

NOTAT

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EBST/mli
Nordic Address Meeting 2010

Country Report Denmark: Addresses 2009-2010

1 Address Authorities and cooperation

1.1 Core authorities and responsibilities

1.1.1 Address authority

The Danish Enterprise and Construction Authority (EBST/www.ebst.dk) is the national authority for addresses in Denmark as well as for the Danish address register, which is a part of Building and Dwelling Register (BBR). EBST is an agency in the Danish Ministry for Economic and Business Affairs.

Denmark's 98 municipalities have the practical authority for addressing, i.e. for the assignment and for the registration of street names, addresses as well as additional identifiers that belong to the address.

Post Denmark (www.post.dk) has, according to the concession agreement with the Traffic Authority (TS, www.trafikstyrelsen.dk), which falls under the Ministry of Transport, the responsibility for the subdivision of Denmark in postcodes. Since 2007, the postcode has been part of the official Danish address. EBST and TS has a certain influence (rights to veto) to certain changes in postcodes.

1.1.2 Population registration

The national authority for civil registration is the Central Office of Civil Registration (CPR-Office), which is responsible for the Central Population Register (www.cpr.dk). CPR-Office belongs to the Danish Ministry of Interior.

Registration in CPR is conducted by the municipalities and takes place on the basis of the official addresses provided by the municipalities in the BBR. Civil registration is based on BBRs "unit address" i.e. the precise residential address for each dwellings or apartment (similar to Norwegian "boligadresse" and Swedish "lägenhedsadresse").

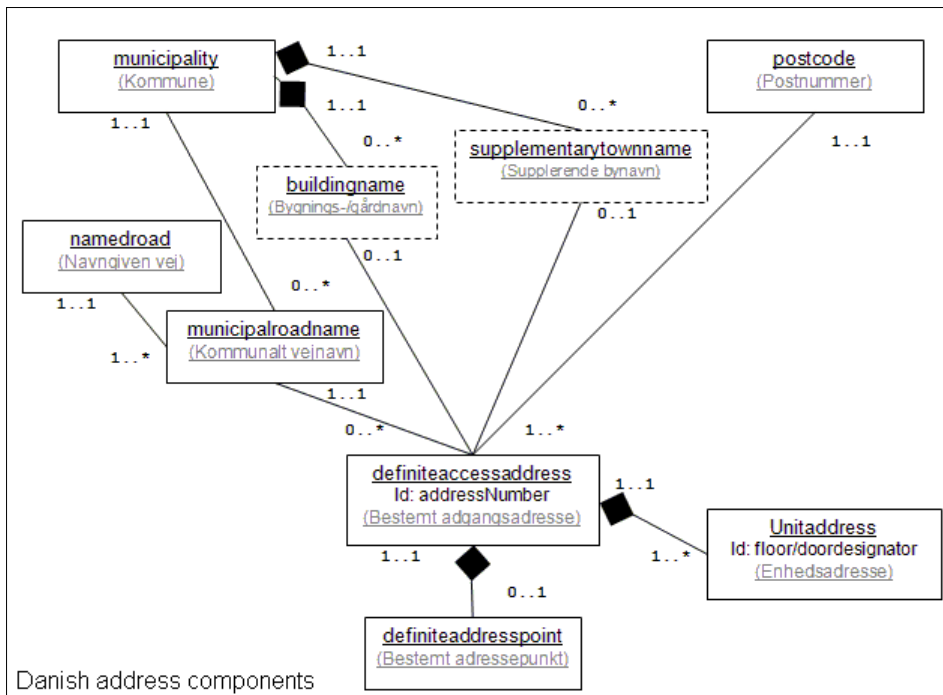
1.1.3 Population Statistics

Censuses and population statistics are carried out by Statistics Denmark (www.dst.dk), which (like EBST) belong under the Danish Ministry for Economic and Business Affairs.

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Since the 1980s the Danish censuses and population statistics have been "register based", ie. based on a correlation of personal data from the CPR with dwelling information from BBR, linked together by the common unit address identifier.

1.1.4 Business Registration

The national business registration is carried out by The Danish Commerce and Companies Agency (EogS, www.eogs.dk) which is responsible for the Central Business Register (www.cvr.dk). EogS also belong under the Danish Ministry for Economic and Business Affairs.

CVR is updated by EogS itself and by the Danish Tax Authority (Skat) and The Statistics Denmark (DST). The registration is only partially based on the the official addresses provided by municipalities in the BBR.

1.1.5 Spatial infrastructure, INSPIRE

The overall authority for Denmark's spatial infrastructure and the INSPIRE directive is carried out by the National Survey and Cadastre (www.kms.dk), which manages the national land mapping, the Danish cadastral system and the provision of sea charts. KMS belong under the Danish Ministry of the Environment.

Addresses are defined as reference data and as an important component in spatial infrastructure in INSPIRE.

1.2 Cooperation between authorities

1.2.1 General

There has not been established a formal cooperation between the core authorities in the field of addresses. The parties, however, know each other and maintain contact and cooperation on an ad hoc basis.

1.2.2 Cooperation with municipalities

In 2009-2010 the Enterprise and Construction Authority (EBST) have had a close cooperation and interaction in the address field with the municipalities and with Local Government Denmark (www.kl.dk).

The cooperation between EBST and the municipalities include development and adaptation of legislation and regulations, guidance and training, development of the address register in BBR, data quality and better interaction between public base registers.

2 Address Legislation and procedures

2.1 Background

2.1.1 Legislation and regulation

The Danish legislation on addresses is found in the Articles (§ §) 3a to 3g of the Law on Construction and Housing Register (www.retsinformation.dk/Forms/R0710.aspx?id=129786).

The detailed regulation on addressing is in the statutory order on street names and addresses:

www.retsinformation.dk/Forms/R0710.aspx?id=27425

English version of the statutory order: http://www.adresse-info.dk/Portals/2/Dok/DK_Statutory_order_on_road_names_and_addresses.pdf

2.1.2 Instructions and Information

In order to help municipalities, building developers, land owners and other, the EBST in March 2009, in cooperation with municipalities and Post Denmark, released a guidance and an illustrated collection of examples in address and street name assignment.

http://www.ebst.dk/publikationer/Fastsaettelse_af_adresser_-_Vejledning/index.htm

www.ebst.dk/publikationer/Fastsaettelse_af_adresser_-_Eksempelsamling/index.htm

At the website www.adresse-info.dk EBST have collected the most relevant information about the Danish addresses and address data. The site has three target groups: citizens, IT companies and municipalities.

2.2 Changes in legislation

2.2.1 Address number posting

December 16th 2009 the Danish parliament adopted a change in the BBR Act which means that municipalities will be able to issue an administrative fine for owners who fail to post a proper address number plate, as required in the BBR Act § 3c.

Simultaneously, the existing authority for the minister to issue a more detailed regulation in a statutory order was extended, so that it now also applies for posting of address numbers.

This means that EBST in the address statutory order could lay down rules about how owners must post a sign with the approved address number.

2.2.2 Changes merged into the new BBR-Act

On February 8th all changes in the act during the years 2003-2009 was compiled and merged into the original Act in a new order ("lovbekendtgørelse"). This makes the BBR Act and the sections on addressing easier to overview and to read.

2.2.3 Statutory order on unambiguousness of street names

In 2008 the "Statutory order on unambiguousness of street names" was put into force. The impact of the order was that municipalities had to change approximately 350 road names that were not unique within the appropriate post code.

In addition EBST also had agreed with Post Denmark that changes to post codes should solve the some 100 remaining conflicts between road names.

Status today is that virtually all the identified conflicts are resolved; only a few municipalities still have to implement a couple of changes in street names.

Although it has been a significant effort for municipalities to resolve the many conflicts of street names, the experiences of the process have been good; e.g. only few citizens have posted complains, and we only have a few examples of disagreement between two neighboring municipalities.

2.3 Processing

2.3.1 Statistics 2009-2010

EBST supervises municipalities and other stakeholders on matters of legislation and regulation regarding addresses and in the practical addressing processes. EBST also has the function as an appeal authority in conflicts on addressing, i.e. if an individual or company is dissatisfied with the decision of a municipality relating to street names or addressing.

Finally EBST must comment on any proposed changes in the postcode system that Post Denmark wants to implement, including changed boundaries between two postcodes.

Between May 2009 and May 2010 EBST has written 40-50 responses to questions from municipalities, citizens or others.

During the same period EBST has received 15 complains on a municipality decision on street names or addresses and managed 10 applications from Post Denmark on changes in existing postcodes.

2.4 Guidance and training

2.4.1 Address Workshops 2009-2010

In collaboration with the Danish Geoforum EBST has completed two full-day courses on addresses and address data, respectively in Copenhagen and Aalborg. Agenda and presentations from the two events can be found at Geoforums website: October 2009 and March 2010 :

www.geoforum.dk/Default.aspx?ID=8843

www.geoforum.dk/Default.aspx?ID=9362

For each of the events were about 40 participants, mainly from the municipalities, but also from utilities, GIS and IT companies.

The agenda included a review of laws and regulations, information on the address data on complaint handling and how to avoid complaints. A municipal address expert talked about how the municipality works with addresses and a representative of a private firm told of the private sector wishes for good addresses.

In the workshop a couple of group tasks and exercises in practical addressing were organised - as well as an "Address Trivial Pursuit". Geoforum already have people on the waiting list for a next workshop in autumn 2010.

3 Address data: Registration, distribution, use and utility

3.1 Registration of the address data

3.1.1 New Building and Housing Register in operation 2009

After more than 15 years of preparation and waiting a new Building and Dwelling Register (BBR) was introduced December 1st 2009!

The new BBR is now fully operational; but the correction of a number of shortcomings and other agreed improvements still has to be done. The New BBR has its own website: www.bbr.dk

BBR primarily registers information on all Danish buildings and dwellings, but BBR is also designated as Denmark's base directory of addresses.

This means that all addresses assigned by the municipalities must be recorded there.

In the development process the municipalities, especially a small reference group of BBR and address experts, has made a very significant and valuable contribution.

As overall custodian and authority for the register, EBST have had a good dialogue and good cooperation with Denmark and with the local monitoring group.

3.1.2 New BBRs building with open interfaces

The architecture of BBR has a central "core" consisting of the database itself and the basic, shared business logic.

In addition, there is a standard client application, "BBR municipality" (da: BBR Kommune) which is offered all municipalities as user interface to register data in the BBR. This client application is purely text based and contains no map display or GIS functions.

Outside the BBR core, there are a number of open interfaces and services, which allows third party developers to build IT solutions and applications to municipalities - as a substitute or complement to "BBR Kommune.

3.1.3 Local address solutions for New BBR

To underpin BBRs function as base register for addresses there has already been developed seven local solutions by private 3rd party IT or GIS vendors. All solutions include different types of maps and GIS functions.

The coming years will show how many of the solutions municipalities will choose to use and how many other local solutions will be developed for the new BBR.

3.2 Distribution of address data

3.2.1 The Official Information Server, OIS

BBRs address data is primarily distributed to users via the Official Information Server, OIS, which is administered by EBST. OIS includes data from 8-10 public base registers within the property data area.

Currently the OIS has a contract with 22 OIS so called "OIS data distributors", who typically are private companies that (in competition) acquires data and make them available to different users.

Apart from the Danish registration data, all data in OIS available to distributors without charge for data. This scheme was introduced in 2002 as a result of an agreement between the government and the municipalities.

The agreement means that Danish address data incl. address coordinates is available, and can be used, reused and further distributed to a 3rd, 4th and 5th party etc. without any other payment than marginal cost of distribution plus a possible value adding performed by the data distributor.

In 2010, the new BBRs address data will be distributed through the OIS.

3.2.2 *Address Webservices AWS*

EBST and the National Survey and Cadastre (KMS), started in 2009 a pilot project of the so called "Address Webservices" (AWS), which makes the official address data available through Web services.

AWS is based on SOAP and WMS and consists of approx. 35 methods or functions that can be used as IT "components" by a developer that wants to include address functionality in an application, without having a local copy of all addresses. AWS includes methods to "look up", "find", "parse", "validate", "convert", "geocode", "reverse geocode" plus a WMS-layer address.

Users have received concept of AWS very positive.

Experience shows however that the large, core users who will have the greatest advantage of the AWS concept, requires assurance of safe and uninterrupted operation, of high performance and very short response times. In addition, there are requests for new features are not yet a part of AWS.

EBST are underway to explore the alternatives to ensure an expanded funding of AWS - including a proper reliability, high performance and continuous maintenance and development.

3.3 **Use and utilization of address data**

3.3.1 *Value Analysis of the 2002 "free of charge data agreement"*

In the spring of 2010 EBST started an analysis to assess value of the "free of charge data agreement" which meant that Danish address data in 2002 was made available for private and public users without payment.

Preliminary results indicate that official Danish address data from the BBR is today distributed to at least 1,236 different parties and applications, of which 286 uses nationwide data. Approximately 70% of these are within the private sector, while approx. 20% is delivered to the State and regions and approx. 10% to municipalities.

The study points out that at least 12 of the applications that use the official address data, has more than one million users.

EBST is currently estimating the economic value of this relatively large recovery of public address data in Denmark.

3.3.2 *PSI: indicators for the reuse of public address data*

In relation to the EU Directive on the reuse of Public Sector Information (the PSI), EBST contributes to an expert working group that advises the EU commission.

The purpose of the work is to contribute to the development of a number of "economic indicators" for the reuse of PSI address data. The indicators

should be used to compare the situation in individual Member States and the development over time in each country.

Work is ongoing but can be followed on the website "ePSI Platform" (www.epsiplatform.eu).

Information on the Working Group found here:

http://www.epsiplatform.eu/psi_library/reports/the_ec_public_sector_information_group_psi_group/psi_working_group_on_psi_measurement_indicators_address_information.

3.3.3 Reuse of data within the Economic and Business Affairs

Together with other agencies within the Ministry of Economic and Business Affairs, EBST participates in a project with the title "Report only once"

The objective of the project's is to simplify (especially) the reporting form private business entities' to public authorities, using methods which ensures that information already received by one authority can be shared with other agencies.

Oner of the primary purposes of EBSTs participation in the project has been to ensure that the public address data is reused in all parts of the business register, first and foremost in the Central Business Register, CVR.

4 Specific projects for addresses and address data

4.1 Special Partnerships

4.1.1 Cooperation between EBST and Post Denmark

Post Denmark and EBST have agreed to cooperate in the improvement of the situation for settlements and areas where there are too few official addresses to ensure good mail delivery.

The problem exists for example in large industrial or business complexes, in commercial centers with many individual shops and in garden allotment areas, where people reside for the summer season.

The task is part of the "Business Case Study" that EBST for the moment is about to perform (see below point [4.2.2](#))

EBST and Post Denmark has also agreed to investigate the reasons for the measured differences (0.5 to 1.5%) which currently occurs between the population register addresses and official addresses in BBR. There is no agreed timetable for this review.

4.1.2 Cooperation between EBST and 112

EBST have a regular contact and dialogue with National Police's 112 Secretariat, which have the responsibility for the Danish 112 call centers. The dialogue also includes the IT-company that performs the continuous

updating and development of the 112 system with road names and address data.

4.2 Action plan for addresses and Business Case study

4.2.1 *Addresses - ready for the digital Denmark*

In March 2009, EBST prepared an action plan entitled "Addresses - ready for the digital Denmark."

The action plan had three interrelated target areas:

- *Denmark's best road guide*: A strong and precise network of street names and addresses, tailored to meet user's needs.
- *Current address information*: Current address data must be available as a single "resource" which reduces costs for businesses, government and citizens.
- *Effective Address management*: Maintenance of addresses and address data should be simplified, streamlined and ensured a higher quality.

The Action Plan describes a number of specific planned and potential activities within each of the three target areas.

4.2.2 *Business case study*

In 2009 EBST have launched a business case analysis which seeks to assess the benefits and the costs which will be a result if the Action Plan for addresses is realized.

The business case analysis uses the Danish "Joint public business case model" for digitalization projects.

The study is also based on independent analysis and solution descriptions as well as on numerous interviews with key individuals and stakeholders who will be affected by the improvements and tasks resulting from the action plan components.

The study should be completed during autumn 2010.

4.2.3 *Simple information on new roads and addresses, (da: NOVA)*

In autumn 2009 EBST and the Local Government Association (KL) agreed to develop a new solution that should ensure that key users such as 112, police, emergency services and GPS suppliers quickly will get information about the location of new street names.

The solution shall replace an earlier solution (the so called "Electronic Bulletin Board") which is based on that municipalities send an email with an attached overview map (typically as a pdf) showing the location of a new road name.

EBST has given the project the name "Simple information on new roads and addresses" (da: NOVA). The new solution must first and foremost

improve the infrastructure of and interaction between the relevant base data and maps, including BBR, CPRs Road register and the development of a joint public geographic administrative basemap - the so-called FOT project.

Project NOVA is presently being prepared, as the parties are carrying out feasibility studies among key stakeholders.

5 International issues

5.1 Infrastructure for Spatial Information in Europe, INSPIRE

5.1.1 Background

The INSPIRE directive was in December 2008 implemented legally in Denmark by the Law on Infrastructure for Spatial Information (da: geodataloven): www.retsinformation.dk/Forms/R0710.aspx?id=122571

The data theme "addresses" is included in Annex I.

This means that public authorities covered by the directive which holds a data set concerning addresses, will be covered by the INSPIRE provisions on metadata, interoperability of datasets and network services, as well as monitoring and reporting.

In Denmark the National Survey and Cadastre (KMS) is the national contact point for INSPIRE. Currently KMS is establishing a Danish geodata-portal, in cooperation with its sister mapping institutions in the Nordic region.

5.1.2 Preparation for implementation

As being the national authority for addresses, EBST has contributed to the first report on monitoring and reporting to be sent to the EU commission in May 2010. EBST has also compiled the first discovery level metadata description of Danish address data.

EBST and KMS has contributed to the development of INSPIRE data specification addresses with a Danish expert, Morten Lind, who in 2008-2009 participated in INSPIRE Thematic Working Group (TWG) for the data theme "addresses".

EBST has contributed with domain knowledge in the translation of the address section of the INSPIRE implementing rules for interoperability of data sets within Annex I.

EBST have appointed Karen Skjelbo as a Danish expert in INSPIRE's Thematic Working Group on the annex III theme "buildings".

Apart from this EBST has not yet decided or planned systematic preparations to meet the INSPIRE requirements for metadata, data interoperability and network services on addresses.

5.2 Other international topics

5.2.1 *Nordic Address Forum*

In 2010, it is Denmark's turn to organize the annual meeting in the Nordic Address Forum.

At last year's meeting in Myvatn, Iceland, the municipality of Odense offered themselves as hosts. The "Nordic Address Meeting 2010" therefore takes place in "Odense Castle" on June 3 to 4. This year's meeting is entitled: "Addresses for the users - from daily task to utilization".

Odense municipality made a great effort in the practical preparations of the meeting, which is sponsored by Odense municipality and EBST. The meeting is expected to gather 35 experts from Finland, Faroe Islands, Greenland, Iceland, Norway, Sweden and Denmark.

5.2.2 *EURADIN*

Together with partners in Finland, Norway, and Sweden, Denmark has participated in the EU-funded project eContentplus European Address Infrastructure (www.euradin.eu) which ends in 2010. EBST and the company Grontmij-Carl Bro (www.cmcb.dk) have been Danish partners in the project.

As part of the project EBST and GMCB have ensured that the official Danish address data has been included in the project's pilot web service that makes the EU address data seamlessly available across country borders and national data formats.

EBST has also actively participated in the organization of the "First European Conference Address - Addressing the Future" that is hosted by EURADIN in Brussels on 15th June 2010.

Denmark also expects to participate in developments of the "European Address Forum" which will be a loosely organized network and forum of European stakeholders and actors in the field of addressing.

5.2.3 *ISO/TC211 Geographic Information PT 19160 - Addressing*

EBST also participates in Project Team "19160 - addressing" under the ISOs Technical Committee TC211 for geographic information. The project team PT 19160 shall review and compare a existing international, regional and national address standards, in order to identify the potential need for additional global standardization.

Among the standards reviewed is the Universal Postal Union (UPU) S42, OASIS CIQ Version 3.0, the U.S. FGDC Address Standard, EU INSPIRE Dataspecification and Guidelines for Addresses and the address standard for Australia and New Zealand.

The work started in in Quebec, Canada in November 2009 and is expected to be completed with a number of recommendations in the autumn of 2011.