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From Visions to Practical Policy: The Universal Design Journey in Norway. What Did We Learn? What Did We Gain? What Now?

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Abstract. The national policy in Norway have since the last part of the 1990-ies been organized in programs that erected actions including national authorities, municipalities, regional authorities and private enterprises. What have we gained by our national activities to mainstream inclusive and accessibility policy for persons with reduced capability through the principles of Universal Design? Have we made society accessible to everyone and prevented discrimination. Are the results visible?

We can measure results on several sectors, inter alia public buildings, outdoor areas, central communication hubs, public transport and the occurrence plans for Universal Design in municipalities and regions. Through several programs and action plans the Norwegian government has developed a sectoral approach for including persons with disabilities in the society. The majority of ministries have participated in these plans. Local initiatives, local councils for disabled people, and later on municipalities and county administrations were supported by national authorities as complements to regulations and laws. In addition, guidelines and assisting funds were used. The main objective was to redefine the national policy, using better defined national goals and introducing Universal Design to replace accessibility as the basic tool. The mainstreaming of the accessibility policy, where Universal Design was included in relevant sectors and activities, was a crucial part of the strategy. The national policy was organized in programs that erected actions focusing on how to reach, inspire and include municipalities and regional authorities in their own struggle for Universal Design. Through the mainstream approach ministries have both earmarked economic transfers to their own agencies and used steering documents guide to these agencies how to implement Universal Design in their advisory services, in practicing laws and regulations and in their own planning and building activities.

Keywords. Universal Design, planning, national strategies, action plans.

1. Introduction

In his latest edition of the book "Designing for the disabled: the new paradigm", the British architect Selwyn Goldsmith writes:

"It is architecturally disabled people with whom this book is concerned, those who when using or attempting to use buildings can find themselves confronted by impediments which prevent them from doing so, or allow them to do so only with

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difficulty and inconvenience. They are disabled because the architect who designed the building did not anticipate their needs, or did not care about them. Congregately they are people whom the architect can disable but whom he need not disable as severely as he commonly does" [1].

The first edition of Selwyn Goldsmith's book "Designing for the disabled" came in 1963, the fourth and last edition was published in 1997. Designing for the disabled is an impressive encyclopaedia of how to design buildings for people with disability. The book has been a bible and constant inspiration for architects, designers and engineers for five decades, but it is not until 1997 that we meet an angry and impatient Selwyn Goldsmith. The first edition had the subtitle "A manual of technical information", and was a straightforward catalogue of design recommendations for architects. In editions two and three from 1967 and 1976 Goldsmith introduced a number of issues which puts accessibility in a social and societal framework. The edition from 1976 is huge, with impressive 525 pages, but it is strictly informative and does not use terminology like discrimination of people with disabilities or statements like the one cited above from the 1997 edition.

Goldsmith's texts reflect the radical change in how the lack of accessibility has been understood and described over the last 50 years. This happened not only in Great Britain, but internationally and the development in Scandinavia was no exception.

In Norway the first sign of a change in government policy came with a White Paper to the National assembly [2], the Storting, in 1966 where the policy of normalisation is launched. An important principle in this new ideology was that unnecessary divisions between the disabled and others should not be drawn in upbringing, education, work and welfare. The policy was developed further and underlined in a White Paper to the Storting 11 years later [3]. This time the responsibility for all public service agencies to customize their service for people with disabilities was ascertained. The objective was that "The individual disabled can establish the same life situation he would have had if he had not been disabled, inter alia live and work in his natural environment, side by side with other people". The process towards social inclusion, equal opportunities and the policy of sectoral responsibility had started.

The first concrete example of this policy in the field of accessibility came when the Norwegian building regulations were revised in 1976 with a number of requirements for public buildings concerning accessibility and usability. It was of vital importance to the development of accessible environments in Norway and a demonstration of the new mind-set: the regulations were not issued by the social and health authorities, but by the building authorities.

The new building regulations were considered to be a great victory for the organisations for disabled. The Norwegian Association for disabled had been working to reduce the architectural barriers in society since the mid 1960-ties and had watched the development in Sweden closely [4]. Building regulations with accessibility recommendations were introduced in Sweden in 1966.

The work of Selwyn Goldsmith was well known in Norway, and a group of researchers at the Norwegian building research institute at one point considered translating the book Designing for the disabled into Norwegian. Researchers at the institute had been working on issues concerning dwellings for disabled and the elderly for nearly 10 years when a "Disability group" was formally established in 1970. Instead of translating Designing for the disabled the group started doing their own research in the field of accessibility. Their accomplishments are extensive and have been of fundamental importance to the development and understanding of accessibility for people with disability in Norway [5].

At this point accessibility for disabled was the term used and the Norwegian research was in line with Selwyn Goldsmith's and in other countries concerned with these issues. The objective was then, as it is now, to describe how accessibility to buildings and dwellings could make education, jobs and housing achievable to persons with disabilities. Terms like equal opportunities and solutions for all were only discussed in some avant-garde groups. The Norwegian building research institute was one of these, and organizations for disabled people was another. For people with disabilities equal opportunities had been discussed since the 1930s and before, but then more in terms of a dream than an achievable near future.

The Norwegian architect Kåre Adler was a sought after lecturer in the 1970s and 1980s. He used a wheelchair himself and could explain accessibility both as an architect and as a user of the architect's solutions. In the early 1980s he included the United Nation's universal human rights in his lectures claiming that these rights also applied people with disabilities and their right to have access buildings. This was at the time a strange thought for many, and he had to take it out of the lecture to avoid people interrupting him with laughter.

The early 1980s was too early for the general acceptance of the human rights for people with disabilities, but the "for all" qualities were gaining general public interest. It started with "Livsløpsboligen" the Life circuit or The Lifespan dwelling. The concept was first developed by The Norwegian Association for Disabled in 1981 and refined by the Norwegian State Housing Bank a few years later. The dwelling was carefully designed to look like an ordinary dwelling with a lay-out most people were familiar with. The bath was larger and the doors wider than in standard houses at the time. In addition, if the house were to have more than one floor, the entrance floor had the capacity to function as a complete dwelling with kitchen, bathroom, living room and a master bedroom. The idea was sensible.

In houses with Lifespan-design it could be possible and to live a lifespan with or without disabilities. Some consciously misread the concept as Lifetime dwellings associating the concept with some sort of home atonement, but this joke did not catch on. The concept was a success, not necessarily because the Norwegians are particularly sensible and foresighted, but more likely because the Norwegian Housing Bank gave better financial terms to Lifespan house builders.

The design of the Lifespan dwelling was based on the traditional design of dwellings with some qualities of accessibility for people with disabilities added. Accessibility was still a rather neutral concept. Most researchers who studied the term concluded that accessibility was a collection of detailed requirements to accommodate the needs of people with disabilities. No more and no less.

There is no doubt that The Americans with Disabilities Act of 1990 [6] (ADA) vitalized the thinking about accessibility and at the same gave inspiration to have a new look at the" for all" ideology. The ADA intended to protect against discrimination based on disability. Enacted by the U.S. Congress in 1990, it affords similar protections against discrimination to Americans with disabilities as the Civil Rights Act of 1964. The United Nations followed up with The Standard Rules on the Equalization of Opportunities for Persons with Disabilities in 1993 [7]. The purpose of the Rules was to ensure that girls, boys, women and men with disabilities, as members of their societies, may exercise the same rights and obligations as others.

Ideas which were shared by small avant-garde groups in Norway only a few decades earlier were now communicated by the UN and through US legislation. At the same time efforts were made to develop a more comprehensive understanding of accessibility which pointed clearer towards equality and non-discrimination. A number

of definitions and concepts were suggested: design for all, inclusive design and more. In Norway Universal Design and the definition developed by Ron Mace [8] was used as a platform for new accessibility initiatives. In the report "Universal Design: Planning and Design for All" [9] the concept was presented and discussed. The importance of using Universal Design as a prerequisite in all planning, including city and regional planning was underlined. The Ministry of the Environment, the planning authority in Norway, started testing the concept of universal in city and regional planning in 1998. This expanded to extensive action plans with projects involving a vast number of municipalities and regions.

2. Wall to Wall Strategies and Plans from 2002

2.1. Governmental Programme of Action for Universal Design 2002 – 2004

The action programme for Universal Design was completed in 2002-2004. It had as a target decision-makers and employees at all levels of public administration. The aim was awareness and training and to contribute to good solutions in practice. The financial resources to operate the programme were modest. Ten ministries took part in the program. They set up measures together with their national agencies as to both organizing implementation of Universal Design as a new topic in their duty, and realizing actions.

The programme followed an active period from the Ministry of the Environment with information campaigns addressed to the regional and local planning authorities [10] Focus in the period 2002 - 2004 therefore more precisely was to enshrine Universal Design in the physical environment or policy documents both on national and regional level. In this the program has made its mark.

Norwegian Institute for Urban and Regional Research concludes in their evaluation:

"It appears to be particularly cost effective to get on the agenda of development projects dealing with the physical environment and thus achieve a significant gain with relatively little effort. The program has helped to changing attitudes among public employees." [11]

The programme was involved in many conferences on Universal Design and generally spread knowledge satisfactory. But the evaluators also observed a high turnover in the participants for the operational program, in the sense that they just a few years after do not longer working at the same place, which means that knowledge disappears from the workplace. One should nevertheless not underestimate the importance of their knowledge transferred to their new workplaces, since Universal Design is such a far-reaching principle.

2.2. Government Action Plan for Increased Accessibility for Persons with Disabilities 2005 – 2009 - Plan for Universal Design in Key Areas of Society

The action plan was launched by two ministers late in 2004. The Minister of the Environment represented the strategic thinking connected to the planning and building system and processes that could implement Universal Design in different sectorial authorities, the Minister of Health and Social affairs wanted to statute his main responsibility for the policy for people with disabilities, connected to a long period developing agreements and supporting activities handled in the Norwegian welfare

system. The mainstream approach in the Action Plan 2005 - 2009, underlined the sectoral approach on the national level: 15 ministries announced as many as 90 actions as their responsibility.

The action plan combined budget priorities and initiatives that should be taken, involving national agencies for the operation of the measures. Education and research institutions were engaged to develop higher competence in Universal Design. Some very important measures had a basic view: they involved practitioners in the municipal sector. During the period of the Action plan a hundred municipalities was involved in actions connected to tree specific measures (see Table 1).

An important measure was the ambition to implement Universal Design as a main goal in the Planning and Building Act. This was realised by the adopting of the revised law in 2008.

Sphere	Measure	Description
Buildings and outdoor areas BU 29	Eliminate 100 critical barriers to accessibility nation-wide.	A national campaign to eliminate 100 critical barriers to accessibility. The municipalities are invited to submit proposals. Implementation is expected to take place in cooperation between the state and sector authorities, the municipalities and the relevant owners,
Buildings and outdoor areas BU 30	Refinement of the training programme "Planning for All".	Revision of the training programme "Planning for All" and continued use of the package in local and regional course activity.
Buildings and outdoor areas BU 31	Increased emphasis on the application of Universal Design principles in municipal activities.	Support to pilot-project municipalities to promote the integration of Universal Design principles into the strategies underlying municipal activities. Particular importance is attached to strengthening links between municipal planning activities and the exercise of available financial instruments.

Table 1. Tree measures for inspiring, involving and creativity in the municipal sector

All the measures included in the action plan from 2005 were grouped together by sphere: transport, buildings and outdoor areas, information (ICT) and other aspects of society. A complete table specifies which ministry is responsible for follow-up as well as the date or time-frame for implementing and, where available, the financial framework. One of the measures adopted by the Ministry of Environment vis-à-vis the ministries, was to offer stimulus funding for new projects.

An evaluation [12] concluded that coordinating efforts by Ministry of the Environment in develop the plan before launching and use supporting funding was a criteria for success, but also sometimes an uncomfortable challenge for some of the ministries, according to different way of working. It can feel strange for officials unused to working on projects and applications.

The evaluator concluded that several sectors did good work to develop policies and projects – the sector principle works. They found that work on Universal Design was anchored in general plans, letters of allocation and reporting procedures. They found clear progress over the period especially in the Transport Ministry's policy area.

Responsibility for ICT was transferred internally under the Ministry of Government Administration and Reform during the period, a change which appeared to be working satisfactorily.

As far as the evaluator could see the stimulus funds have also allowed the Ministry of Environment to run pilot and development programmes targeting the municipalities, which in many areas are the principal policy implementing bodies in relation to Universal Design. 17 municipalities were through the measure BU31 Universal Design as municipality strategy pilots, expressed with examples and articles in the report with the same name. [13]

2.3. Governmental Action Plan for Universal Design and Increased Accessibility 2009 – 2013 - Norway Universally Designed by 2025

The action plan 2009 - 2013 had ambitious perspectives, although Norway universally designed by 2025 was clearly expressed as vision, not a target. In an evaluation of the action plan [14] Oslo Economics concluded that without political vision on this field, they could not observe a natural process within the society contributing to Universal Design and for that reason, they consider an action plan to be necessary in achieving political goals.

The action plan should support the implementation of the new Anti-Discrimination and Accessibility Act and the new Planning and Building Act.

The Ministry of Children, Equality and Inclusion had the coordinating responsibility for the plan. It contented 50 measures on the areas of responsibility to 15 ministries. It followed the sectoral approach, with the ministries or their underlying agencies as responsible to implement the measures in the plan. Some of the measures had wider approach than sectors alone, and included coordination on different levels.

The action plan described instruments as regulations (laws and guidelines), supported higher competence and supporting by funds. Changing in understanding and knowledge shall isolated and in common lead to Universal Design results. Registered low or lack in efficiency, achieved targets or coherence between cost and benefit, are a basis to evaluate a potential for improvements.

In their evaluation Oslo Economics concluded: "the wide commitment in many sectors has shown results according to the political vision for Norway to be Universal Designed by 2025."

They recommended the commitment from the action plan to be continued, like:

- 1. Continue the efforts of the action plan
- 2. Ensure a clear descriptions of the goals of each measure
- 3. Make sure to include relevant stakeholders in designing the measures
- 4. Make sure a clear description of measures to increase awareness and knowledge of Universal Design.
- 5. Make sure that scope of the measures to increase awareness and knowledge of Universal Design is broad
- 6. Best practice from the action plan should be made available
- 7. Continue the use of stimulating measures

The purpose of the evaluation was to assess the initiated measures, their effects and benefits so far and possible areas of improvement and covering the action plan's scope: amendments, promote knowledge, national development project in county councils and local authorities and standards.

Surveyed measures in the evaluation were chosen after these criteria: large range, that the measures affect several sectors, touching many actors and great importance to them it touches. In addition, the measures shall represent the four priority areas: construction, planning and outdoor areas, transportation and ICT.

Methodical the evaluation was primarily an impact evaluation or an assessment of goal achievement. The evaluator identified and assessed the effects of the measures against the objectives of the plan, the overall working areas and the specific measures.

Three important findings in the evaluation were:

- The new Planning and Building Act has contributed to increase the degree of accessibility so that all new buildings for workplaces and public buildings are being universally designed
- The Anti-Discrimination and Accessibility Act only to a small extent has made an impact on the owners' and the entrepreneurs' incentives to apply the new Planning and Building Act.
- The costs of Universal Design of buildings for workplaces, public buildings and facilities and outdoor areas are considered acceptable when the increased quality and accessibility is taken into account.

Few specific activities within the measure have been given in the action plan, and consequently the responsible part of a measure has the liberty to design the activities.

To what extent measures to increase awareness and knowledge of Universal Design have reached its target group is varying. However, it is demanding to measure improvements in knowledge methodically. In important measures according to this, the evaluators found:

- Extensive participation on the measure K1 National development project in county councils and local authorities
- Courses in the Measure K5 Programme to improve the expertise of politicians and local authority employees have been held in half of the communities throughout the country.
- Measure P1 Strengthen Universal Design in local authority and regional planning has been part of other activities arranged by those responsible for the measures.
- Several measures to increase awareness and knowledge of Universal Design, but the perception of the content is ambiguous

Municipalities and counties were the target group for measures in the action plan to cover the target group's need for knowledge. To some extent these measures are overlapping and the evaluator's opinion pointed a problem: Overlapping measures make it difficult to choose most appropriate measure for their needs.

Broad processes where the target group should be consulted seems to ensure that their needs are being met, as well as contribute positively to the marketing of the measure, as done in the measure K1. By ending the measure K1 88 municipalities (20 %) and eleven counties (60 %) have participated with high and own run activities [15].

Standards for Universal Design define the criteria to meet the requirements for Universal Design. The use of standards is more common amongst private planners than amongst employees in municipalities and counties, as presupposed.

2.4. An Intermediate Period in 2014 and 2015

The new government - a right wing coalition - elected late in 2013 wanted to build new considerations for the policy of Universal Design on their political platform. As a result the action plan period 2009 - 2013 ended without a new in direct succession. Some of the measures from the action plan 2009 - 13 were prolonged and some new agreements with different kind of partners, especially in the municipality sector were established. One was a successor to the measure K1, named K2 Universal Design bound for new peaks and a network called Low-hanging fruits organised of The National organization for the Municipal Sector.

2.5. The Government's Action Plan for Universal Design 2015 – 2019

The new government launched a new action plan January 2016 for the period 2015 – 2019. The vision Norway universally designed by 2025 toned down to: "a society in which everyone can participate" [16].

The Government declare that it is acting to comply with the UN Convention on the Rights of Persons with Disabilities. Accordingly, the government plans to continue working for a universally designed society. About 50 measures were allocated by eleven ministries.

In the new action plan the Norwegian Government states that:

- Universal Design benefits both individuals and society
- More people working and being educated is an asset
- The action plan is an important instrument
- Norway is well equipped to continue working for a universally designed society
- Technology can improve welfare in everyday life

This leads to the main priorities in the action plan: ICT and welfare technology.

The objective of the ICT policy is to renew, simplify and improve the public sector. To increase the digital skills and participation among the population, in addition to focusing on Universal Design of ICT solutions is necessary. The number of people who are not on the Internet should be halved from 270,000 to 135,000 within five years.

As the age structure of the population changes. Future care services must empower users to increasingly become a resource in their own lives, and welfare technology must give users new ways to cope with everyday life.

Measures that have been implemented include work on standardisation and infrastructure, development and testing in municipalities and development of guidance and training tools for local councils.

It will take a significant, concerted effort to develop and implement welfare technology for care services in Norwegian municipalities.

To ensure continued progress towards a universally designed society, the government want to maintain and monitor the work for Universal Design on other key areas of society than ICT and welfare technology. Indicators and targets show that there is slow but steady progress in most areas. For example, the number of public buildings with access for the mobility impaired increased from 4 per cent to 7 per cent from 2013 to 2014, but illustrates that it may take time to upgrade existing buildings and existing facilities and outdoor areas. The key areas for better accessibility are buildings, transport, outdoor spaces and digital communication. They are all essential for people

to have access to education, work and an active social life. 60% of the listed measures are connected to these key areas.

The sectoral responsibility principle is fundamental to the implementation of the measures in the plan, but the Ministry of Children, Equality and Social Inclusion is the coordinating ministry for this action plan, with special responsibility for cross-sectoral challenges and measures. Action plan stimulus funds of NOK 26 million (2015) will be directed towards cross-sectoral and high-priority measures. A forum will be created to exchange information and views on measures, profile and progress of the action plan. The plan will have an effective duration of 5 years.

3. What Did We Learn? What Did We Gain? What Now?

In the evaluation of the Governments Action plan for Universal Design and accessibility 2009-2014 it was concluded that Universal Design and accessibility had few drivers in society. Development was dependent on the leadership and initiatives of the Government and local authorities.

A number of means were used to reach results. Besides the extensive networks established nationally, Universal Design were included in a number of laws and regulation, inter alia the Planning and building act in 2008 and in the building regulations in 2010. In 2008 the Non-discrimination and accessibility act was passed defining the lack of Universal Design as discrimination of people with disabilities.

Progress can be seen in the data collected in the various sectors (see Figure 1). New buildings out-door environments, websites and more are all designed according to Universal Design, but there are still a lot to do with the existing environment.

- 45% of municipal authorities currently have a plan for Universal Design (2014).
- 16% of county authorities currently have a plan for Universal Design (2014).
- 7% of public buildings in Norwegian municipalities have entrances for the mobility impaired. (21% for the visually impaired).
- 32% of public buildings in the Stavanger city centre have entrances for the mobility impaired (2014).
- 62% of buildings managed by the Directorate of Public Construction and Property have step-free access to the main entrance (2015).
- 3% of Norwegian railway stations (10 stations) were universally designed (2015).
- 30% of Norwegian railway stations (103 stations) were accessible (2015).
- The Universal Design requirements are met by 70–80% of Norway's major airports (2015).
- 33 of 36 ferries on stretches of state roads satisfy Universal Design requirements (2013).
- 51% points achieved on average by websites for private and public enterprises (2014).

Figure 1. Status for Universal Design and accessibility in selected sectors.

Universal Design and accessibility will be important tasks in the years to come. The changes in the age distribution in the population, with a growing proportion of senior citizens, can be expected to increase the need for a universally designed society.

And Universal Design, will it remain a particular design-concept in the future or will it simply be what everyone associates with good design? We should have good reasons to expect the latter.

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