

Survey on the situation of Mobility-Impaired Youth in Employment and Education in Germany

General Background

Legal Framework, Definition and Statistics on Disability

The main legal instrument regulating access to employment for the disabled in Germany is the Severely Disabled Act¹ (Schwerbehinderten-Gesetz), in force since 1986 and updated in 2000. The main ruling of this law is that 5% of all jobs in enterprise with more than 20 employees and in the public sector have to go to people, recognised as severely disabled. Otherwise, these employers have to pay a compensatory sum into a fund, which is used for financing programs and projects benefiting the employment or professional qualification of severely disabled people. On the basis of this law, also the Social Code (Sozialgesetzbuch IX) has been amended in 2001.

The definition of disability underlying the law and the politics in this area is as follows: “People are considered to be disabled, if they suffer from non-transient functional disturbances, based on physical, mental or psychological states, deviating from what is typical for their specific age”. This is in agreement with the definition of the World Health Organisation (WHO) which is rooted in the terms **impairment, disability and handicap**². The law considers a person as severely disabled, if disability reaches 50% or more on a highly differentiated scale.³

The report of 1998 just quoted, analysed the situation of the disabled very thoroughly, paying particular attention to the situation in East Germany as compared to the Western part. According to this analysis, the disabled in Germany have to be seen as a highly differentiated group in terms of their relation to employment, namely those

- employed in the public sector and private enterprise
- registered as unemployed
- employed in specially supported employment (e.g. sheltered workshops)
- outside employment and all employment agencies

The sum total of these groups amounts to about 6,6 million people or 8% of the population of the German Federal republic. In addition, there is a group not counted into the statistics, because their disability is not at or over the 50% mark, defining serious disability in terms of the law. Also outside these statistics are very seriously disabled persons, dependent on a special mix of supporting measures to be integrated into the labour market and those, who do no longer need any assistance. Overall, the disabled are making up about 10% of the population in Germany.

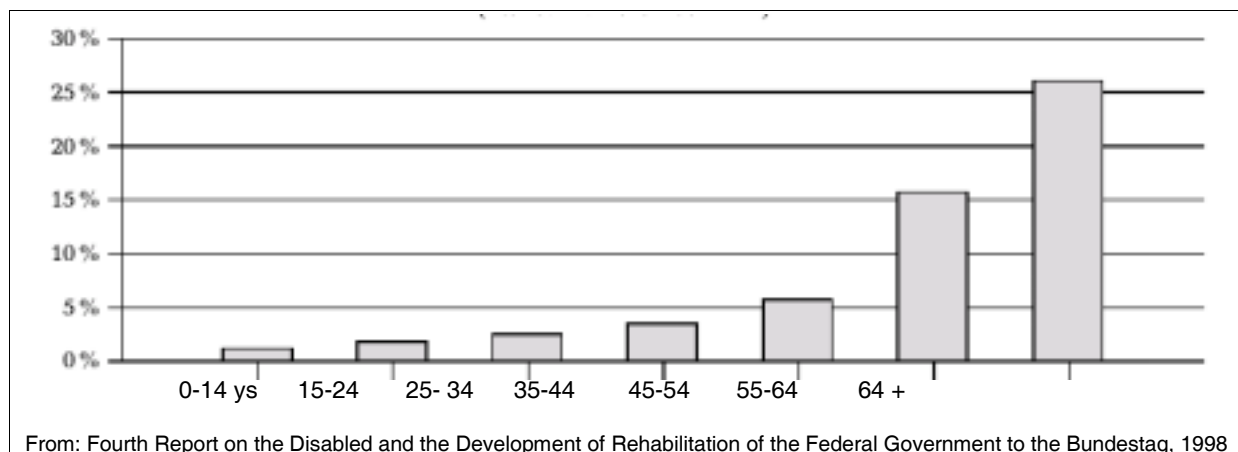
The following diagram shows the occurrence of disability according to age. As can be expected, the risk of disability is less in the years of youth and increases sharply with age:

| |
|---|
| Proportion of Severely Disabled in the Population broken down by Age Group |
|---|

¹ The full title of the law is „Gesetz zur Sicherung der Eingliederung Schwerbehinderter in Arbeit, Beruf und Gesellschaft (Schwerbehindertengesetz – Schwbg“ = Law on securing the integration of the seriously disabled into work, occupations and society).

² Fourth Report on the Disabled and the Development of Rehabilitation of the Federal Government to the Bundestag, 1998. This report is drawn up once during each electoral period.

³ A critical appraisal of these methods of definition is put forward by Ulrich Bleidick: Allgemeine Übersicht, Begriffe, Bereiche, Perspektiven in: Informationen über die sonderpädagogische Förderung in der Bundesrepublik Deutschland, Zeitschrift für Heilpädagogik, 1994. His conclusions are: 1) There is no definition of impairment/disability which is generally recognised; it is moreover neither possible nor desirable to define disability once and for all. It needs to be accepted that disability is to a very large extent a social construction; 2) It is practically impossible to “rank” different disabilities, because the subjective perception may be entirely at variance with the objective rank.



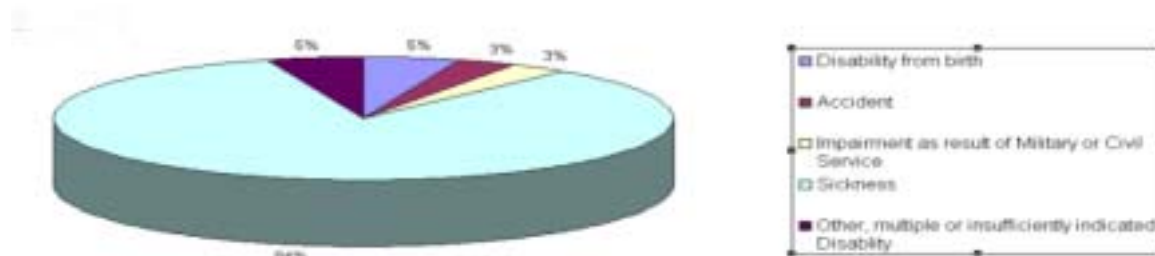
Consequently, the vast majority of disabled, 5.5 million of the officially registered in 1996, is already outside the labour market due to age. The age-bracket under 25 has a comparatively low quota of 3,9%.

Types of Disability and Mobility Impairment

Of the 6,6 Mill. officially registered disabled in Germany in 1999, 52,7% percent were men. 86,2% of disabilities resulted from sickness, only 4,5% were born disabled, 2,5% acquired their disability from accidents or occupational sickness.⁴

The following diagram and table show in detail the break down of disabilities in Germany according to cause and to type:

Severely Disabled Persons in the Federal Republic of Germany, status of 31st December 1997 according to cause:



Severely Disabled Persons in the Federal Republic of Germany, status of 31st December 1997 according to type of disability:

| Type of Disability | Numbers | Percentage |
|--|-----------|------------|
| Loss or partial loss of limbs | 107.013 | 1,6 |
| Functional impairment of limbs | 1.005.616 | 15,2 |
| Functional impairments of spine or rump, Deformation of thorax | 1.009.873 | 15,3 |
| Blindness, visual impairment | 343.182 | 5,2 |
| Impairment of speech, Deafness, impairment of hearing or equilibrium | 260.409 | 3,9 |

⁴ Statistisches Bundesamt (2000), Statistik der Schwerbehinderten 31.12.1999

| | | |
|--|-----------|-------|
| | | |
| Loss of one or both breasts, Distortion | 172.177 | 2,6 |
| Functional impairment in organic systems | 1.982.302 | 29,9 |
| Paralysis, cerebral impairment, mental or psychological impairments, addiction | 972.946 | 14,7 |
| Other and insufficiently indicated impairments | 767.629 | 11,6 |
| | | |
| Total | 6.621.157 | 100,0 |

University of Trier, Zentrum für Arbeit und Soziales, Dokumentationssystem Schwerbehinderte und Arbeitswelt. Teil II: Statistisches Archiv, 2000.

Rehabilitation

Rehabilitation is the central term to denote the measures for integration of the disabled into society. Disabled persons are entitled to rehabilitation benefits, such as

- **medical benefits:** treatment, medicines, therapies, including work therapies and work tolerance testing, and aids, such as artificial limbs
- **work-related benefits:** assistance to obtain or keep employment, training or re-training, other measures to aid the integration of disabled people into work (e.g. specially adapted furniture or equipment)
- **Educational and social integration measures:** special care in schools, special learning arrangements, handicapped-friendly transport and traffic systems
- **Financial benefits:** sickness or injury benefit, transitional allowances during medical or work-related rehabilitation

To provide these benefits, especially medical and work-related benefits and training, special facilities have been set up, such as:

- **Vocational rehabilitation clinics :** These provide an integrated approach combining medical and vocational rehabilitation measures, such as aptitude testing, career planning. There are 16 clinics in Western Germany and 2 in the Eastern lands with a total of 2915 places.
- **Vocational training centres for youth:** These work in close cooperation with firms to provide basic vocational training for young disabled, unable to receive inplant-training due to their disability. There are 54 training centres for youth for 14600 trainees, 8 of these are located in East Germany (with 2300 places)
- **Retraining Centres for Adults:** They work similarly as the training centres for youth. There are 28 Centres for 15000 trainees (four of these seven are in East Germany with a capacity of 3000 trainees)
- **Sheltered Workplaces:** These special workshops offer suitable vocational training and jobs for persons unable to find employment on the open job market due to the nature or severity of their disability. These workshops provide disabled persons with an opportunity to develop, increase or regain their ability to work productively and to earn money. Germany has 656 state-approved workshops which offer some 188,000 jobs; of these, 173 workshops offering approximately 35,000 jobs are located in eastern Germany.

In addition, a disabled person may be entitled to **further benefits**, for example

- technical equipment for the workplace

- aids for the disability-specific adaptation or for the acquisition of a motor vehicle - the details are regulated by the Motor Vehicle Assistance Regulation
- training subsidies and integration assistance to employers.

Expenses for vocational rehabilitation by the Federal Labour Office have risen from 2450,9 Mio DM in 1987 to 4823,90 in 1996.⁵

The main objectives of disability policies in Germany are:

- to ensure that disabled persons live as normally as possible

from this follows:

- to prioritise rehabilitation before care
- to pursue actively policies of integration in all spheres of society.

Discrimination and Anti-Discrimination policies, Access to Employment

According to the Fundamental Law of the Federal Republic of Germany, all citizens enjoy equality before the law and discrimination against any segment of the population is unlawful. Since 1994, this extends specifically also to the disabled. Particular measures favouring the integration of the disabled are not considered to be in contradiction to the general rule of equality, rather they are seen as necessary steps to ensure equal participation by the disabled in society. Nevertheless, the government report of 1998 is explicit in its judgment that reality is still far behind the achievement of the full measure of equal participation of the disabled in society. These concern perceptions of disability and attitudes towards the disabled as well as the “hard figures” of the labour market.

Concerning perceptions and attitudes the report speaks about “new forms of hostility towards the disabled”, which is rooted in valuing “100%-usefulness and effectiveness” for economy and society and a tendency to consider special measures of rehabilitation and integration as a luxury.

In the 90s, the “scissors” between growing demand for work jobs for the disabled and declining offers of employment have been opening up, and this trend is still going on. Between 1995 and 1997, the number of jobs to be counted as relevant for the quote of 6% reserved for the severely disabled, declined from 21.214.089 to 20.903.809 according to the statistics of the Institut für Arbeitsmarkt- und Berufsforschung der Bundesanstalt für Arbeit (Institute for Research on the Labour Markets and Occupational Development of the Federal Employment Service). Interestingly enough, these losses were incurred exclusively in the “old federal lands” of West-Germany, while in the Eastern “new lands” more severely disabled people have been employed. Comparing the public and private sectors, the decline has been most marked in the private sector: in 1996, 76% of all those employers, obliged by law to employ disabled persons, did not fulfil their quota. Consequently, the employment quota of the disabled declined from 4,3 % in 1992 to 3,9% in 1996⁶.

The number of registered unemployed disabled people rose in West Germany from 155.528 in 1995 to 163856 in 1997; the corresponding figures for East Germany are 20.950 for 1995 and 31.305 in 1997. Also, the unemployment rate of the disabled is higher than among the non-disabled and reached 24,2% in 1997. Similarly, disabled unemployed people stay significantly longer out of work than non-disabled unemployed.⁷

Despite severe shortcomings, German policies have resulted in a high degree of integration of the disabled as is borne out by the following table, showing comparative figures from the EU and the EU

⁵ Fourth Report on the Disabled and the Development of Rehabilitation of the Federal Government to the Bundestag, 1998

⁶ Fourth Report on the Disabled and the Development of Rehabilitation of the Federal Government to the Bundestag, 1998

⁷ IABkurzbericht Nr. 16/1998, Arbeitsmarkt für Schwerbehinderte nach 1995 weiter verschlechtert, Regensburg 1998

member states on the degree of integration of disabled person into employment, according to age group, gender, degree of disability:

| | B | DK | D | GR | E | F | IRL | I | L | NL | P | UK | E12 |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| severely impaired men 25-49 | 61,5 | 28,3 | 66,5 | 48,3 | 27,3 | 59,4 | 15,2 | 64,3 | 49,4 | 57,7 | 53,9 | 27,9 | 53,8 |
| somewhat impaired men 25-49 | 85,9 | 71,4 | 89,0 | 75,8 | 60,5 | 86,6 | 59,1 | 87,1 | 92,8 | 89,0 | 87,9 | 72,6 | 82,6 |
| non-impaired men 25-49 | 93,6 | 89,3 | 93,2 | 92,1 | 83,9 | 89,8 | 83,9 | 90,2 | 96,5 | 93,8 | 95,6 | 88,4 | 90,2 |
| severely impaired women 25-49 | 47,0 | 35,7 | 51,8 | 26,2 | 18,8 | 51,4 | 17,2 | 40,7 | 31,5 | 42,1 | 39,6 | 24,1 | 41,5 |
| lightly impaired women 25-49 | 59,0 | 68,1 | 63,9 | 47,2 | 31,2 | 59,2 | 25,4 | 44,3 | 60,1 | 66,7 | 66,6 | 58,4 | 55,9 |
| non-impaired women 25-49 | 76,8 | 88,0 | 74,1 | 50,6 | 46,4 | 69,0 | 45,4 | 56,0 | 62,8 | 72,5 | 73,8 | 74,8 | 66,3 |
| severely impaired men 50-64 | 14,5 | 21,8 | 25,6 | 28,6 | 23,4 | 23,4 | 13,8 | 37,7 | 13,2 | 30,1 | 41,3 | 8,1 | 25,1 |
| somewhat impaired men 50-64 | 36,5 | 46,6 | 48,8 | 53,6 | 36,3 | 40,5 | 42,1 | 49,6 | 36,3 | 49,4 | 67,9 | 46,2 | 47,0 |
| non-impaired men 50-64 | 56,5 | 80,1 | 71,4 | 70,1 | 64,9 | 50,3 | 76,0 | 60,3 | 51,9 | 63,9 | 83,8 | 77,7 | 66,2 |
| severely impaired women 50-64 | 9,4 | 8,2 | 23,4 | 8,8 | 6,1 | 18,2 | 2,5 | 7,8 | 6,3 | 12,9 | 23,1 | 10,2 | 14,5 |
| somewhat impaired women 50-64 | 17,8 | 30,0 | 28,6 | 26,3 | 13,7 | 25,6 | 16,1 | 19,6 | 5,4 | 22,3 | 38,4 | 31,2 | 25,0 |
| non-impaired women 50-64 | 26,7 | 69,8 | 41,7 | 30,0 | 21,2 | 33,0 | 24,7 | 23,2 | 22,2 | 33,9 | 49,9 | 53,0 | 36,0 |

Employment and Qualification of Young Disabled People

Employment is the most important aspect of integration and participation in society. The highest priority is put on employment in the normal labour market and not primarily in sheltered workplaces and other special measure projects. The full range of work-related rehabilitation measures and benefits is available to young as well as adult people with some additional programmes and facilities for young disabled people (see list above).

The key to employability is qualification plus the willingness and ability to perform. For young people, therefore, it is important to have the opportunity to select and plan a professional career with utmost care and sufficient support by specialist advisors. Preparatory measures for the transition to work and vocational training begin in the final years of school with specific subjects such as "Employment Studies", "Economics" or "Engineering/Handicrafts". measure. Often, it is necessary to offer additional *preparatory assistance*, before a final decision for a training is taken. These may include:

- measures of vocational assessment and work testing
- educational measures to prepare for vocational training or employment,
- specific types of basic training for the blind and similar types of training,
- preparatory measures which are followed immediately by retraining or further education.⁸

In the transition from school to work, the young people concerned, their parents, teachers and advisors are faced with the highly contradictory impacts of rapid technological change pervading the economy:

On the one hand, these technologies offer great benefits, because some of the effects of disability can be compensated as never before in human history. This is especially the case in regard to certain types of physical impairments, such as mobility impairments, because of the increased capacities of remotely controlled mechanisms and appliances, but also because of the flexibility of work-arrangements such as telework (see further below).

⁸ Federal Ministry of Labour and Social Affairs, The Integration of Disabled Persons in the Federal Republic of Germany, Bonn 2000

On the other hand, the new technologies are driving a secular trend of rationalisation by which simple, unqualified or little qualified work is made obsolete on a very large scale. Also, the mastery of jobs using new technology involves great learning demands, which are insurmountable for those whose learning ability is impaired.

Consequently, there is a rising demand for counselling, with an increase of 8,7% between 1994 and 1996. These services have been the domain of the labour exchange offices until 1998. Since then, private companies and advisors are competing with the labour exchange offices in this area. Offerings of counselling provide an integrated package of measures, including information and advice on career planning, rehabilitation measures, active support in finding training and in-plant vocational training places. Successful management of the transition between school and employment via further education or vocational training requires close cooperation between the young disabled, their parents, schools and other institutions of the educational sector, labour exchange offices, councillors and employers. In some places, notably Hamburg, specific support centres have been put into place to ensure this. If necessary, practical preparation and training courses are used to help disabled youth find the right career or occupation. Also, in some cases the curriculum or catalogue of training measures applying to vocational training for a particular occupation, might be changed in order to accommodate special needs of a young disabled person⁹. This, however, is a doubled-edged sword, which should be used only after careful consideration, because here is the risk of devaluing the training in the public eye, or, worse, to train for occupations, which have no future on the labour market¹⁰. This risk is growing all the more due to the high competition for jobs, leading to the temptation to identify “special” with “below standard”, and therefore, beyond the pale. In this light, it is rather unfortunate, that in Eastern Germany, where the rehabilitation-system was adopted after Reunification, these exceptions are made use of much more frequently than in the West: (in 1994 11196 youth in East Germany and 9940 in the West; in December 1996 58% in Eastern Germany).¹¹

Despite all efforts to integrate young disabled people into normal vocational training, further education and employment there remains and will always remain a group, unable to go this way. For youth, whose disability/dependency on special treatment excludes their direct integration, specific rehabilitation centres are being provided, the **Berufsbildungswerke** (Agencies of vocational training). These centres are based on a fully integrated system interlinking all necessary medical, pedagogical, social and psychological services, in order to open career paths to youth suffering from multiple disabilities and/or severe impairments of their cognitive faculties.

An important role is played by schools and even nurseries, because here the basis for the future is laid. The principle guiding educational processes at each stage is „as much special assistance as necessary, as much shared learning as possible“¹². Only in exceptional cases, disabled children should be signed into special schools. The special schools are obliged by law to review at the end of every school year which of the pupils can be transferred to normal schools.

Universities, Polytechnics and other institutions of academic and further education are obliged by law to ensure equal access of disabled students by providing all necessary special measures. In the 80s, indeed, the situation of disabled and chronic students was improved in many instances. However, tight budgets, student overload and the generally more competitive atmosphere in the institutions of higher education have put a brake on these positive developments. In the Social Survey by the German Student Agency in 1994 2,3% of the respondents indicated they were disabled and 10,4% declared themselves as chronically ill, which amounts to about 39000 disabled students and 177000 chronically ill. Out of these, 50.000 suffer severe to medium impairments. Because of the conditions in universities and polytechnics, these students need significantly more time to finish their

⁹ These exceptions are regulated by §§ 44, 48 of the Vocational Training Act (Berufsbildungsgesetz) and §§ 41, 42b of the Regulation of Handicrafts (Handwerksordnung).

¹⁰ Hans Stadler, Schule – und wie weiter? Zur beruflichen Integration schwerkörperbehinderter Jugendlicher, Berufliche Rehabilitation 1995

¹¹ Fourth Report on the Disabled and the Development of Rehabilitation of the Federal Government to the Bundestag, 1998

¹² Federal Ministry of Labour and Social Affairs, The Integration of Disabled Persons in the Federal Republic of Germany, Bonn 2000

studies and the proportion of drop-outs is higher than amongst non-disabled students.¹³ The grievances voiced most often by disabled students relate to conditions in the university buildings, which are not optimised for wheelchairs, insufficient number of flats and rooms suitable for disabled students¹⁴.

Gender Issues: the Situation of Disabled Women

All the rehabilitation programmes and all careers are equally open for men and women, girls and boys. However, women have to deal with a dual discrimination: the gender asymmetry, favouring men in society, applies also to them and this is compounded by the non-fulfilment of equality for the disabled. Concretely, disabled women have greater difficulties in finding adequate jobs than disabled men or even the training opportunities necessary for them. This is an expression of the general gender barrier, which is as much an internal barrier of mentalities as an external barrier. For instance, internal barriers determine what is thought of as a proper occupational choice for women. External barriers include obligations of caring for children or other problems in accessing rehabilitation facilities.

A survey on the situation of disabled women and girls, conducted in 2001 in the Vocational Training Centres and Vocational Support Centres by the Federal Organisation Office of Disabled Women, presented the following analysis:

- In the Federal Republic of Germany live about 5 million disabled women (including those not statistically recognised). The LIVE Survey undertaken by the Federal Ministry for Family, Senior Citizens, Women and Youth, showed 70% of the disabled women as mothers.
- The statistics on the participation of the disabled on the Labour Market, provided by the Federal Labour Service, do not break down figures per gender. Therefore, figures have to be drawn from the Microcensus of the Federal Office for Statistics from 1995. These figures show, that only 13,3 % of the severely disabled women were employed (as compared to 19,7% of severely disabled men)
- On average, women are employed in a lower wage-bracket than men: Two-Thirds of the women, but only one third of the men had to cope with an income of less than 1800 DM per month. At the top of the income-scale, about 13% of men had an income of 3500 DM or more as compared to only 3% of the women¹⁵.

One of the main reasons for this situation is the lack or insufficient level of qualification of disabled women.

In the Berufsbildungswerke, the proportion of young women is about 30%, but the percentage of women varies greatly between professions, as shown in the following table, reflecting similar preferences as non-disabled young women.

| Occupational Branch | Proportion of Women in % |
|---------------------|--------------------------|
| Electrotechnical | 2,7 |
| Engineering | 2,1 |
| Commercial | 11,8 |
| Administrative | 35,7 |
| IT | 7,5 |

¹³ Fourth Report on the Disabled and the Development of Rehabilitation of the Federal Government to the Bundestag, 1998

¹⁴ Sozialhandbuch 97 der Fachschaftskonferenz, Uni Heidelberg, <http://www.uni-heidelberg.de/stud/fsk/referate/soziales/soz97/sozial31.htm>

¹⁵ Survey on the Situation of disabled girls and women in facilities for vocational rehabilitation, Bundesorganisationsstelle behinderter Frauen, <http://www.behindertefrauen.org/aktuell/Download/GesamtReha.doc>

| | |
|------------------|------|
| Social | 22,3 |
| Health | 47,6 |
| Printing | 31,6 |
| Other | 6,2 |
| Technical School | 5,9 |
| Polytechnic | 20,0 |

Most Berufsbildungswerke and other agencies for rehabilitation programmes are offering women specific courses (for women by women, for example).

One of the reasons why women are reluctant to use facilities such as the Berufsbildungswerke is, undoubtedly, their distance from their home. Berufsbildungswerke are large, centralised organisations catering for extended regions. Rehabilitation usually involves living at the facility, away from home. The spectrum of occupations for which training is offered, does not sufficiently accommodate the wishes of women (= high demand for health care and social professions).

In the meantime, a number of model projects is under way, attempting to offer rehabilitation measures closer to home, for example in day facilities. The problems encountered here are twofold: to reach the women and inform them of these offers and to find local employers for practica.

At the same time, the Berufsbildungswerke have extended their programmes to include courses specifically addressing women and to provide childcare.¹⁶

In addition, the discrimination of the disabled is in itself gender-specific. Women encounter particular problems in being denied their sexuality or their reproductive rights. For example, they are frequently encouraged by doctors and other advisors to abort their pregnancies. Despite their stereotyping as non-sexual, they are also the victims of sexual violence.¹⁷

New Technologies –Telework - Telelearning

As pointed out further above, new technologies open a broad spectrum of possibilities for the integration of disabled people into work and society. An ever extending range of products is coming to market including special mice and keyboards, add-ons on computers allowing for their control by one finger only, light signals, voice, photophones etc., but also remote controls for wheel-chairs or doors¹⁸.

In addition, the flexibility of new work models, especially their tendency towards defining work or learning independent of place and time, have opened up many opportunities for the disabled, though these also involve some risks, such as social isolation. In order to tailor policies towards these opportunities, at the same time minimizing the risks, a number of research and model projects have been commissioned by the Federal Ministry for Labour and Social Affairs (in 1997) and other interested organisations¹⁹. The survey of the Federal Ministry resulted into the development of Guidelines on Telework for the Disabled. The main findings of the survey can be summarised like this:

1. The number of teleworkers have increased notably in the FRG in recent years to 875000, but the number of disabled teleworkers is below 1000.
2. There is a distinction between four types of telework:

¹⁶ Survey on the Situation of disabled girls and women in facilities for vocational rehabilitation, Bundesorganisationsstelle behinderter Frauen, <http://www.behindertefrauen.org/aktuell/Download/GesamtReha.doc>

¹⁷ Swantje Köbsell, Zur Lebenssituation behinderter Frauen, Info der Bundesorganisationsstelle behinderter Frauen: <http://www.behindertefrauen.de/BOS/infos/inf2.html#seitinf2>

¹⁸ Horst Niederholz, Gabriele Theuer, Moderne Technik: Hilfsmittel für behinderte Menschen. Dorothea hat mit den Füßen geschrieben – jetzt schreibt sie mit der Sprache! Alle Probleme gelöst – Sieg des technischen Fortschritts? Berufliche Rehabilitation 1998

¹⁹ See for example the Linklist Telearbeit und Telelernen für behinderte Menschen Projekte und AnsprechpartnerInnen (Telework and Telelearning for disabled persons. Projects and contact persons at www.dias.de/tgreha/tg-verbbbeh.html

- a. mobile telework: telework from changing locations (e.g. work with clients outside the enterprise)
- b. alternating telework: work is done partly at home and partly in the enterprise
- c. telework at home: work is 100% from home
- d. work in telecentres: work is done in a centre for teleworkers.

The most common form is mobile telework with 500.000 workers, followed by alternating telework (350.000). Telework at home involves 22.000 workers and only 3500 work at telecentres. For the disabled, only alternating telework, work at home and work at a telecentre are of interest.²⁰

Opportunities and Risks of Telework for the Disabled

The main advantages of telework from the point of the view of the disabled are:

- no or less commuting to the workplace:
This is an important advantage as travelling is much more tiring and time-consuming for the disabled than for the non-disabled. Due to their limited chances on the labour market, their commutes are often very long (up to four hours daily among those surveyed)
- the ability to establish one's own rhythm for work and rest
Disabled teleworkers do not have to conform to official work and break times. They can establish work rhythms that meet their individual needs.
- improved or extended occupational choices:
This applies especially to young disabled people and their career-planning
- no worry about the accessibility of the work place
This may make it possible to retain the original work, if it can be done by teleworking, though the enterprise is not accessible by people with wheelchairs.

The main disadvantages:

- risk of losing contacts with colleagues and supervisors in the enterprise
Almost all of those interviewed complained of lack of contact, losing touch with what is going on at work
- Prejudices and Misjudgements of Supervisors
Too much work is often expected or too little time is allowed for its completion. Supervisors who cannot check up on their disabled employees in the office often demand too much in order to prevent teleworkers from slacking off.
- Technical problems
Technology was a major problem mentioned by those surveyed. Solving technical problems, particularly when special technical aids are in use, can be difficult and time consuming due to the distance from the office. Loss of work time is often the result, and the burden of making up for this loss is placed on the teleworker.

Nevertheless, the majority of interviewed disabled teleworkers estimated the advantages higher than the disadvantages.

The following improvements have been suggested:

- Expanding vocational training to include new media skills
- Increased accessibility of the new media to the disabled

²⁰ Bundesministerium für Arbeit und Sozialordnung, Entwicklung der Telearbeit, Forschungsbericht 269 (Federal Ministry for Labour and Social Affairs, Development of Telework, Research-report 269) Bonn 9/97)

- initiating more teleworking and telelearning projects, including telecentres adapted to the needs of the disabled
- adapting educational and labour market policies: In Germany, measures for the vocational rehabilitation of disabled workers are required to be part of the national social insurance program. Teleworking often leads to free agency jobs that are not included in this insurance program. The question of how labour market policies and instruments can adapt to this development without slowing the dynamic development of telework is still unsolved.²¹

Telelearning

Many of the arguments on the advantage and disadvantage of teleworking apply also to telelearning. Due to the status of telelearning as an emerging technology and skill, there is still little well-researched hard data available: "But we know precious little about the prerequisites, modalities and possibilities for distance learning for the handicapped. An international comparison of relevant literature reveals that the following attitude is adopted: 'Distance learning in Germany is something for people who enjoy good health and who have no other problems anyway.'²²

The Fernuni Hagen, the main facility for distance learning in higher education in Germany, considers two main avenues as important in further developments of distance training and education, adequate for the disabled:

- (1) full distance courses with ample opportunities for contact by providing information, advice, tutoring and guidance.
- (2) offerings of distance education complementary to or alternating with attendance-based courses.

In developing distance course offerings for students or trainees, it is necessary to pay attention to

- employing media appropriate to the target group of disabled and for bridging geographical distance
- organisational forms providing adequate support (technical, social etc.)
- make sure, students/trainees have adequate IT-skills or providing for their acquisition.
- provision of study centres, accessible for disabled students/trainees in order to realise "alternating telelearning"

Conclusion

Over the past ten to fifteen years, there have been many improvements in the legal situation, research and provision of differentiated rehabilitation offerings for the disabled. In practical every day life, however, the situation is far from satisfactory. The high level of unemployment and dwindling funds for social policies put severe restrictions on measures for the full integration of the disabled into work and society. Also, discriminatory practices and attitudes are still wide-spread.

It is necessary to continue work on policies and models, which make use of innovative concepts and technologies to further rehabilitation, equality and integration under the present general conditions.

²¹ Lilienthal, T., Goll, S., Zapp, M., Teleworking for Disabled Persons Opportunities and Risks - An Empirical Study. Lecture held at the 6th European Congress on Research in Rehabilitation, Berlin 1998, <http://www.dias.de/en/tgreha/tg-vortrag.html>

²² Rainer Ommerborn, Distance Training for the Disabled, Fernuniversität Hagen, www.fernuni-hagen.de

