Norway and Sweden consider adopting new and more legislation in this area whilst this issue has a less prominent role on the public agenda in the other Nordic countries.

Arguably, the Nordic countries have an unexploited potential regarding a statutory approach to accessibility in the Nordic countries. There exist no systematic and cross-national comparisons but reports from governments, ombudsmen agencies and disabled people’s organizations suggest that the Nordic countries lag behind other Western European countries in this aspect of disability policy, despite governments’ espoused commitment to the principle of universal design for a number of years (e.g., Wästberg 1999, NOU 2001). But even if one authorizes a legal claim to accessibility based on universal design there will be people with disabilities who will not be able to benefit from such provisions. In practice, the principle of universal design will have to be operationalized. Currently, not all goods or services are designed for all and not all people with disabilities may achieve access to the goods and services even if one manages to formulate more inclusive standards for goods and services.

For these reasons one may consider authorizing a legal claim to accessibility of goods and services rather than only focusing on univer-
sal design. For instance, the 1990 Americans with Disability Act (Title III, Sec. 302, 2) and the British Disability Discrimination Act of 1995 (Part III, 21-2) authorize a proactive duty for providers of goods and services to establish a reasonable alternative method for making the goods and services in question available to people with disabilities if the customer cannot use them in the ordinary way. The alternative methods should be anticipated and arguably in place independent of whether any particular individual has reported his or her need for accommodation. People with a hearing, visual, neurological or cognitive impairment are likely to need personal assistance in certain cases, even if the goods and services conform to universal design standards.

The limitations of universal design

To some extent new social regulations to promote accessibility through universal design may reduce the needs for specialized assistive technology. If universal design standards are taken into account in an early stage of the design and production process it is less likely providers may incur extra costs of goods and services. Potentially this may save public expenses to assistive technology. If more goods and services are made accessible for all independent of disabilities to begin with, there will be less of a need for specialized and impairment specific products produced in a small number and at high costs per unit. Although one may achieve large improvements in the overall accessibility to goods and services from a systematic approach to universal design there will nevertheless be a need for alternative and supplementary approaches to ensure accessibility and usability of goods and services. For such reasons one should not exaggerate the prospects of reduced public expenditures through improved social regulations to promote universal design. Future research will need to carefully examine the economic benefits of universal design.

Concluding remarks

Arguably, the UN Convention on the Rights of Persons with Disabilities adopted by the plenary of the General Assembly in December 2006 will encourage the Nordic countries to continue to pursue accessibility requirements systematically in the future. During the last decade, there has been policy learning from the USA and a reorientation to adopt
new and complementary policy measures. The EU and Western Euro-
pean countries have adopted new social regulation provisions focusing
on the prevention of barriers to participation in a meritocratic society.
This agenda is concerned with, among other goals, improving the market
participation of people with disabilities. The measures are meant to
remove market barriers to participation, prioritizing the removal of
barriers encountered by people with disabilities, either as workers or
consumers. The social regulation component is concerned not with
compensating for actual or perceived disadvantage associated with li-
ving with disabilities but with removing the barriers that limit or preclude
equal participation on the basis of an individual’s merits.

When arguing for an unexploited potential in the area of social
regulation, some may conclude that one could improve the social
regulation in efforts to reduce the public expenditures on relatively
generous redistributive provisions in the Nordic welfare states. Studies
have demonstrated the assets of the Nordic welfare states, expressed
among others in more equal standards of living studies and employment
rates above the average for people with disabilities. Although the balance
between social regulation and redistribution may be discussed, the so-
lution is hardly to replace the one with the other.

Yet, the Nordic countries have much to learn from other Western
countries in terms of developing and improving the regulatory measures
to achieve improved accessibility and equal opportunities for people
with disabilities to participate in society. To many people who have
been involved in disability policy this may be a counter-intuitive argu-
ment. The Nordic countries have been considered by other countries
and have also considered themselves to be pioneering nations in their
policies to promote social inclusion and the distribution of resources.
The Nordic welfare states have provided their citizens with resources
to improve their capacities to participate in society and maintain a higher
standard of living. At the same time, many barriers to participation in
the market remain to be solved.
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Policy and principles for the provision system

Danish disability policy is based on a small number of core principles which, among other things, affect the provision of assistive technology to individuals with disabilities. The policy is concerned with the principles of compensation, sector responsibility, solidarity and non-discrimination.

Before providing a closer definition of the respective principles, a brief account will be given of what is meant by the terms disability and handicap, since the principles under discussion are based on how these terms are understood.

No universally accepted definition of handicap exists in Denmark. However, in everyday language, a handicap will mean the person concerned has an established physical, mental or intellectual functional impairment requiring some form of compensation to enable him/her to be able to function on an equal footing to other citizens.

The word handicap signifies the loss of, or at least a limit to, opportunities to participate in the life of the community in the same way as other people. It describes the relationship between a person with a disability and his/her surroundings. The purpose of this term is to emphasize shortcomings in the environment around the disabled person, as well as shortcomings in activities carried out in society, such as information, communication and education, which hinder disabled people taking part on an equal footing to others.

The definition is important as it defines precisely the relationship between the two key terms: handicap and disability. A disability is objectively ascertainable in an individual, e.g. visual impairment, hearing problems or mental or cognitive impairments. Handicap, on the other hand, refers to how the individual’s development is constrained as a result of the disability, since the surrounding society is not organized in a way which meets the needs of disabled people.
The compensation principle means that a disabled person receives, to the broadest extent possible, compensation for the consequences of their disability. This compensation may be provided by making the opportunities and activities offered by society accessible to disabled persons. It may also be achieved by providing special services, such as assistive technology, home conversions or personal assistance specially meeting the particular needs of the individual. The provisions in the Social Services Act have their starting point either in the provision of natural services or compensating for significant additional expense incurred as a consequence of the disability. In the matter of allocation, it is emphasized that disabled people themselves must pay the part of the costs equivalent to the fees they would have had to pay in any case if they had not been disabled. On the other hand, people with disabilities should not have to cover additional expenses arising from their disabilities.

The solidarity principle means that everyone is responsible for ensuring handicapped individuals receive the necessary services as and when these are required. The principle is reflected in the services largely being funded by the public sector through taxation. This principle forms a key element of the disability policy.

The sector responsibility principle means that the public sector offering activities, services or products is also responsible for ensuring that the activity, service or product in question is accessible to people with disabilities. Thus, efforts in the disability sphere are not only the task of the social sector, but also concern other areas, such as the housing, transport, labour market, education and health sectors. In the field of assistive technology, this means that responsibility for grants for assistive technology falls on the authorities where the need arises.

The non-discrimination principle is a result of the UN’s standard regulations on equality and the equal treatment of disabled persons alongside other citizens. This principle was ratified by a parliamentary resolution in 1993. The principle of the equality and equal treatment of disabled persons has since that time been a central component of the disability policy.
Regulations on grants for assistive technology

Assistive technology in the home

Under the terms of the Danish Social Services Act, the municipality is to provide grants for assistive technology and consumer goods for persons with long-term mental or physical disability, if the assistive technology or consumer good:
1. could relieve the long-term effects of the disability to a great extent
2. could facilitate day-to-day home life to a great extent, or
3. is necessary to allow the person in question to do a job.

The allocation of assistive technology and consumer goods is to contribute to the applicant having the chance to lead as normal and independent an existence as possible. The allocation shall also, to the greatest possible extent, render the applicant independent of the assistance of others in his/her daily life. The allocation of assistive technology/consumer goods shall at the same time ensure that persons with long-term disabilities, should they require it, have the opportunity to develop or maintain a link with the labour market.

Based on the Social Services Act, in order to receive grants for assistive technology and consumer goods, the disability must be long-term. This means that within a foreseeable future there is no prospect of an improvement in the state of health of the person, and that for a long time in the future it will be necessary to alleviate the consequences of the disability. In most cases, the affliction will have to be borne by the applicant for the rest of his/her life.

Under the terms of the Act, assistive technology and consumer goods shall be provided without regard to age, income or property-owning status. Examples of assistive technology provided under the terms of the Act are wheelchairs, hearing aids and orthopaedic footwear. A prerequisite for receiving grants under the Social Services Act is that the technology/consumer good cannot be granted on the basis of other legislation, e.g. health legislation. Assistive technology is lent out free of charge for as long as required.

In Denmark, there is no complete list of the assistive technology or consumer goods that can be provided. The Act divides products up into various categories to which special provisions apply. These categories are: Common furnishings, consumer goods, standard assistive
technology and special personal assistive technology.

*Common furnishings* covers products normally found in the home, such as normal chairs, tables, beds, telephones, TVs, videos, tape-recorders etc. No money can be provided for consumer goods normally considered a part of this category.

*Consumer goods* covers products manufactured and marketed widely with a view to common use by the general population. Such products are thus not made with the special intention of alleviating a disability; however, they may in some cases constitute a compensation of the kind needed by disabled persons. The grant as a rule constitutes 50% of the price of a general standard product of the type in question. The user has right of ownership to the product. In the case of consumer goods of special quality or design, funding is also provided for the payment of additional expenses in connection with this special quality or design. Consumer goods which solely serve as an assistive aid can be provided for the full amount - i.e. the disabled person pays nothing.

*Special personal assistive technology* covers wheelchairs requiring adaptation to the individual user and which must necessarily be used for majority of the day, as well as orthopaedic footwear, arm and leg prostheses, braces and bandages etc., wigs, breast prostheses, ostomy devices and visual aids worn on the body for people with long-term impaired vision or medically defined long-term ophthalmic diseases. In the case of these aids, the applicant, if he/she wishes to use another supplier than the one nominated by the municipality, may him/herself choose to purchase the aid and have the costs refunded.

*Standard assistive technology* covers devices which are not covered under special personal assistive technology. In providing standard assistive technology, the municipality may decide that an aid is to be provided by particular suppliers.

Grants for personal assistive devices and consumer goods are awarded to people living in institutions according to the same regulations that apply to people living in their own homes. Assistive devices and basic equipment for collective use by people living in special accommodation, residential institutions or similar must be provided by the institution in question.
**Adaptation of homes**

Under the terms of the Social Services Act, assistance may also be provided in the conversion of homes for people with long-term physical or mental disabilities when the conversion is required for making the accommodation more suitable as a residence for the person in question.

In special cases, in which assistance in conversion is not sufficient to have the required effect, assistance will be provided in meeting the costs of the procurement of an appropriate, alternative residence.

The aim of providing assistance in the conversion or change of residence is to help a person with long-term mental or physical disability and his/her family live a normal life comparable to people of the same age in similar life situations. At the same time, the assistance is to help make the applicant more self-sufficient and so less reliant on the help of others in everyday life, just as the aim is also to ease the burden on others in respect of the care required by the applicant.

A further aim of such assistance in conversion or change of residence is to help a child which has a physical or mental disability to have the opportunity to remain at the parental home, instead of being moved elsewhere.

The goal of such conversion or change of residence is to make the residence better suited as a dwelling for the disabled person.

When assessing whether a solution is to be granted under the terms on assistive technology and consumer goods of the Social Services Act, or under the terms of the same act on necessary home conversions, emphasis is placed on whether the installation can be seen as a fixture. If it is a matter of a fixture, the solution shall be treated in accordance with the regulations on home conversions.

**Assistive technology for treatment and training**

Under the terms of the Health Act, the regional council is responsible for managing the functions of the hospital service. These functions mainly consist in providing hospital treatment. An integral part of such treatment is supplying patients with the devices etc. required by the nature of the treatment being provided, where a need for such devices exists. These devices etc. may be categorized as treatment devices.

Such devices, the costs of which are defrayed by the hospital service, are understood to include equipment and aids which are supplied to the
patient as an element or continuation of his/her treatment begun at the hospital. The aim is either to effect further improvement in the results obtained from the treatment or at least prevent a decline in the progress made during the treatment. The following groups of assistive devices/equipment fall in the category of treatment devices:

1. Assistive technology and equipment prescribed as an element of hospital treatment and which are as a rule used under the direction of the hospital before the condition is stable.
2. Assistive technology and equipment implanted through surgery during admission.
3. Equipment prescribed by the hospital and procured for more or less permanent use in the home, but for which the patient has received instruction in its use at the hospital or which is under a certain degree of control by the hospital.

Assistive technology and equipment, which in the view of the hospital is needed by the patient while the patient is awaiting hospital treatment, are also covered by the regulations. Examples are crutches and wheelchairs.

Under the terms of the Health Act, the municipality provides home nursing care to municipal residents based on a physician’s referral. An element of this care is also providing the aids required for the start of the care.

Providing patient instruction during inpatient care is an integral part of the hospital service, and the treatment devices or assistive aids which may be required in this connection are to be supplied and funded by the hospital (district authority).

In cases where, following discharge from the hospital, a patient has a medically justified need for rehabilitation, the municipality shall defray the costs for this, including costs for the assistive devices prescribed to the patient as a part of the rehabilitation process. It is also the responsibility of the municipality to provide the assistive technology.

In those cases where, following discharge from hospital, a person has medically justified grounds for specialized, out-patient rehabilitation requiring hospital expertise and which is offered at a hospital, the hospital shall provide the necessary treatment devices or aids for this rehabilitation. The costs of treatment devices or aids in connection with specialized, out-patient rehabilitation following discharge shall be borne by the municipality.
Assistive technology for use in education

Primary school

Special education and other special educational assistance may, under the terms of the regulations on special education and special educational assistance provided by the municipal primary and lower secondary school, be given to pupils at the municipal primary and lower secondary school (kindergarten plus grades 1-10), if their development requires special consideration or support which cannot be provided within the framework of normal teaching.

Special education and other special educational assistance covers measures necessary for the pupil’s participation in the education, or which serve to promote the aims of the education. Assistive technology is a component of the special educational assistance. Assistive technology required in connection with prep work at home is also covered.

For children in the municipal primary and lower secondary schools, the necessary educational materials are to be provided free of charge. For example, these may be teleloop systems for the hard of hearing, Braille machines for the blind or partially sighted or aids for the teaching of dyslexics.

For those children who are under school age, special educational assistance is provided if their developmental needs require such special consideration. The special educational assistance is provided under the terms of the regulations on special educational assistance provided by the municipal primary and lower secondary school to children of preschool age.

Upper secondary school, adult upper secondary level course, Higher Preparatory Course, vocational education and training, upper secondary vocational courses, training for social and health assistants etc.

Students with handicaps requiring special education or some other special educational assistance shall be offered this, cf. the Education Acts. The institutions can apply for grants to cover expenses at the Danish State Education Grant and Loan Scheme Authority. Grants can normally be provided in the form of assistive technology and instructions for its use, support lessons with the aim of compensating for disability, sign language interpretation etc.
Labour market training schemes

In this area, funds have been set aside for a trial scheme concerning the improvement of conditions for the disabled in AMU courses at institutions providing vocational courses for young people. These funds are administrated by the Danish State Education Grant and Loan Scheme Authority. The allocation can be used to continue to improve the opportunities for the disabled to participate in training through the development and procurement of compensating educational materials and equipment, as well to improve the admission conditions etc. to the institutions.

Further and higher education

According to the regulations on special educational assistance for further and higher education, such assistance may be provided to students with disabilities enrolled on a higher or further education course. The assistance is provided by the educational institution following specific application by the student. The scheme is administrated by the Danish State Education Grant and Loan Scheme Authority. The assistance, which is applied for via the educational institution, may for example consist of assistive technology in the form of synthetic speech, scanners, dictaphones etc. The assistive technology is provided for very specific educational objectives, so students with disabilities can as far as possible take part in study activities (teaching, group work, one-to-one tuition etc.) with and in the same way as other students. The assistance is provided to compensate for the consequences of both physical and mental disability.

Assistive technology for use at work

Under the terms of the Act on active employment policy, assistive technology is provided to persons on the labour market or those due to enter it. This is to compensate for limitations in working capacity and must be necessary for an individual to be able to perform a specific work process. According to the Act, persons with limited working capacity can be offered support for assistive aids in the form of educational materials, tools and workplace adaptation. The Act covers persons in subsidized jobs, those in training, skills enhancement, vocational experience or employment with subsidized wage, as well as persons
who are employed or are to be employed without subsidized wage.

Grants for assistive technology for use at work are administrated by the job centres. Either the state or the municipality at the job centre grants funds for the technology, depending on the person’s maintenance basis, among other things. Appeals against municipal or state decisions at a job centre can be brought before the employment appeals board.

There is a special job centre in Vejle which performs a nationwide special function with the aim of retaining and integrating more disabled people in the workplace.

Other regulations on assistive technology

Aside from the above, other regulations exist governing the allocation of assistive technology within other areas, such as the regulations of the Social Services Act on assistance in meeting necessary additional costs in providing for children and adults respectively. Grants for assistive technology only used for leisure/play, such as for a child which has no other play possibilities, are provided according to the Act’s regulations on additional expenses. Besides the above, there is a possibility for grants for assistive technology in such areas as working environment, spare-time education, etc., or for specific target groups, such as text telephones for deaf people, the hard of hearing and people with speech impairments, TV and video programmes in sign language for the deaf, publications on audio tape and in Braille for the blind and partially sighted etc.

Administrative regulations

Aside from the legislation stipulating which groups of people are entitled to assistive devices, and under what conditions, there is also legislation concerned with regulations for administration of cases. The Act on legal protection and administration of social affairs is concerned with – among other things – ensuring citizens’ legal rights when the social authorities deal with cases, and the basic principles for the administration of social cases.

The Act stipulates, for example, that the municipality shall process applications and queries on assistance as quickly as possible and shall establish a deadline by which time a decision must have been reached. Furthermore, the applicant shall have the opportunity to assist in the handling of his/her case.
According to the Act, the municipality is to process applications and queries on the basis of all the possibilities available with which to provide help under the social legislation, including advice and guidance. Furthermore, the municipality is to be aware that help may be sought from another authority and according to other legislation.

The Act also stipulates as a legal requirement the documentation of the cases, which also touches on the citizen’s right of access to documents, as described under the same act.

**Complaints procedure**

If a citizen is unhappy with a decision relating to the allocation of assistive devices or home conversion in accordance with the Social Services Act, a complaint may be lodged with the Social Services Council which every county council has. One or more social services councils are established in each of the country’s five regions. Here, the case can be heard by another authority. Its decision has the force of law. Thus, it must be adhered to by the county council, municipality and citizen in question.

There is also another complaints procedure which is instigated via the Social Appeals Board, which is the central national appeals board for social issues. If any of the parties involved is not satisfied with the regional decision, the case can be brought before the Social Appeals Board. Once this has been done, the Social Appeals Board decides unilaterally whether it wishes to take up the case for general or theoretical assessment and make a decision. The Social Appeals Board publishes summaries of these decisions in the form of “Social Messages”, creating a subsequent foundation for future case law in the field throughout the entire country.

Citizens also have the option of making complaints about decisions made in accordance with legislation other than the Social Services Act. In some cases, complaints can be made to the municipal council in question, while in other cases a special complaints board is set up.

**The provision process**

The sector responsibility principle indicates that responsibility for the allocation of assistive devices rests with various sectors and institu-
tions. This means that a number of different sectors have developed parallel provision systems, for example, in the field of social issues, schools, vocational training and education.

The provision system within the area of responsibility indicated by the Social Services Act

In accordance with the Social Services Act, the municipality shall ensure the availability of free advice for persons with physical or mental disabilities. This also applies to advice on choosing assistive devices and consumer goods, as well as directions for their use. This function may possibly be performed in cooperation with other municipalities.

The decision on whether an assistive device or consumer good is required is made based on an overall assessment of the applicant's situation. It is important that the processing of the case prior to the decision is undertaken in close cooperation between the citizen and the case-handler. Through consulting the case-handler can in this way assist in clarifying what assistive device or consumer good is required and of what quality.

A desire on the part of the applicant to manage independently should be considered in connection with the processing of an application for an assistive device or consumer good. Furthermore, the considerations should also take into account whether it is appropriate to provide personal support – e.g. personal and practical assistance – rather than, or as a complement to, providing an assistive device.

There is often a need to produce a broad account of how and to what extent disability exists, how the applicant manages his/her daily life and how he/she wishes to organize his/her existence. Consideration should be taken of the potential to live as normal and independent life as possible.

Many aspects may be included in this account:
• Social conditions, such as family situation and participation in leisure activities
• Housing conditions, e.g. interior design and the environment around the applicant’s accommodation
• Work related situation, such as the type of work, or whether the applicant is taking part in school or daytime public care/club activities.
• State of health, such as the disability borne by the applicant, special
consideration when examining the pathological picture, other disability or other medical condition, and whether the assistive device/consumer good is to be combined with treatment. Special note should be made of whether the condition can be considered as progressive.

- Other conditions, such as whether the assistive device/consumer good is to be combined with other support, including for example personal and practical assistance.

Each municipality purchases assistive devices and runs its own assistive technology warehouses offering recycled assistive devices. However, there is a tendency for more and more municipalities to lease their assistive devices from private suppliers which have set up warehousing functions, or for a number of municipalities to join forces and enter into collective procurement agreements and warehousing functions.

Following the structural reform which came into force on 1 January 2007, there are 98 municipalities in Denmark. Large municipalities are divided into a number of area offices, each of which has its own case-handlers in the field of assistive technology. This form of organization of the provision of assistive technology demands high levels of knowledge, expertise and ongoing in-service training.

In areas where it does not possess the required expertise, it is incumbent on the municipality to obtain this either from national and regional functions or via other relevant specialized consulting, such as assistive technology centres and the national knowledge and special advisory organization VISO, or to refer to these (see the section on central support functions).

In connection with consulting and guidance, it is the task of the municipality to inform the applicant seeking a specific device/consumer good to whom the person in question can turn to get help. It is also the duty of the municipality to monitor the cases on an ongoing basis to ensure that the assistance continues to fulfil its goals.

**Funding**

The municipalities defray the costs of assistive technology and consumer goods. Consulting fees are also defrayed by the municipalities. To the extent that the regions perform functions in the assistive technology area, these shall be funded by the municipalities.

Consumer organizations have long been pressing for users of assistive
technology to be able to select devices and suppliers of such devices. This has meant that as far as assistive devices worn on the body (breast prostheses, ostomy products, orthopaedic shoes, etc.) are concerned, users can opt to receive a grant in cash and then select their own supplier. However, note that this grant includes a requirements specification for the assistive device. This ensures that the user receives guidance and the authority granting the funding is certain of the function and quality of the assistive device in question.

When agreements are drawn up between a municipality/county council and suppliers (supplier agreements), user representatives must be involved: this is a legal requirement.

As far as the operation of individual assistive devices is concerned, there is a general tendency for users themselves to have to pay more and more, such as paying for their own batteries for electric wheelchairs. In the same way there is a growing number of consumer goods now considered regular furnishings, for which it was previously possible to get grants, but for which grants are no longer offered.

The authority approving the provision of assistive devices buys and owns them. For this reason each municipality has its own warehouse for assistive technology unless a leasing agreement has been entered into with a private firm. There is therefore no central, national purchasing function or central ownership of the assistive devices.

Rejecting an application for an assistive device on the basis that the budget has been exceeded is not permitted.

Net operating expenses re. adults with physical or mental disability in millions of DKK. PL-2003 (assistive devices etc.):

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Source: The municipal accounts and budgets. 2003 are budget figures.
Net operating expenses for devices, consumer goods, home conversion, transportation and care of the dying in millions of DKK, (PL-2003)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
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<td>419</td>
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<tr>
<td>Orthopaedic aids</td>
<td>312</td>
<td>318</td>
<td>322</td>
<td>302</td>
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<tr>
<td>Incontinence and ostomy materials</td>
<td>363</td>
<td>389</td>
<td>416</td>
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<tr>
<td>Other assistive technology</td>
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<td>1099</td>
<td>1143</td>
<td>962</td>
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<tr>
<td>Consumer goods</td>
<td>35</td>
<td>29</td>
<td>23</td>
<td>27</td>
<td>27</td>
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<tr>
<td>Assistance for home conversion</td>
<td>174</td>
<td>181</td>
<td>209</td>
<td>149</td>
<td>159</td>
</tr>
<tr>
<td>Support for individual transportation</td>
<td>46</td>
<td>52</td>
<td>57</td>
<td>52</td>
<td>38</td>
</tr>
<tr>
<td>Optical aids</td>
<td>41</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>42</td>
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<tr>
<td>Prosthetic arms and legs</td>
<td>54</td>
<td>70</td>
<td>77</td>
<td>78</td>
<td>83</td>
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<tr>
<td>Hearing aids</td>
<td>177</td>
<td>205</td>
<td>230</td>
<td>250</td>
<td>238</td>
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<tr>
<td>County co-funding</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>Care of the dying at home</td>
<td>112</td>
<td>102</td>
<td>107</td>
<td>92</td>
<td>86</td>
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<tr>
<td>IT aids and IT goods</td>
<td>11</td>
<td>18</td>
<td>17</td>
<td>13</td>
<td>17</td>
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<tr>
<td>Other categories</td>
<td>-270</td>
<td>-279</td>
<td>-285</td>
<td>-69</td>
<td>69</td>
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<tr>
<td><strong>Total</strong></td>
<td>2498</td>
<td>2632</td>
<td>2778</td>
<td>2805</td>
<td>2631</td>
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<tr>
<td><strong>Growth (%)</strong></td>
<td>-2.3</td>
<td>5.4</td>
<td>5.6</td>
<td>1.0</td>
<td>-6.2</td>
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</table>

Source: The municipal accounts and budgets. 2003 are budget figures.

Assistive devices outside of the auspices of the Social Services Act are also financed by the public sector, however via other budgets. The costs are either borne by the municipality or the state.

**Central support functions**

Ligestillingsprincippet blev stadfæstet ved en folketingsbeslutning i 1993. Princippet om ligestilling og ligebehandling af handicappede har siden da været centralt placeret i handicappolitikken. In cooperation with the regional municipalities, the region is to assist in providing appropriate and safe devices. This means that the regions can continue the running of the former county assistive technology centres. The municipalities may also opt to run the assistive technology centres themselves. One of the functions of the assistive technology centres is to advise the municipalities on technical aids and provide guidance, demonstrations and adaptation of assistive technology.

The municipalities or the regions also run low vision centres and hearing institutes which advise on optical aids and hearing aids respectively.

Furthermore, the Danish Centre for Assistive Technology (see www.hmi.dk), which is a part of the national knowledge and special advisory organization VISO, forms a part of the municipalities’ obligatory advisory role. The Centre coordinates and takes part in testing, research and information activity in order to secure appropriate
and safe devices. It assesses the sphere of use and functionality of the assistive technology and maintains an overview of the range of such devices on the market. The Centre publishes 2 periodicals with up-to-date information on assistive technology and holds a large number of courses, conferences etc. on devices and the expert methods connected with their provision. It also maintains a database of assistive technology from which it is possible to obtain information on the devices.

VISO (www.spesoc.dk), as already mentioned, is a new knowledge and special advisory organization which has the function of providing free expert guidance and clarification in the most specialized and complex individual cases within such areas as:

- Disabled children, young people and adults
- Special education and special educational assistance for children, young people and adults

In order to perform this special advisory and informative role, VISO has entered into agreements with experts nationwide.

Besides the Danish Centre for Assistive Technology, 13 other knowledge centres are included in the disability sphere in VISO. Each of these centres possesses special expertise concerning specific groups of disabled people.

The Social Appeals Board is the central national appeals board for social issues. It has assumed growing significance in the assistive technology area since a change in the law in June 1998, where it was tasked with coordinating practice. It is to ensure that all citizens are treated alike, no matter where they live in Denmark and despite the extensive municipal and county council autonomy. The Social Appeals Board practises this by publishing its decisions on an ongoing basis and taking the initiative to implement investigations in which it examines casework in specific areas and writes concluding articles.

For more information go to:
www.hmi.dk
www.spesoc.dk
Policy and principles for the provision system

Finnish society is a good provider of the general prerequisites required for producing services for assistive technology. Finland’s disability policy is based on the Nordic welfare model. Legislation obliges municipalities to arrange welfare services and healthcare for their citizens. The aim is to guarantee the services required by citizens in municipalities, regardless of their financial and social status. For the most part, this is based on a model involving services funded by tax revenue and supplemented by private services and civil organization activities.

The State helps to finance the municipalities’ extensive statutory functions, but the municipalities themselves decide on how to organise services for their citizens. The municipalities may either provide the service themselves or in cooperation with neighbouring municipalities. One municipality may also buy in services from another or from a private provider. Legislation does not regulate the content of service in detail. This means differences can arise in the matter of service between the municipalities.

In February 2007 a law came into force on a municipal and service structure reform which is valid until the end of 2012. The renewal of the municipal and service structure has the aim of securing citizens’ access to the welfare services for which the municipalities are responsible in the future as well. The municipalities have new possibilities for organizing and providing services. They can cooperate either by uniting or forming areas for cooperation. At least 20,000 citizens must be in a municipality or cooperation area responsible for primary care. This framework forms the basis of a municipal structure which strengthens the regional characteristics. The municipalities have good possibilities for developing the ways in which they provide and organize the service. (Municipal and Services Structure Reform Act, 155/2006)
Assistive technology is provided or loaned to the disabled. The assistive technology services also include training and instruction in the use of the devices and in replacing and maintaining them. These services are free of charge. The majority of assistive technology is obtained from the health centre or by referral from the healthcare district’s assistive technology unit. Assistive devices which are required for social life and recreation can be obtained from social services as a service for the disabled. (Ministry of Social Affairs and Health, 2006)

The State guides the municipalities and other service providers by setting quantitative and qualitative targets for the services and giving recommendations, as well as by providing information and business models as a support for the activity. (SHM 2006) Kvalitetsrekommendation för hjälpmedelstjänster [Quality Recommendation for Assistive Technology Services] (2003) is based on the programme of targets and activity for the social and health services for 2000-2003 as adopted by the Finnish government. The need for a recommendation also came to light in the investigation on access to assistive technology undertaken by STAKES (National Research and Development Centre for Welfare and Health) in 2000. According to their report, regional and organizational differences existed in the matter of access to assistive technology and in the practice of its provision. (Quality Recommendation for Assistive Technology Services. Handbooks of the Ministry of Social Affairs and Health 2003:8).

The aim of the nationwide quality recommendation on assistive technology services is to guide and develop the services so they function focussed on the needs of the client and according to a common foundation. Services which are rendered effectively and professionally ensure that a citizen receives an assistive device for his/her disposal in accordance with the established need, irrespective of the municipality resided in.

The recommendation can be used for strategic planning and as an aid in the developmental work, follow-up and assessment of the activity. The recommendation is primarily aimed at management and decision-makers within the social and health services, since they give instructions concerning the assistive technology services of the social and health services in the municipalities and healthcare districts, and are responsible for the guidelines of the activity and allocation of resources to it. A regional plan for assistive technology service has been drawn up in 19
of the 21 healthcare districts and a regional assistive technology centre has been established in 13 of them since 2003.

As the rehabilitation system is complex, a law has been passed on rehabilitation cooperation. This law obliges the social services and healthcare authorities, labour and education authorities and the Social Insurance Institution of Finland to work together on coordinating rehabilitation measures. These authorities are also to cooperate with other service systems.

**Regulations on grants for assistive technology**

**Assistive technology in the home**

Disabled people receive reimbursement – either complete or partial, depending on what they need as a result of their disability or illness – to cover costs arising from the acquisition of equipment, machines and devices which they need in order to carry out their day-to-day tasks.

Municipalities must reimburse severely disabled people for reasonable costs for adaptations to their homes and for acquiring assistive devices installed at home if purchasing these adaptations and devices is necessary – as a result of the disabilities or illnesses in question – for such disabled people to function in their day-to-day lives if they do not require ongoing institutional care.

Assistive devices which belong to the home and for which grants are available include stairlifts, alarms or other equivalent devices that are permanently installed in the home. Municipalities may also place devices which belong in the home at the disposal of severely disabled people without reimbursement (Act on service and support due to disability, 380/1987, Regulation on service and support due to disability 759/1987).

Responsible authorities: Municipal social services.

**Assistive technology for treatment and rehabilitation**

Municipalities or associations of local authorities must ensure that medical rehabilitation services are arranged with regard to content and scope so that they meet the need for rehabilitation within the municipality or the area covered by the association of local authorities in question. Medical rehabilitation services include assistive technology services, which involve assessing and determining the need for assistive devices
and testing them, allocating assistive devices along with rights of ownership or use, training in and following up the use of assistive devices, and maintenance of these devices. In Åland province the same principles are followed as on the Finnish mainland, with the difference that in the former, the health and medical services are responsible for assistive technology associated with medical rehabilitation, instead of the municipality or association of local authorities. (Public Health Act, 66/1972 and Act on specialized healthcare, 1062/1989, ÅFS 60/93).

Assistive devices for medical rehabilitation include equipment, devices or similar which are designed to counter disabilities verified on medical grounds and which disabled people need in order to perform their day-to-day tasks. Assistive devices also include care and exercise equipment required for rehabilitation purposes. Personal assistive devices for medical rehabilitation which are required for school and in other situations (Regulation on Medical Rehabilitation, 1015/1991) are provided for disabled pupils at primary and lower secondary school or upper secondary school (under the age of 17).

Assistive devices are loaned out as a means of medical rehabilitation. Assistive devices which cannot be reused remain the property of the recipient.

Assistive devices for medical rehabilitation are free of charge (Act on client fees in the field of social services and healthcare, 734/1992).

Responsible authorities: Municipal health and medical services, special healthcare service.

**Assistive devices in the field of education and training**

Disabled students and other students in need of special support are entitled to receive – free of charge – special assistive devices and services which they need to allow them to take part in their classes. Such aids are for example computers, lifts or special desks. (Act on basic education 628/1998).

Severely disabled students at upper secondary school or in grades 7-10 of comprehensive school are entitled to the assistive devices required for their studies (such as computers and low vision aids), on the condition that these are specified in a special vocational training plan approved in accordance with the individual rehabilitation plan the Social Insurance Institution of Finland (KELA) assumes has been drawn up (Act on rehabilitation arranged by the Social Insurance Institution of Finland,
Responsible authorities: Municipal education service, The Social Insurance Institution of Finland (KELA).

**Assistive devices for use at work**

The Social Insurance Institution of Finland (KELA) is a social insurance institution owned by society. It is obliged, for the purposes of vocational rehabilitation, to arrange expensive or demanding assistive devices required in order to enhance or maintain the abilities of severely disabled people to work and earn their living.

“Expensive and demanding assistive devices” refers to assistive devices requiring a special technical level. These are allocated on an individual basis after consideration of the applicant's disability. Vocational rehabilitation also includes establishing the need for assistive devices and testing their suitability, as well as training the client to use them, monitoring their use and arranging the requisite servicing.

To support the placement of disabled people in jobs and their chances of keeping those jobs, employers can be granted funding for special arrangements in the workplace (Employment Services Act, 1005/1993, Regulation on benefits in connection with employment services 1253/1993).

Responsible authorities: The Social Insurance Institution of Finland (KELA), labour authorities.

**Other regulations on assistive technology**

**Assistive devices for disabled war veterans**

The State Treasury is obliged, as part of its medical care, to arrange prostheses, equipment and assistive devices and to pay for servicing and replacement of them, as well as training in their use.

It must also provide disabled soldiers with compensation amounting to at least 20 percent for impaired ability to work, for costs relating to home adaptations and for acquiring devices for the home (Act on injuries sustained in military service, 404/1948).
Assistive devices after road traffic accidents, industrial accidents or occupational diseases

Insurance companies reimburse costs as agreed for assistive devices required due to such accidents sustained at work as are referred to in the Accident Insurance Act (608/48), or such occupational diseases as are referred to in the Occupational Diseases Act (1343/1988), or such injuries sustained in road traffic accidents as are referred to in the Road Traffic Insurance Act (279/1959).

Responsible authorities: The State Treasury, insurance companies.

Administrative regulations

The various acts are the only guidelines available, but they have proven to be open to varying interpretations. Rehabilitation staff have expressed a need for national guidelines. STAKES has worked together with various parties to compile a quality recommendation for an assistive technology service. The Ministry of Social Affairs and Health and the Association of Finnish Local Authorities published this quality recommendation in 2003 (Quality recommendation for assistive technology services, Handbooks of the Ministry of Social Affairs and Health 2003:8).

Lodging an appeal

There are clear regulations on how to appeal against decisions made on the assistive technology service for which the social services, KELA and insurance companies are responsible.

The procedure is not the same for health and medical services. Here, the assistive technology service constitutes a part of the care ordered by the doctor. It is not possible to appeal against decisions on care made by a doctor. If a person is dissatisfied with the assistive device solutions (care) they receive, they should send a memo to the senior consultant. If they are then dissatisfied with the decision of the senior consultant, they can send a demand for rectification to the public health board.

The case can be brought before the administrative court as an administrative dispute case. Complaints relating to decisions made by an administrative court may be lodged with the supreme administrative court.
The provision process

Health and medical services

At the beginning of 2006, there were a total of 249 municipal health centres (excl. Åland), of which 25% belonged to associations of local authorities and 75% to municipalities. There are 185 health centres serving a user base of fewer than 20,000 citizens and 64 serving greater than that number. The municipal and service reform will see the number of health centres fall within 5 years.

The health centres are responsible for primary healthcare and what are known as basic assistive devices, such as manual wheelchairs and assistive devices to help with walking and hygiene. The biggest health centres have assistive technology units, and the smaller ones have assistive technology teams run by the physiotherapy department.

There are 21 central hospitals (incl. Åland) with assistive technology units which are responsible for expensive technical aids such as electric wheelchairs, stairlifts/hoists and environmental control systems. In addition, eye clinics, hearing clinics and lung clinics are all responsible for meeting the needs of their own patients with regard to assistive devices. The assistive technology units are also responsible for the training and planning of the assistive technology service for the district.

The allocation of various assistive devices to primary and special care varies from region to region. Doctors make decisions on the care and assistive devices required for medical rehabilitation.

Social services

Each municipality has its own social welfare office which is responsible for providing services to disabled people in the municipality. Severely disabled people are entitled to home adaptations, as well as equipment and devices in their homes if their disabilities are such that they cannot manage without such equipment. Social services pay for the cost of these upon application, and often consult the healthcare services before making decisions.

The same principles are followed on Åland as in Finland, but the provincial laws are followed instead of the national legislation.
School and employment service

Schools are responsible for providing special assistive devices for use by their disabled pupils in schools and classrooms. Rehabilitation staff who provide detailed recommendations regarding the devices required are often the people who apply for these measures.

Employers apply for support from their local employment offices. Applications may also come from rehabilitation staff working with clients who are returning to the labour market after illness or disability.

The same principles are followed on Åland as in mainland Finland, but the provincial laws are followed instead of the national legislation.

The Social Insurance Institution of Finland (KELA) and the State Treasury

The Social Insurance Institution of Finland (KELA) has a total of more than 400 customer service points all over Finland (incl. Åland). There are over 260 full-service offices and around 70 branch offices. KELA provides joint service at over 100 sites.

Rehabilitation can be applied for by applicants themselves, by the healthcare services, by the labour administration, by an educational establishment or by social services. Furthermore, the application may come via a doctor’s report submitted to KELA in connection with another application for benefit.

Applications must be accompanied by a doctor’s certificate stating the nature of the disability and the problems it causes.

The State Treasury’s unit for military injuries and matters relating to veterans deals with the granting and payment of damages in accordance with the Act on injuries sustained in military service to people who have been disabled or fallen ill fighting our wars, as well as to their spouses, widows and other relatives.

As a result of the same law, damages are also paid for injuries and illness among national servicemen, certain other people who have worked for the armed forces and people who have served in the UN’s peacekeeping forces. Compensation in accordance with the Act on injuries sustained in military service is payable for medical costs, and costs for home adaptations and rehabilitation, among other things.

Assistive devices are provided upon application, and such people as the injured themselves, rehabilitation staff or carers may apply for them.
**User influence**

The central position of users in assistive technology matters is recognized. The Ministry of Social Affairs and Health emphasizes the central position of clients in all its action plans. The state and municipal disability councils (which can be found in most municipalities) and the organizations for the disabled have an important part to play when it comes to promoting user influence in Finland.

**Funding**

Since 2000 the total cost of health and medical care has risen yearly and amounted in 2005 to 11.9 billion euros. In 2005, the overall costs for health and medical services accounted for 7.5 percent of the national product. This is somewhat lower than the average for OECD and EU countries. The cost of health and medical services per inhabitant is also below the average for OECD countries (STAKES, 2006).

In the matter of funding health and medical care, the greatest financier is the municipalities (40.3% of costs in 2005). State funding has been increased, while at the same time the proportion of charges paid by the municipalities has shrunk somewhat. In 2005 the state paid 20.7% of the total. The significance of the household as financier of the entire health and medical service has declined in relation to 2000. In 2005, 17.9% of costs were borne by households – one of the highest figures in the OECD countries. The significance of employers’ relief funds and private insurance for the financing of health and medical service costs has remained marginal (STAKES, 2006).

The State helps finance the municipalities’ extensive statutory functions. The State shares system levels the differences between different municipalities and secures equivalent services for everyone. The state share of the social and healthcare cost income for the municipalities will be 33.9% in 2007.

Municipal expenditure is financed by means of taxes, State shares, charges and sales revenue. Finnish municipalities have the right to levy taxes. The municipal tax, property tax and share of corporation tax make up almost half of the municipalities’ income. On average, citizens pay 18.3 percent of their income in municipal tax. A good 7% of expenditure on social services and healthcare is covered by charges.
The municipalities arrange primary healthcare and special care for their citizens. In this way, first aid, medical examinations and treatment, plus rehabilitation, are made available to everyone.

Primary care services are provided by the health centres. Each municipality belongs to an intermunicipal federation for healthcare districts that run hospitals in order to ensure that special medical care can be given.

Health insurance, which is administered by the Social Insurance Institution of Finland, supplements public health and medical services by reimbursing costs arising from the use of private health services and the cost of pharmaceuticals for outpatient use. The health insurance is funded through employers and the premiums paid by the policyholders. The State is responsible for ensuring that there is enough money in the health insurance fund.

The Finland Slot Machine Association (RAY) is an association governed by public law, with the purpose of acquiring funding for the promotion of activities in the public interest in Finland by providing games for the public. The profits of the Finland Slot Machine Association are divided in full among non-profit associations and for purposes in the public interest in Finland.

The largest organizations for the disabled arrange an assistive technology service with the support of the Finland Slot Machine Association. These organizations provide advice and guidance to their members. They arrange courses and seminars on assistive technology. The Finnish Federation of the Visually Impaired and The Finnish Association on Intellectual and Developmental Disabilities (Communication and Technology Centre Tikoteekki) have their own assistive technology centres, and they sell their services (for assessing the need for assistive technology, for example) and hire out or sell products to municipalities’ health and social services, insurance companies and KELA, among others.

The State Treasury, which is responsible for the rehabilitation of disabled war veterans, also receives money from the Finland Slot Machine Association to fund its work.
Central support functions

There is no comparative product information or national database of assistive technology. SAI-LAB r.f. (a supplier association within the laboratory and healthcare industry) maintains a database for purchasing departments of hospitals and health centres, as well as a telecom system between the organizations. This database includes information on products needed in hospitals or in the field of healthcare, along with information on suppliers. The SAI-LAB system is intended only for use by hospitals and health centres.

STAKES maintains a database, Apudata, of services and organizations in the field of assistive technology (www.stakes.fi/apuvalineet).

The Papunet unit of The Finnish Association on Intellectual and Developmental Disabilities maintains a database on assistive technology and related services for people with impaired communication functions (www.papunet.net).

No systematic national testing of assistive devices is carried out, apart from the testing carried out as agreed between the Nordic countries and EU regulation. The Medical Products Agency (Läkemedelsverket) is obliged to monitor companies that manufacture or sell assistive devices. Manufacturers and agents are obliged to report potential risks.

Some medical care districts purchase products jointly, but most assistive technology centres issue invitations to tender and price agreements themselves.
Policy and principles for the provision system

Iceland’s policy on disabled and elderly people is based on the principle of non-discrimination, the compensation principle and the sector responsibility principle. Its legislation ensures that citizens receive the service they need, financed by the public sector, mainly the State, through taxes.

According to Icelandic law, there are three ministries responsible for the provision of assistive technology in Iceland: the Ministry for Health and Social Security, the Ministry of Social Affairs and the Ministry of Education, Science and Culture. The Ministry for Health and Social Security has the biggest part to play, and institutions subordinate to this ministry have been delegated responsibility for the provision of assistive technology. These institutions are the Social Security Administration, which has the key responsibility in accordance with the Social Security Act, the Icelandic Low Vision and Rehabilitation Clinic in accordance with the Low Vision and Rehabilitation Clinic Act, the National Hearing and Speech Institute of Iceland in accordance with the National Hearing and Speech Institute Act, hospitals and institutions in accordance with the Health Services Act. Eight area offices under the auspices of the Ministry of Social Affairs are responsible for disabled people under 67 years of age in accordance with the Act on people with disabilities. The municipalities are responsible for primary and lower secondary schools in accordance with the Primary and Lower Secondary Schools Act.

The Social Security Administration is responsible for assistive technology in accordance with the Social Security Act and regulations relating to assistive technology. Assistive technology is to be used in order to:

- improve people’s abilities
- enhance the opportunities for self-help
to ease the care of disabled people

The Social Security Administration contribution to assistive technology may be in the form of participating in the purchase of aids (e.g. at a 50, 70 or 100 percent share), a specific sum of money or a combination of both (e.g. 90%, but never more than ISK 26,000). The Social Security Administration pays 100 percent for the purchase of assistive devices which can be reused.

Administrative regulations and appeals

Legislation is in place which deals with public case-handling, legislation on information and legislation on non-discrimination. There are guiding regulations relating to time frames for case-handling, case notes, documentation and citizens’ rights to information on the case-handling, among other things.

It is possible to lodge appeals relating to all cases handled by the Social Security Administration, including the allocation of assistive devices. The social insurance appeals board handles these cases.

Organization and division of responsibility

Many players from a variety of sectors collaborate on the provision of assistive technology. It is important to involve all sectors concerned. Different bodies are involved depending on the case in question; but in addition to users themselves, the rehabilitation sector, the health sector, schools or workplaces, institutions responsible for assistive technology and – potentially – other bodies may all be involved.

The Social Security Administration’s assistive technology centre has the greatest responsibility for assistive technology for people living at home. The assistive technology centre ensures that assistive devices are provided for day-to-day activities in the home, assistive devices for driving, assistive devices for communication, orthopaedic assistive devices (such as orthoses, prostheses and orthopaedic shoes), disposable items (such as nappies, ostomy appliances, urine catheters and urine bags) and medical and treatment-related assistive devices (such as assistive devices for respiratory treatment, circulation treatment and injection equipment). The assistive technology centre is responsible for
information, advice, case-handling, service (incl. maintenance), reuse, supply, purchase agreements, instruction etc. In addition, agreements are drawn up with clinics for lung and oxygen services, for example; that is to say, relating to special services.

Purchase agreements exist for the following assistive device areas: assistive devices for walking, manual wheelchairs, beds and accessories, stairlifts/hoists, work chairs and special chairs for children, bathroom and toilet assistive devices, orthoses, prosthetic arms and legs, orthopaedic shoes, nappies, urine catheters and urine bags, emergency cooling devices, oxygen equipment and servicing, and CPAP/BIPAP equipment and servicing.

Information on the provision of assistive technology according to the Social Security Act and regulations concerning rights to assistive technology can be found on the homepage of the Social Security Administration at www.tris.is under "hjálpartækjamiðstöð" (the assistive technology centre). The regulations are divided up into general regulations on entitlements and definitions, and into detailed regulations split up according to the classification system for assistive devices, in which more information is given on conditions and the contributions of the Social Security Administration.

The National Hearing and Speech Institute of Iceland is responsible for hearing rehabilitation and assistive devices for the hard of hearing and people with speech impairments. The National Hearing and Speech Institute is responsible for information, advice, case-handling, service, reuse and purchasing.

The Icelandic Low Vision and Rehabilitation Clinic is responsible for rehabilitation and assistive devices for the blind and visually impaired people. The Low Vision and Rehabilitation Clinic is responsible for information, advice, case-handling, service, reuse and purchasing.

Area offices (eight offices throughout the country) are responsible for assistive devices for people aged 16 and over who are studying and for people aged 18 and over who are working.

Hospitals and institutions (including care homes for the elderly) are responsible for assistive devices for their patients/residents.

Primary and lower secondary schools are responsible for assistive devices for their pupils.

There are other knowledge centres which provide advice in specific
fields with regard to assistive devices, including the Computer Centre for People with Disabilities, which is run by user associations and organizations for the disabled.

Funding

Assistive devices are financed mainly by the State, but municipalities provide assistive devices used in primary and lower secondary schools. Assistive devices are mostly provided free of charge to users, but users have to pay something towards certain assistive devices. So, for example, the user has to pay 10 percent towards the cost of orthopaedic shoes and 30 percent of the cost of orthoses when they will be used for less than twelve months.

The authority approving the provision of assistive devices buys and owns them. Reusable assistive devices have to be returned after use.

Central support functions

The Social Security Administration’s assistive technology centre, the National Hearing and Speech Institute of Iceland and the Icelandic Low Vision and Rehabilitation Clinic are national knowledge centres in the field of assistive technology and accessibility for people with disabilities or impaired hearing, sight or speech. The aim in providing assistive technology is to effect an increase in social participation by the disabled and elderly through the use of quality assistive devices. These centres stimulate development and offer information and training.

The Social Security Administration has set up a database for the provision of assistive technology, and this is constantly being updated. It meets the demands made for information, statistics, searches etc. and will meet demands for electronic links. The use of the ISO classification system for assistive devices in the provision system and database ensures that there are opportunities for comparing the provision of assistive technology across national borders, among other things.

The Social Security Administration’s assistive technology centre has been working together with the State Trading Centre (Ríkiskaup) since 1994 on the range of assistive devices available. Its aim is to enter into agreements with the suppliers of assistive devices so as to acquire good,
safe assistive devices at favourable prices. The assistive technology centre has set up a reference group tasked with recommending relevant assistive devices. This reference group is made up of staff from the assistive technology centre, the rehabilitation sector and users.

The Social Security Administration’s assistive technology centre holds information meetings with suppliers, user groups, rehabilitation centres/departments and health centres with a view to creating a platform for the dissemination and exchange of information. The centre also offers information days, courses, conferences and instruction concerning assistive technology and its use.

Nordic cooperation in various fields with regard to the provision of assistive technology is considered very important for the development of assistive technology in Iceland.
Policy and principles for the provision system

The government’s pivotal values dictate that the disabled are full citizens in Norwegian society and shall have the opportunity to perceive themselves as such. The aim of the government is to place the individual citizen in the centre when it comes to policy-shaping. This aim requires the realization of such values as:

• **Non-discrimination** (The adaptation of the public sphere so that everyone, based on their own abilities, has an equal opportunity to acquire the same living conditions and enjoy and discharge their rights and responsibilities as members of civil society).

• **Self-determination** (The freedom of the individual and equal opportunities to determine one’s own life direction and be respected for one’s choices).

• **Active participation** (Work towards a society in which everyone has the opportunity to participate actively based on their abilities).

• **Personal and social responsibility** (Responsibility for one’s own life and joint social responsibility are important).

“Disability occurs when a gap exists between the capabilities of the individual and the functional requirements of his or her surroundings” (Government White Paper 40 (2003-2003)).

A disabled person encounters obstacles created by society which lead to:

• Practical problems, because they are unable to meet the expectations set by their surroundings

• finding themselves being on the periphery of society with regard to important issues

Assistive devices, accessible environments, technical measures or personal assistance can all help lessen society’s demands in terms of function, thereby allowing people to live more independent lives. The more
accessible the surroundings are, the less people need special solutions.

The effects of disabilities can also be reduced both by making people more capable and doing something about society’s demands. People can be made more capable by giving them training, education, care and support. Society’s demands can be altered by adapting the surrounding environment and making it accessible.

Assistive devices and personal assistance can be employed to lessen the ”gap” between demands and abilities.

### Regulations on grants for assistive technology

**Assistive technology in the home**

A number of ministries are responsible for providing assistive devices for people with disabilities. The Ministry of Labour and Social Inclusion has overall responsibility for assistive technology and accessibility which is covered by the National Insurance Act. Part 10 of this act regulates financial support for assistive technology.

Assistive technology and accessibility work help compensate for the disabilities and include many groups of assistive technology for different life phases, such as aids for everyday life, employment and schooling. Grants are provided, for example, for communication aids, vision aids, aids to assist movement, aids for the adaptation of homes, hearing aids, cognitive aids, aids to assist in training and stimulation, IT aids and custom-built vehicles, plus such measures as providing a functional assistant at the workplace.

Other ministries also have a role to play in the provision of assistive technology, such as the Ministry of Transport and Communications and the Ministry of Education and Research. The former is responsible for transport and telecommunications services, while the latter is responsible for education, training and research. Both of them are responsible for preparation and information for the public areas with which they are concerned.

Assistive devices must be part of a holistic plan and contribute to:

• greater functionality
• enhancing self-sufficiency
• facilitating the care of disabled people

People suffering from a long-term disability (more than 2-3 years)
and significantly impaired abilities due to illness, injury or physical defects can receive grants for assistive devices from the *national health insurance scheme*. People who temporarily need assistive devices can loan these from their municipalities.

In addition, the assistive devices must be *necessary and appropriate* for enhancing disabled people’s abilities to solve practical problems in their day-to-day lives, or for ensuring their care at home. The national health insurance scheme usually provides support for the most reasonable of the types of assistive device that meet the needs of the user in question.

Grants are not provided for assistive technology for the home also normally used by ”non-disabled” persons, such as white goods and brown goods, and general kitchen equipment. However, support is provided for extra equipment used to adapt such equipment.

**Assistive devices for treatment and training**

Treatment devices such as oxygen equipment, respirators and inhalers for medicine intake were also the responsibility of the national insurance scheme in times past. This responsibility was essentially transferred to the health organizations (hospitals) from 1 January 2003.

*The national insurance scheme* can provide assistive technology for training and stimulation of children and young people up to the age of 26. Special and additional equipment is also provided for games and sport, but this equipment has to be specially designed for disabled people or necessary for them to carry out the activity in question. Examples of this equipment include switches for games, skis for the disabled and the like. No assistive devices are provided for competitive sports, and neither is ordinary games and sports equipment provided.

**Assistive devices for use in primary and lower secondary schools and upper secondary schools (assistive devices at school)**

By school assistive devices is meant any assistive aid or measure which can contribute to reducing practical problems for the disabled connected to school or an institution of learning. These aids may cover all kinds of equipment. Most school assistive devices which are allocated fall into the group of computer equipment for people with reading and writing difficulties. This group most often requires standard IT equipment for word processing with spell checking. More advanced computer
equipment is also allocated adapted to persons with multiple disabilities and the partially sighted. Aids are also provided to make education more accessible for pupils with visual or hearing impairments, and for those requiring adaptation of the toilet and care situation in the course of the school day.

In the case of grants for standard computer equipment, the regulations changed on 1 January 2003 from a loaning scheme to a grants scheme. This means that a fixed subsidy is granted to buy a standard computer from the assistive technology centre. Equipment provided subject to the grants scheme becomes the personal property of the individual concerned and the user is free to choose a supplier. Replacement equipment can be applied for after 4 years unless the requirements change.

Users who are entitled to more advanced computer equipment receive it on loan from the national insurance scheme. This also means that the scheme covers the necessary servicing and repairs for it.

**Assistive technology for employment and education**

*The national health insurance scheme* can provide grants for assistive devices, converting machinery and adapting the physical environment in the workplace. Grants are provided if such are appropriate and necessary to allow disabled persons to find work (usually as part of vocational rehabilitation) or to keep a suitable job. By “a suitable job” is meant a job which the user is capable of mastering, given his or her physical and intellectual capabilities.

In accordance with the Working Environment Act, §4-1 and 4-6, employers are responsible for ensuring that the workplace is adapted to vocationally disabled employees.

Nevertheless, grants can be provided by the national health insurance scheme to allow disabled employees to keep suitable jobs. If support is provided to place disabled people in a position to acquire suitable jobs, this is often part of vocational rehabilitation. In this instance, a rehabilitation action plan must exist which has been prepared by the rehabilitation applicant and the Norwegian Labour and Welfare Organisation (NAV). Support can be given for assistive devices that disabled people need for education at college or university level, even if the education is not part of vocational rehabilitation. Support can also be given for assistive devices for self-employment if this is necessary for
the disabled person in question to be able to continue to trade.

Support can be given for reading and secretarial help for the blind and partially sighted in cases where assistive aids alone cannot meet the need. Support for this kind of need is granted in relation to work, education, organizational work and for everyday life. As a starting point the user shall choose appropriate reading and secretarial help him/herself.

For employees with severe physical disability who require adaptation of the workplace, grants are given for the maintenance of a functional assistant. This person’s task is to support the employee in practical tasks in the workplace which cannot be carried out by the use of assistive technology. The scheme is not a right under the terms of the National Insurance Act, but an adjustable grant provided via the central government budget.

The accessibility grant is a device intended to contribute to the prevention of sick leave and counteract displacement from the labour market. It may be granted for the procurement of objects and equipment for the workplace as a supplement to the scheme for individual workplace aids.

Administrative schemes are in place which give workplaces with many hard of hearing employees permission to hire interpreters who are available to such employees at any time. The costs are covered by the national insurance scheme.

A certificate of guarantee is an offer to jobseekers with requirements on the adaptation of a workplace. It documents that a jobseeker has a right to have the workplace adapted with support from the national insurance scheme provided that the requirements in the Working Environment Act are met. The aim of the certificate is to support rapid assistance from the aid mechanism and inform employers of the available opportunities.

**Assistive technology in other areas**

*The national health insurance scheme* provides assistive devices and support for other measures for other purposes. However, there are a number of conditions attached to many of the areas, such as limits on the amount of aid that can be given or the number of hours over a year. Special regulations apply to the following areas:

- Hearing aids and interpreters for the hard of hearing
• Interpreters and escorts for deaf-blind people
• Guide dogs and assistance with reading and secretarial services for visually impaired people
• Adaptation courses for the partially sighted, hard of hearing and deaf-blind
• Basic pattern for sewing clothes
• Motor vehicles and other modes of transport
• Orthopaedic aids

Administrative regulations

Users requiring assistive technology who have/are to be provided with an individual plan can opt to use this instead of normal application for aids when the need can be taken from the plan. The use of individual plans has laid the foundation for significant simplification of the provision of assistive devices to users with such plans. Throughout the entire plan period, users are able to receive loans of assistive devices covered by the plan without having to apply for them in the usual way. All they have to do is tell a contact within the municipality that they need a new assistive device, and the national health insurance scheme will lend it to them.

Users who need long-term, complex services from the public sector are entitled to such plans. The responsibility for preparing such plans most often rests with the municipality, and even if the national health insurance scheme is unable to initiate or prepare individual plans, the national health insurance scheme could use such plans as a basis for the lending of assistive devices.

Appeals and complaints etc.

If users feel that their requests have not been granted in full, they can appeal against the decision to an appeals authority within six weeks. If the appeal to this authority is not successful, a further appeal on the decision of the appeals authority can be submitted to the National Insurance Court (of Appeal) within six weeks. The Court is an administrative body and not a regular court, and a decision made by this body can be brought before the regular courts within a period of six months; however, a requirement is that such cases must start in the circuit courts.
Organization and division of responsibility

A number of government departments and sectors have to work together to bring about a consistent assistive technology solution. Users have a lot of different people with whom to consult. These bodies have to work together with users towards common goals if the solutions they provide are to turn out well.

The provision of assistive technology requires competence from various sectors and at various levels. It is important to involve all the sectors concerned. Both simple and more complex problems can be resolved at front-line level if the municipality has its own experience of similar problems. Rare and more complex problems often require specialist skills from a higher level of competence. People are encouraged to ask for advice and guidance from other cooperative partners if their own skills are insufficient.

Municipalities are responsible for the health and rehabilitation of all their citizens. The provision of assistive technology is part of this responsibility. The assistive technology centre has overall and coordinating responsibility for the provision of assistive technology in its county. The centres function as a second-line service and as resource and competence centres. The centres provide expert support to users and other partners as needed. There are 19 assistive technology centres in Norway, one in each county. ”The Nationwide Vehicle Centre” (LSB), ”The Centre for IT Aids” (SIKTE), ”The North Norwegian IT Centre” (NONITE) and ”The Centre for Vocational Rehabilitation” (SYA). These are all specialists in individual fields with regard to the provision of assistive technology, and they provide users with front-line and second-line services all over Norway. Both the assistive technology centres and the nationwide services are a part of NAV. Other nationwide and regional centres of competence are found outside NAV.

As of 1.7.2006 all the country’s assistive technology centres offer a contact for children/young people with disabilities and their parents/guardians. This contact shall help ensure the child/young person and his/her parents/guardian receive the best possible coordinated options.
The provision process

If assistive devices are to be provided, there has to be a practical problem for a user as a consequence of disability, be it physical or mental. This requires an investigation of the overall situation of the user and a target for the provision of assistive devices. This should be included in a treatment plan, care plan, training plan, rehabilitation plan or vocational rehabilitation plan.

One or more assistive devices are selected once various possibilities have been tested and assessed. Specialists can consult their assistive technology centres in order to borrow assistive devices for testing.

An application (requirement form) is then drawn up and submitted to the assistive technology centre for assessment and a decision. It is important for the application to be sufficiently detailed and justified on the basis of relevant information. This helps to speed up the process.

If the assistive technology centre approves the application, the assistive device is sent to the user. The assistive device often has to be adapted and adjusted, and more major adaptations may sometimes be required. The assistive technology centres take care of this.

Reasonable guidance, training and practice in the use of the assistive device is just as important as the device itself. The assistant who recommended the assistive device is also responsible for following up and working together with the user to assess whether the device does actually solve the user’s problems, and whether further training or adaptation is required.

The user must receive both verbal and written information on who to contact, and where, if the device needs servicing or repair.

The process must be evaluated in order to check that the user has received useful assistance and the right assistive device within an expected time frame.

Funding

Assistive devices are financed by state funding – the Storting (Norwegian parliament) grants money to the ”Assistance budget”. An assistance budget is drawn up for each assistive technology centre one year at a time.

The allocation of assistive devices is based on individual rights of the
user. The assistance budget is an estimated grant, meaning that if the users meet the criteria enabling them to receive assistive devices, the devices must be acquired even if the budget is exceeded. If the budget is exceeded, this must be justified and more money subsequently allocated to it.

For some assistive devices, such as hearing aids, there is a user’s part payment.

Central support functions

NAV sentralt is responsible for entering into agreements with suppliers of assistive devices in Norway. This applies to the major groups of assistive technology. NAV sentralt enters into agreements with individual suppliers, such as for manual and electric wheelchairs. Assistive devices subject to framework agreements make up a national standard. The intention behind framework agreements is to ensure that a national range of good quality devices is available at a reasonable price.

The assistive technology centres select their local ranges based on the national range. It does not enter into framework agreements for the smaller assistive device groups such as ”Activities of Daily Living” aids. In these cases, the assistive technology centres enter into direct agreements with suppliers.

Reference groups have been set up for the various product areas. These reference groups consist of staff from NAV sentralt, specialists from the assistive technology centres and users themselves. The role of the reference groups is to recommend relevant products for which price negotiations would be desirable.

NAV sentralt has a support function to the assistive technology centres in the matter of coordinating developmental measures for them and implementing trial activity.

NAV sentralt is also responsible for drawing up information on the assistive technology area, such as thematic guides or net-based information, for example. This information is aimed both at experts in the field and users of assistive technology. It includes a national database of assistive technology. Norway is working together with Sweden and Denmark on technical development of the database. The database is
still under construction. Suppliers will gradually be made responsible for entering relevant information on the various assistive devices in the database.

In total, 5 national standards have been developed for the assistive technology area. These are: ”National standard for front-line training”, ”Emergency repairs to assistive devices”, ”Outpatient activity”, ”Testing assistive devices” and ”Range work at assistive technology centres”. The national standards describe the quality of service that can be expected from the assistive technology centres.

The national standards enable municipalities and other partners to find out about the work of the assistive technology centres and the demands made of these centres. Consequently, this will give them more realistic expectations of what these centres can and should do.

The national standards also help with developing a consistent national service. These standards are to ensure that the procedures in a specific field or for a specific service are the same in all the counties. The existing national standards are now going to be assessed. At the same time, an ongoing assessment is taking place of whether there is also a need to create standards for other areas with regard to the provision of assistive technology.
Policy and principles for the provision system

The objective of the disability policy is to bring about a society which makes it possible for people with disabilities to be fully active members of society. The fact that all people are equal is a basic starting point as regards how society should be formulated, and people with disabilities are citizens with exactly the same rights and obligations as everyone else. This is expressed quite clearly in the national action plan for disability policy, ”Från patient till medborgare” [From patient to citizen] approved by the Riksdag (Swedish parliament).

Access to assistive technology which works well is crucial if the objectives of the disability policy are to be attained.

Assistive devices are products which people with disabilities need in order to:
• prevent future loss of function or ability
• improve or maintain function or ability
• compensate for impaired or lost function and ability to cope with day-to-day life.

Regulations on grants for assistive technology

*Assistive devices in the home, for treatment etc.*

County councils and municipalities, according to the Health and Medical Services Act (§3b and §18b), are obliged to provide people with disabilities with assistive devices. The Health and Medical Services Act is an obligation act for county councils and municipalities, but it does not entitle individuals to assistive devices. There is no right of appeal to a court against decisions on assistive devices.

Within the scope of the Health and Medical Services Act, county
councils and municipalities may themselves decide on regulations for assistive devices, such as which products are to be regarded as assistive devices and be available for prescription to people with disabilities. They also decide on any charges. Therefore, the chances of receiving a specific assistive device may vary, depending on where you live in Sweden. In the field of assistive devices changes in prescription policy are made by the public health authority. Differences across the country concerning charges and what is prescribed as assistive technology are great. To varying extents the prescribing of certain products declines or ceases at the same time as the introduction of new devices occurs at differing tempos in different parts of the country.

Assistive devices according to the Health and Medical Services Act include assistive devices to aid with day-to-day life and for care and treatment.

Assistive devices aim to assist individuals to carry out the following tasks themselves or with the help of someone else:
- meet basic personal needs (getting dressed, eating, personal hygiene etc.)
- get around
- communicate with the people around them
- function both in the home and around the local area
- orientate themselves
- carry out day-to-day tasks in the home
- go to school or college
- take part in normal leisure and recreational activities

**Assistive devices in the field of education and training**

Assistive devices for use in schools and colleges may include:
- personal assistive devices
- educational aids
- basic equipment

Personal assistive devices in schools and colleges – assistive devices at school – are assistive devices which individual students need to compensate for their disabilities so as to be able to take part in classes. The public health authority – the county council or municipality – is responsible for this, using the Health and Medical Services Act as its basis. Health and medical services staff, such as occupational therapists,
speech therapists and physiotherapists, are responsible for assessing the need for appropriate assistive devices and prescribing them.

The public health authority’s responsibility for offering assistive devices at school applies to the following types of school:

- primary and lower secondary schools, including special schools
- upper secondary schools
- colleges/universities
- State and municipal adult education.

All schools are responsible for buying assistive devices, although these are not a responsibility under the terms of the Health and Medical Services Act.

The educational authority is responsible for providing educational aids and basic equipment, as well for adapting the premises. Pupils with disabilities sometimes need special educational aids. The special educational institute is responsible for providing special support to responsible persons within the public sector educational system. This is done, for example, by promoting the development and adaptation of educational aids within the area. In primary and lower secondary schools, including special schools, upper secondary schools and independent schools under state supervision, acquiring and funding these educational aids is the responsibility of the school.

The boundaries between the responsibilities of schools and the responsibilities of the health and medical services may vary depending on what has been agreed with the public health authority.

**Assistive technology at work**

Assistive devices which allow people with disabilities to work and are not normally required in the business are known as assistive devices at work. Workplaces may also need to be adapted to accommodate disabled people. Responsibility for assistive devices at work and/or converting the workplace is shared between the social insurance offices and the Swedish Employment Service. The employer bears the basic responsibility for ensuring the workplace is adapted to the needs and capabilities of the employees. The assistive devices required by employees to prevent injuries from being sustained at work are the responsibility of employers and are known as assistive devices for staff.

The social insurance office is responsible for assistive devices at work
required to allow staff to continue their employment, while the Swedish Employment Service is responsible for ensuring that people with disabilities can actually work in the first place. Any employee with a disability which makes it difficult to do their job, has been affected by long-term illness, is undergoing rehabilitation or needs help to get back to work can receive a grant through the social insurance office for personal assistive devices at work. Both employees/self-employed persons and employers can receive funding.

The Swedish Employment Agency is responsible for assistive devices at work required to help staff take on new positions when switching jobs or after a period of unemployment, as well as when the need for assistive devices at work arises during the first year of employment. The Swedish Employment Agency is also responsible for assistive devices that are needed by young people with disabilities during their practical work experience and for costs for talking books and Braille books required by visually impaired people to allow them to take part in vocational training.

The social insurance office and the Swedish Employment Agency often engage the services of rehabilitation and assistive technology specialists in these cases.

Other forms of support

There are special regulations and support systems pertaining to the adaptation of homes and vehicles.

According to the Housing Adaptation Assistance Act etc. (1992:1574) disabled people can receive funding for converting their accommodation, in order to enable them to live an independent life in their own home. Application for such funding is made to the local municipality. The need for proposed adaptation must be supported by an occupational therapist, doctor or other expert. The municipality decides on the amount.

Vehicle support covers several types of financial aid for disabled persons to purchase or adapt vehicles and is regulated by Regulation (1998:890) on vehicle support for disabled persons. To receive such support, the applicant must be long-term disabled in a way that causes significant difficulties in own movement or in the use of normal transportation. Decisive is an overall assessment of the duration of the disability and the problems in travel using normal transportation – not
the type of disability. Long-term means the disability shall last or be projected to last for the service life of the vehicle, i.e. normally 9 years in practice. Application for such support is made to the social insurance office.

**Lodging an appeal**

Formally, there is no right of appeal to a court against the prescription of assistive devices. The Health and Medical Services Act is an obligation act for the public health authority, but it does not entitle patients to assistive devices. Anyone who is not happy with a decision can appeal to the operations director and/or patient boards at county councils and municipalities.

**Organization and division of responsibility**

Assistive technology constitutes part of other care and habilitation/rehabilitation efforts provided by the public health authority, county councils and municipalities. There are 21 county councils/regions and 290 municipalities in Sweden.

Assistive devices to be used in the home, the local environment and at school in order to facilitate day-to-day life and for care and treatment are the responsibility of the public health authority, i.e. county councils and municipalities. Health and medical services staff at various units within county councils and municipalities prescribe assistive devices.

**The county council level**

At **district health centres or their equivalent** in primary healthcare, most assistive devices are prescribed to people with physical disabilities. At these centres, there are doctors, nurses, and often also occupational therapists and physiotherapists who can assess the need for assistive devices and prescribe them. People can also be referred to other units, such as hearing centres or low vision centres, from here.

Staff at **assistive technology centres** usually act as consultants for the people within county councils and municipalities who prescribe assistive devices mainly to people with physical disabilities, speech impediments and language impairment disorders, and cognitive and
medical disabilities. Consultation takes place with regard to complex or unusual assistive devices, or when adapting assistive devices. Assistive technology centres provide information and also train people who prescribe – and other people as well – on assistive devices. These centres have another important function, too; they provide assistive devices prescribed.

The hearing centres or their equivalent are responsible for hearing rehabilitation. This involves carrying out hearing tests, testing, adapting and prescribing hearing aids and other hearing devices and training people in their use. The hearing centres also provide information to the relatives of the hard of hearing.

The Interpreter Centres and Speech Service centres are responsible for interpreting for the deaf and hearing impaired, as well as for people with speech impairments. The former often handles the prescription of text telephones.

Local low vision centres are responsible for the rehabilitation of people with vision impairments. This involves investigating, assessing the need for and prescribing assistive devices, as well as teaching people how to get started, read and move about.

The orthopaedic units often work on behalf of county councils. These are responsible for assessing the need for and producing orthoses, prostheses and orthopaedic shoes after referral by a doctor.

Habilitation and rehabilitation units are responsible for treating children, young people and adults with congenital disabilities, primarily physical disabilities and multiple disabilities. Assistive devices form part of their treatment and are prescribed by occupational therapists, physiotherapists and speech therapists working in habilitation.

Certain medical clinics operating in the field of in-patient care, such as lung clinics and diabetes units, are also responsible for assistive devices in their respective fields.

At speech therapy clinics, assistive devices are prescribed for people with speech impairments and language disorders, and they are given training in alternative methods of communication. Some county councils offer what are known as communication centres, which deal with more complex communication analyses and also train staff.

Specialist skills in assistive devices based on advanced computer technology are available at assistive technology centres or as special
computer resource centres under some county councils.

A datatek (children’s computer centre) often forms part of the habilitation activity. Here, children with disabilities who are unable to read or write yet are able to try out different kinds of computer software. They can also borrow computer software and control devices for use on their own computers at home.

For children with reading and writing difficulties, a school datatek gives them the opportunity to try the tools during teaching. The school datatek loans out educational software and compensatory aids, such as computers with scanners and speech synthesis.

**Municipal level**

The municipalities are responsible for health and medical services for the elderly and people with disabilities in special accommodation, and in some municipalities in their own accommodation as well. This also involves responsibility for rehabilitation and assistive devices, primarily for people with physical disabilities. Many municipalities have rehabilitation units employing occupational therapists and physiotherapists who are responsible for this work, which also includes assessing the need for, prescribing and providing training in assistive devices. There is often close cooperation with county councils’ assistive technology centres.

Staff at special accommodation, home help staff and relatives also help to ensure that assistive devices prescribed are being used correctly.

A number of municipalities have home instructors whose job it is to help visually impaired and hearing impaired people to enjoy more active lives by helping to train them in how to use their assistive devices, for example.

*Nurses with Medical Responsibility* are the people responsible for quality and safety in the field of municipal health and medical services, which also includes rehabilitation and assistive devices. Some municipalities also have people with medical responsibility for rehabilitation.

The municipalities are responsible for home adaptation grants which, following certification by an occupational therapist, doctor or equivalent, can be obtained for measures deemed necessary to allow people to remain in their own homes.
The prescription process

Assistive devices for people with disabilities are prescribed by health and medical services staff in accordance with the Health and Medical Services Act. The process of prescribing assistive devices is a part of habilitation or rehabilitation for which special habilitation or rehabilitation plans must exist. These plans should include planned measures such as the prescribing of assistive devices, who is responsible for the measures and what they aim to achieve. Patients should take part in the planning of measures as far as is possible.

Around 70 percent of assistive devices prescribed go to people aged over 65. If vision, hearing or orthopaedic assistive devices are required, patients are most often referred to low vision or hearing centres or to orthopaedic units. A vast number of vision, hearing and orthopaedic assistive devices are prescribed at these units, and county councils are essentially responsible for these assistive devices.

In the case of other assistive devices (to help with physical disabilities, cognitive disabilities etc.) provided via assistive technology centres, this responsibility is shared between county councils and municipalities. The people prescribing the assistive devices – usually occupational therapists, physiotherapists, speech therapists and district nurses – may be employed by either the county council or the municipality, and assistive devices are largely prescribed by their own staff within the primary healthcare service of the municipality or county council. Assistive technology specialists at assistive technology centres are consulted when anyone prescribing an assistive device feels that they are not skilled enough to prescribe such a device.

Some assistive devices, such as ventilators, CPAP equipment for snoring problems and inhalers, are also prescribed using the Health and Medical Services Act as a foundation. However, slightly different procedures may apply, as clinics at hospitals are often responsible for prescribing and following up these assistive devices.

People prescribing assistive devices are medical/healthcare staff who select appropriate, specific products for named patients on the basis of needs assessments. The people prescribing assistive devices decide on which assistive devices to prescribe, given the applicable regulations within the public health authority by which they are employed. In some cases – often in the case of expensive assistive devices – a formal decision
is also made to approve the prescription before the assistive device in question can be purchased.

The prescription process is the same regardless of the field of assistive technology involved, the professional category responsible for prescribing or the public health authority concerned. The prescription process consists of a number of phases in which one and the same member of health and medical services staff can be responsible for the entire process, or just for parts of it. It is essential for responsibilities to be clarified for the various phases, such as in the rehabilitation plan, and for functional information transfer to be implemented throughout the entire care chain.

The prescription process consists of the following phases:

- assessing the need for assistance
- assessing, adapting and selecting an appropriate, specific product
- if so required – initiating and preparing instructions for special adaptation
- instructing, training and providing information
- following up and assessing function and benefit.

For more information on the respective phases, please see the Swedish Handicap Institute’s document entitled «Förskrivningsprocessen för hjälpmedel till personer med funktionshinder» [The prescription process for assistive devices for disabled people], order no.: 00336.

**User influence**

Users have a large and vital part to play in assistive technology activities. Their participation and influence is brought to bear in a variety of ways. As individuals, they take part in and influence their own rehabilitation and the prescription of assistive devices. Here, great emphasis is placed on the fact that users must be given genuine opportunities to properly take part in this process.

Users are also able to exert influence through the many well-developed organizations for the disabled. There are various methods of cooperation in respect of assistive technology activities. The county councils have joint consultation bodies, Disability Ombudsmen, where organizations regularly consult with politicians and officials with regard to assistive technology issues, among other things. Equivalent councils exist at the
municipal level. Units working in the field of assistive technology activities, such as assistive technology centres, low vision centres and hearing centres, have special range groups or user councils where relevant questions can be addressed. These organizations also run – either on their own, or in coordination with assistive technology activities – various projects relating to rehabilitation and assistive technology.

**Funding**

Assistive devices are paid for by county councils and municipalities and are essentially free of charge to users. The division of responsibility is described in the section entitled Organization and division of responsibility. Separate fees are payable by users for certain assistive devices: orthopaedic shoes, wigs and hearing aids, for example. It is also usual for users to pay for consumer goods such as tyres for wheelchairs, batteries etc.

Assistive devices for use at work are financed by the social insurance office, the Swedish Employment Agency or employers and are thus free of charge to users.

**Central support functions**

The Swedish Handicap Institute (HI) is a national resource centre on assistive technology and accessibility for disabled people. The Swedish Handicap Institute works to promote full participation and equality for people with disabilities by working towards high-quality assistive technology, effective provision of assistive devices and an accessible society. The Institute encourages research and development, tests and procures assistive devices, assists with the development of knowledge and methods, and provides information and training. Its principals are the State and the Swedish Association of Local Authorities and Regions.

The Institute:

- works to develop and improve assistive devices, assistive technology activities and accessibility in society for disabled people
- works with the development of knowledge and methods and carries out health economics studies
- works for a cost-effective supply of assistive technology for the pu-
The Swedish Handicap Institute issues information documents and books written for both users and staff. It has a comprehensive website at [www.hi.se](http://www.hi.se), which offers a large quantity of information on assistive technology and its use. The Institute also has the largest specialized library in the Nordic region as far as assistive technology and disabilities are concerned.
Nordic Council of Ministers
is the intergovernmental body for co-operation between the Nordic countries. The Prime Ministers bear overall responsibility for this co-operation. The activities of the Council are co-ordinated by the Nordic co-operation ministers and a number of different specialized councils of ministers. The Nordic Council of Ministers was established in 1971. Read more at www.norden.org

Nordic Cooperation on Disability (NSH)
is an institution under the Nordic Council of Ministers (the social affairs ministers) with responsibility for running a number of programmes, projects and support arrangements. NSH is also the secretariat for the Nordic Council on Disability Policy. Read more at www.nsh.se

Nordic Development Centre for Rehabilitation Technology (NUH) was established 1990 and is a subsidiary of NSH. NUH promotes joint Nordic development of new assistive technology with the aim of creating possibilities for equal citizenship to all. NUH also aims to promote high quality and efficiency of the provision systems of assistive technology in the Nordic countries. Read more at www.nuh.fi

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