

# **Country Profile: Denmark**

Country Profile (PDF)

## **Country Resources**

### Topographic

Series Denmark 1:50,000 Scale Topographic Maps	<b>Publisher</b> KMS	<b>Scale</b> 1:50,000	<b>Years</b> 2015	Sheets 239
Aeronautical				
Series	Publisher	Scale	Years	Sheets
Denmark 1:500,000 Scale Aeronautical Charts	NAVIAIR	1:500,000	2019	1
Norway 1:500,000 Scale Aeronautical Charts	AVINOR	1:500,000	2014	3
Thematic				
Series	Publisher	Scale	Years	Sheets
The World 1:30,000,000 Scale Topographic Map Series 1145 (NGA)	DMA	1:30,000,000		2

# **Global Census Archive: GIS Census Data**

East View Geospatial has an ongoing effort to add GIS census data to our Global Census Archive program. Please contact us for the status and availability of Denmark census resources.

# **Global Resources**

#### Topographic

Series	Publisher	Scale	Years	Sheets
Soviet Military City Plans	VTU GSh	Varies	1944 - 2003	3,020
Soviet Military 1:100,000 Scale Topographic Maps	VTU GSh	1:100,000	1947 - 1999	24,897
Soviet Military 1:200,000 Scale Topographic Maps	VTU GSh	1:200,000	1949 - 2009	17,799
Soviet Military 1:500,000 Scale Topographic Maps	VTU GSh	1:500,000	1953 - 1998	3,093

### Nautical

Series	Publisher	Scale	Years	Sheets
NGA Nautical Charts POD Certified (All Scales)	NGA	Varies	1943 - 2013	4,517

### Aeronautical

Series	Publisher	Scale	Years	Sheets
Joint Operations Graphic (JOG 1501A) 1:250,000 - Aeronautical	DMA	1:250,000	1958 - 2007	4,204
Tactical Pilotage Chart (TPC) 1:500,000 Scale - Aeronautical	DMA	1:500,000	1967 - 2006	598
Operational Navigation Chart (ONC) 1:1,000,000 Scale - Aeronautical	DMA	1:1,000,000	1969 - 2001	243
Jet Navigation Chart (JNC) 1:2,000,000 Scale - Aeronautical	DMA	1:2,000,000	1971 - 1999	117

Global Navigation and Planning Chart (GNC) 1:5,000,000 Scale – Aeronautical	DMA	1:5,000,000	1981 - 1999	27
Geoscientific				
Series Soviet Military 1:1,000,000 Scale Topographic Maps	<b>Publisher</b> VTU GSh	<b>Scale</b> 1:1,000,000	<b>Years</b> 1948 - 1994	<b>Sheets</b> 1,089

**Note:** East View Geospatial is continuously sourcing new resources that may not yet be listed in Global Explorer. Please contact us if you have geodata needs beyond what is listed above and we will be happy to discuss available off-the-shelf and custom solutions.

Shop all products in Global Explorer

# **Historical Country Mapping Information**

Jump to: Topographic | GIS/Vector | Nautical | Aeronautical | Geological/Scientific | Soil | Vegetation/Forestry | Atlas | Cadaster | Tourist/Reference | Census/Demography/Statistics

Country Profile (PDF)

#### **Topographic**

Kort- og Matrikelstyrelsen (KMS) was established in 1989 by combining the Geodætisk Institut with the Hydrographic Department (Søkortarkivet) and the Cadastral Directorate (Matrikeldirektoratet). The organization is therefore responsible for topographic and cadastral mapping and nautical charting of the land and waters of Denmark, the Faroe Islands and Greenland, as well as maintenance of the geodetic and gravity network. Descriptions of the maps of Greenland and Faroe will be found in separate sections of this book. KMS is also concerned with developing the digital base map component of a Danish Land Information System, and is working closely with other providers of spatial data to this end. In 1995, KMS prepared *Vision 2005*, a 10-year plan to enable the organization to keep up with changing technology and with user requirements. Subsequently a new contract, *Vision 2009*, has been prepared, which plans to further extend and integrate the use of digital geographical information in both public and private sector.

The predecessor of **KMS**, the **Geodætisk Institut**, was established in 1928, while detailed topographic survey dates back to the nineteenth century, with the establishment of a series of *Maalebordsblade*, or plane table maps, at 1:20 000 and a derived 1:40 000 scale series. These remained the standard maps until the 1970s, but in 1965, modern photogrammetric survey commenced, leading to the production of the modern, high quality series at 1:25 000 and 1:50 000 which have progressively replaced the plane table-derived sheets. The projection for these modern series is UTM, International ellipsoid. The 1:25 000 scale series is printed in four colours with UTM grid and a 2.5 m contour interval, while the 1:50 000 map has a similar specification but with 5 m contours. There is a special 1:50 000 sheet of *Bornholm og Christiansø*. Both series are now completely based on the photogrammetric survey, and there is a revision cycle of about 10 years.

A further series of derived maps at 1:100 000 scale with 5 m contours covers the country in 33 sheets, and is revised more frequently. This series is also available as a bound *Topografisk atlas*, which includes distance tables and an index of 22 000 place names. The fourth edition uses the latest editions of the topographic map sheets (1988-94) organized into 60 double pages with alphanumeric reference grid. A CD-ROM version is also available.

Special 1:100 000 sheets of Djursland, Sundeved og Als, Sydfyn og Langeland and Sydsjæland are also published.

Small-scale maps include a four-sheet 1:200 000 scale road map and an annually revised traffic map at the same scale. The road map is also issued as a small atlas which includes tables of road distances, tourist information and an index of places. A 1:250 000 scale map (Series 1501) is produced for the military.

Back to top

#### **GIS/Vector**

Raster maps of all the topographic series are also available on CD-ROM as a series of 10 regional disks, with an eleventh disk containing all the maps at 1:100 000 scale and smaller. These were launched in 1993, and are revised annually. In 1995, the first version of a *Topografisk atlas* on CD-ROM was launched. This CD for Windows contains 1:100 000 scale mapping of the whole country, together with satellite images, a 1:850 000 general map, information on tourist features, various facts about the country and a quiz. There is a 22 000 name index. It has recently been upgraded and called *Det levende Danmarkskort*, and incorporates route planning software. An English-language prototype, *Map explorer Denmark*, was launched in 1999.

By the end of 1997, **KMS** was using digital methods for producing all their maps. Recent work has been concerned with the development of a seamless digital topographic database for the whole of Denmark, with a spatial resolution of 1:10 000. The project was started in 1993 with a pilot version of the island of Bornholm, and should be complete and operational by the end of the Year 2000. *TOP10DK*, as it is called, is a vector database which is intended to serve as a standard base for the integration of all kinds of spatially referenced data. It will also serve as a base from which topographic maps can be derived.

Back to top

#### Nautical

Hydrographic charting, formerly the responsibility of **Søkortarkivet**, is now carried out within **KMS**. Nautical charts of the coastal waters of Denmark, the Faroe Islands and Greenland are compiled and published, and a conversion to digital production methods was completed in 1997. In addition, the organization has also worked on the production of electronic base maps for use in ECDIS (Electronic Chart Display and Information System) and has collaborated with the UK in the production of INT specification (international) charts. The first ECDIS charts were expected to be ready by the end of 1999. Charts for recreational sailing are issued in several series of *Søsportkort*. The bathymetry of Danish lakes has been surveyed privately by **Thorkild Høy**, and these maps have been collectively published in four volumes by **Strandbergs Forlag** under the title *Danmarks søer*. The volumes include photos, text and historical maps as well as the contemporary bathymetric maps.

Back to top

#### Aeronautical

Aeronautical charts for civil aviation are produced by **Statens Luftfartsvæsen** (Civil Aviation Administration), Copenhagen, and include a 1:500 000 scale ICAO chart, and a 1:250 000 chart of the Copenhagen area. En route charts, instrument approach charts and landing charts are contained in the Aeronautical Information Publication.

Back to top

#### **Geological/Scientific**

In 1995, the geological surveys of Denmark and Greenland merged to become **Danmarks og Grønlands Geologiske Undersøkelse** (GEUS), Copenhagen. This is a scientific research institute under the Danish Ministry of Environment and Energy, and is responsible for advising the Danish Government, and the Home Rule authorities of Greenland, on all aspects of the earth sciences.

The original **Danish Geological Survey** was founded in 1888, and subsequently compiled a variety of maps including an incomplete Quaternary map series at 1:100 000 scale showing surface geology at 1 m depth, and a few pre-Quaternary sheets. Most of these are now out of print.

The principal current series is at the scale of 1:50 000, and was introduced to replace the 1:100 000 scale series. Field work commenced

in 1984 and the first sheet was published in 1986. So far some 32 sheets have been produced. The sheet lines adhere closely to those of the topographic series, and the colour printed maps are described as *basisdatakort*, and give information on the solid geology and subsurface formations. A few sheets are at 1:25 000 scale. Quaternary geology has been mapped extensively and re-drawn from field maps on to 1:25 000 base maps. These black and white maps are not available as printed sheets.

A number of sheets have also been published recently at smaller scales, including 1:200 000 sheets of the structural geology of the Danish Central Graben, a 1:500 000 scale structural map of the upper chalk, and another at this scale of the pre-Quaternary surface which includes adjacent sea areas.

Back to top

#### Soil

Soil mapping has been undertaken by both **GEUS**, which published a 1:500 000 soil map in 1935, and the **Ministry of Agriculture**. The latter was responsible for a major soil survey in the late 1970s and the production of a *basisdatakort* 1:50 000, which was published in colour and classified agricultural land into eight mapping units based on soil texture at 1-20 cm depth. The soil data were also held in a digital database. The office which conducted this survey is now part of the Department of Land Use (**Afdeling for Arealanvendelse** (**AfA**)) at the Danish Institute for Plant and Soil Science at Tjele. This Department holds paper and digital copies of the maps, as well as a digital version of the whole map in ARC/INFO format.

Back to top

#### Vegetation/Forestry

Digital and paper maps of state forestry are produced by **Skov-og Naturstyrelsen**, Copenhagen for forest management purposes, and a number of folders with maps for walking and cycling in forest areas have also been published.

Back to top

#### Atlas

The *Atlas over Danmark* is a long term national atlas project undertaken by the Royal Danish Geographical Society (**Dent Kongelige Danske Geografiske Selskab - KDGS**),

Copenhagen. It is in two series. *Serie I* comprises three volumes, of which the first, *Landskapsformene* by Axel Schou (1949) has been long out of print. Volume 2 is a population atlas and text published in 1961, while the third volume, in English and published in 1992, is devoted to the Danish soil classification. *Serie II* was initiated in 1976, and five volumes have been published of which volume 2, a topographical atlas of Denmark, is out of print. The latest volume was published in 1996 and is devoted to the Faroe Islands (for more information, see under Faroe Islands). These volumes are all distributed by **C.A. Reitzels Forlag**, Copenhagen, and may be purchased separately.

Back to top

#### Cadaster

Modernization of the Danish cadastral system began in 1986, with a programme to convert the maps of each of the 275 municipalities to digital format. This also included the necessity to re-engineer the control points to bring the maps into a common reference system. The conversion was completed in 1997, and in 1998 a Web service, *WEB-c@dastre*, was introduced which allows registered users online

access to cadastral maps and to the parcels register.

Back to top

#### **Tourist/Reference**

The Danish Road Directorate (**Vejdirektoratet**) publishes a number of road maps which may be purchased by the public. These include four single-sheet maps of the whole country at 1:300 000 scale, showing respectively the administrative authority for each road, route numbers, bridges with weight restrictions, and routes allowed or prohibited for transport of dangerous goods. There are also 12 1:100 000 scale county road maps. In the past these maps were produced conventionally, but in future a digital production line will be used. The Road Directorate also markets an intelligent digital road network of Denmark, *Vejnet DK*.

There are relatively few private map publishers in Denmark. **Kortgruppen A/S**, Frederikshavn, specializes in the production of maps of cities and recreational areas and makes use of SPOT imagery. The city maps are checked by local authorities, and are also available in raster and vector digital formats, and a topologically structured database of Greater Copenhagen has been created. **Kraks Forlag A/S** (**Krak**) also has an extensive series of town and city maps, published in four books, one of Greater Copenhagen, one of greater Århus, and the others including respectively 44 towns and cities in Jutland, and 33 on the islands. Folded maps are available for Århus, Odense, Ålborg and Copenhagen, and the Copenhagen map was also released on CD-ROM in 1997. In 1998, Krak produced a 1:200 000 scale map of Denmark in atlas format, including maps of ferry routes, railways and street maps major cities. Other city maps are produced by **Politikens Forlag** (incorporated in their cultural and travel guides). **Folio Legind** produces a variety of motoring and general purpose maps. Most of these private cartographic companies also provide a mapping service to other publishers, such as county and commune authorities, many of whom publish a variety of street maps, tourist, cycling and traffic maps of areas under their jurisdiction. **Geografforlaget** is Denmark's principal educational publisher and distributor in the geographical and geological field. Scan Globe specializes in globe production.

Back to top

#### **Census/Demography/Statistics**

A wide range of statistical data is published by Statistics Denmark (**Danmarks Statistik**), and distributed in paper or digital (CD-ROM) format.

Back to top

Content copyright © 2014 De Gruyter for e-version of World Mapping Today, 2nd Edition

 $Visit\ https://geospatial.com/country\_profiles/denmark/\ for\ more\ information\ or\ to\ place\ an\ order.$