

A Transparent Cadastral System – fit for sustainable development and legal security. The Danish public-private cooperation model.

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SUMMARY

A trustworthy multipurpose property cadastre is a basic infrastructural element in the Danish economy and legal community. The overall task is to ensure a credible legal basis for location, possession, use and settlement, protection and conservation, taxation and mortgaging of private property. The property cadastre facilitates the operation of an efficient land market and effective land management. At the same time, the property cadastre constitutes authoritative basic data in the Danish spatial data infrastructure and thus is the gateway to e-governance and is a corner stone for the development of digital solutions and portfolios in the private sector.

The cadastral process in Denmark for maintaining and updating the property cadastre is organized in a public-private cooperation model between the public cadastral authority (The Danish Geodata Agency) and the private licensed chartered surveyors, who are preparing and submitting cadastral changes for approval and registration in the cadastre.

The underlying philosophy in the Danish cadastral model is to find holistic and balanced solutions and pave the way for sustainable development of change in the urbanized areas and open countryside, taking into account “to third parties” – understood broadly as neighbours, the boundary, public regulation, right holders in property, the cadastre, the cadastral map etc..

This paper will give an overview of the cadastral system in Denmark. It will address the basic framework conditions and structure of the Danish cadastral model. A special discussion is given about the role of the private licensed chartered surveyor in the process and how the surveyor through professional conduct handles this task performance and responsibility. And topical including the ongoing EU-initiatives on deregulation of the liberal professions and the effects on a cadastral process carried out in a business model including a regulated private licensed chartered surveyor’s profession.

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SUMMARY

En troværdig multifunktionel matrikel er et grundlæggende infrastrukturel element i den danske økonomi og retssamfund. Den overordnede opgave er at sikre et troværdigt retsgrundlag for placering, besiddelse, brug og afvikling, beskyttelse og bevarelse, beskatning og belåning af privat ejendom. Matriklen faciliterer et effektivt ejendomsmarked samt en effektiv arealforvaltning. Samtidig udgør matriklen et autoritativt grunddataregister i den danske geografiske infrastruktur og indgangen til digital forvaltning og er en hjørnesteen for udviklingen af digitale løsninger og porteføljer i den private sektor.

Den matrikulære proces i Danmark til vedligeholdelse og opdatering af matriklens oplysninger er organiseret i en offentlig-privat samarbejdsmodel mellem den statslige matrikelmyndighed (Geodatastyrelsen) og de private praktiserende landinspektører, som udarbejder og indsender de matrikulære dokumenter til godkendelse og registrering af matrikulære forandringer i matriklen .

Den underliggende filosofi i den danske matrikulære model er at finde helhedsorienterede og afbalancerede løsninger og bane vejen for en bæredygtig udvikling af ændring i urbaniserede områder og åbne landskaber, idet der tages hensyn "til tredjemand" - forstået bredt som naboer, grænsen, offentlige regulering, rettighedshaverne i materielle matriklen, matrikelkortet osv .

Denne artikel vil give et overblik over det matrikulære system i Danmark. Det vil beskrive de grundlæggende rammebetingelser og strukturer i den danske matrikulære model. Der vil være særlig fokus på den private praktiserende landinspektørers rolle i processen, og hvordan landinspektørerne gennem regulering og selvregulering håndterer ansvar og god landinspektørskik i forbindelse med matrikulær sagsudarbejdelse. Og aktuelt vil der være en omtale, af de igangværende EU-initiativer om deregulering af de liberale erhverv og virkningerne for en matrikulær proces, der udføres i en forretningsmodel, som implicerer en privat praktiserende landinspektør profession.

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1. INTRODUCTION

Maintenance, updating and development of the Danish property cadastre¹ has for more than 250 years been organized in a public-private cooperation model consisting of a central state cadastral authority (today The Danish Geodata Agency) and private licensed chartered surveyors. The licensed chartered surveyors perform the cadastral tasks in the field, prepare the cadastral documents and submit the changes to the central authority that controls, approves and records property changes in the cadastre.

To ensure a continuously “fit for purpose” cadastre has both the cadastral system² as the cadastral process³ been adjusted to the needs of a democratic and capitalist society with private landownership and evolved over time in relation to the general societal and technological developments.

There is a high focus in the Danish society on managing property rights in a both trustworthy and a transparent process to meet the need for legal certainty on real property and consumer protection.

The underlying philosophy in the Danish cadastral model is to find holistic and balanced solutions that will pave the way for sustainable development of change of property and land use, taking into account “to third parties” – understood broadly as neighbors, the boundary, public regulation, rightsholders in property, the cadastre, the cadastral map etc..

Over time the Danish cadastre has changed from being a primarily fiscal and legal cadastre to be a multipurpose cadastre in to a broader concept of Land Administration Systems. Today the Danish cadastre is a digital basic infrastructural tool in the Danish Landadministration System assisting the functions of land tenure, land value, land use and land development and supporting e-governance by spatial data. A land management design that fits into the

¹ ”The Danish cadastre is the basis for all land registration in Denmark. Consisting of a country-wide cadastral map, an official register and a cadastral archive” (The Danish Geodata Agency)

² The cadastral system includes legislation, institutions, registers, data, IT systems, processes, actors etc. to manage property registration

³ The cadastral process includes actors, parties and performing procedures to change the property registration

conceptual framework described in the global land management perspective as illustrated by the following paradigm (fig. 1):

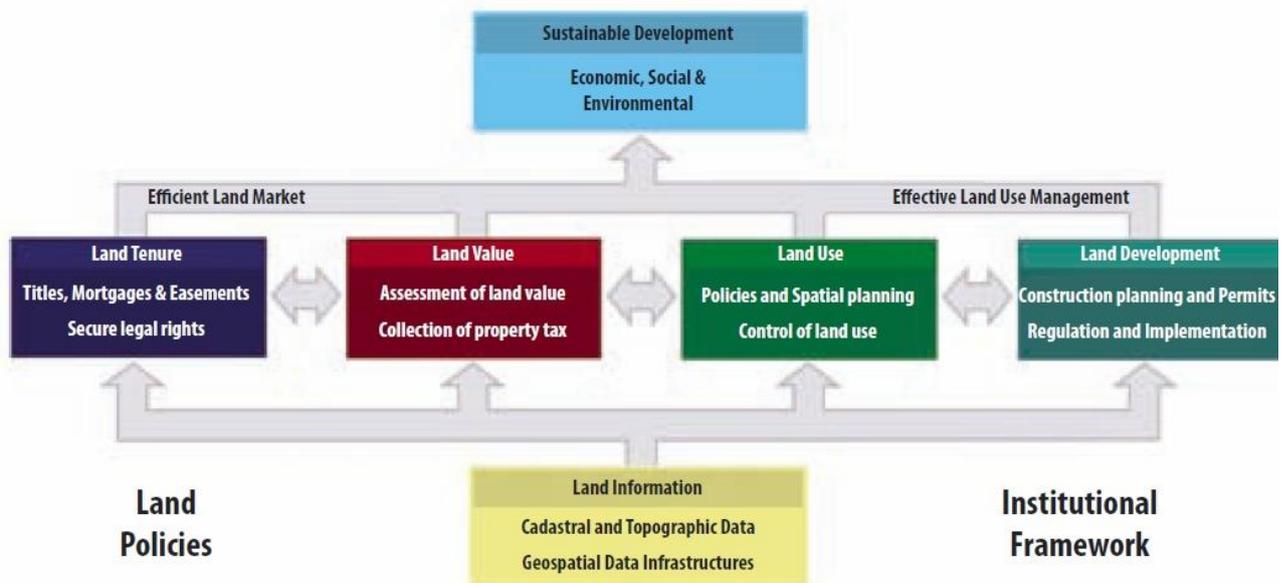


Fig. 1. A Global land management perspective (Enemark 2004)

This paper will present the Danish cadastral system focusing on basic framework conditions for cadastral activity and professional requirements for the licensed chartered surveyor performing cadastral work:

- Basic framework conditions for the cadastral system
- Professional framework and requirements for licensed chartered surveyors
- The Danish cadastral system

It gives a kaleidoscopic overview of the elements that forms a trustworthy Danish cadastral system and a transparent cadastral process, conducted in a public private cooperation model which ensures a high degree of legal certainty and consumer protection.

2. BASIC FRAMEWORK CONDITIONS FOR THE CADASTRAL SYSTEM

The Danish cadastral system is arising out of private property rights and the inviolability of property, which are basic pillars in the Danish rule of law and economy and sets a constitutional framework for the design of the Danish cadastral system. Furthermore, there is a political consensus on public private cadastral cooperation model.

The Danish cadastral system facilitates an efficient land market, valuation and taxation, supports effective land management and ensures property rights. To ensure legal certainty and

consumer protection, the society has established a number of basic framework conditions for the cadastral system.

2.1 Institutional framework

Private property rights are a value bearing foundation of a democratic constitutional state as the Danish. Real property is subject of considerable private and public investment, establishment of rights and serves as the subject of security for raising of loans and for taxation.

It is grounded in the Constitutional Act of Denmark, the framework for Danish democracy, with a set of fundamental principles and rules for society. The Constitutional Act establishes the protection of private property:

§ 73, 1. The right of property shall be inviolable. No person shall be ordered to surrender his property except when required in the public interest. It shall be done only as provided by statute and against full compensation.

Legislation, actions and interventions in relation to private property is always taking into account § 73 of The Constitutional Act.

2.2 Legal framework

The legislation in Denmark confirms and consolidates the economic and social significance and value of a secure and trustworthy cadastral system, by setting out a clear framework for responsibility, conduct and performance of cadastral work

The cadastral system and model in Denmark is basically governed by two main laws the Subdivision Act and the Chartered Surveyors Act. A series of statutory orders and guidelines sets out more detailed framework for the specific execution of the cadastral work

The Subdivision Act provides the legal basis for the Danish cadastral model and the subdivision requirement.

The Chartered Surveyors Act contains professional and ethic requirements and regulations of the licensed chartered surveyors and the chartered surveying companies conducting cadastral work, to ensure legal certainty and consumer protection on defining property boundaries, property creation by an independent, impartial and objective professional surveyor.

2.2.1 The cadastral process

The Subdivision Act states that the Cadastral Authority must lead and maintain the land register as a register of all properties and as a cadastral map with associated measuring sheets. The cadastre must include the cadastral designations, area sizes, some listings about the property. The Subdivision Act defines together with the Chartered Surveyors Act that

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cadastral work may only be performed by practicing chartered surveyors (private licensed chartered surveyors – owners or shareholders of a chartered surveying company) and their assistants who are appointed chartered surveyors.

2.2.2 Subdivision and land transfer requirement

The Subdivision Act states that change in ownership or pledge of an area is only permitted if the area presents a separate real property or an unregistered property. This means that an acquisition of a part area of a real property includes a requirement for subdivision into a separate property or transfer of the part area to another property. Changes that must be handled under the rules of subdivision and land transfer. The subdivision and land transfer requirements are supported by the requirement that there must not be established rights of use over a part area of a real property for a longer period than 30 years if the area is part of separate real property.

2.2.3 Subdivision control

Centrally in the Danish holistic and sustainable cadastral model is that the Subdivision Act states that there must be no subdivision, land transfer or merger if the cadastral change or the intended land use according to the information will result in violation of the another legislation or of planning or other public or private law restrictions on the affected properties.

2.2.4 Sole purpose

A chartered surveying company must have the sole purpose of performing surveying and cadastral work. And to ensure that costumers meets a qualified and professional advisor the Chartered Surveyors Act states that if a surveying company consists of more than one office every office must be managed by a licensed chartered surveyor.

2.2.5 Personal responsibility

Performing cadastral work is associated with a personal responsibility and ethic rules. The Chartered Surveyors Act states that a licensed chartered surveyor is personally liable, together with the company, for any claims arising in consequence of assistance provided by the chartered licensed surveyor to a client. The licensed chartered surveyor must at the same time behave in a manner consistent with good chartered surveying practice. The surveyor are entrusted with a bonus pater liability.

2.2.6 Ownership and management regulations

To ensure surveyor's independence of material and economical interest in relation to the provision of professional responsibility by performing the societal task that lies in performing cadastral work and thereby an objective consideration to third parties interests the Chartered Surveying Act stress ownership and management regulations of chartered surveying companies.

In a chartered surveying company at least 51 percent of share capital and voting rights shall be owned by practicing chartered surveyors who actively are carrying surveying business in the company. Of the remaining capital and voting rights, other the mentioned practicing chartered surveyors can not own more than 15 percent of share capital each. This limitation does not apply to persons who have their main job in surveying company

In a chartered surveying company the majority of members in the Supervisory Board and in the Executive Board must be practicing chartered surveyors who actively are carrying surveying business in the company.

2.2.7 Impartiality requirements

Furthermore to ensure the impartiality of the licensed chartered surveyor conducting cadastral work, there is a requirement that the surveyor may not perform cadastral work concerning a property in cases where the licensed chartered surveyor has a material or any other kind of interests in the property and in the outcome of the case.

2.3 Spatial data infrastructure framework

The Danish cadastre is a multipurpose digital/analog register for land registration in Denmark and plays a central role in the Spatial Data Infrastructure (SDI) with a two-part legal and administrative role:

- Authoritative basic data register
- Spatial reference data for eGovernance

The cadastral data are recognized as authoritative basic data – data which may be used without verification. The licensed chartered surveyor is both user of and supplier of cadastral data by performing cadastral work. In this performance the surveyor use many other maps, property data and spatial data.

The Danish Spatial Data Infrastructure builds on INSPIRE principles:

- Data should be only collected once
- Data should be maintained where this can be done most effectively
- Data should be combinable, regardless of their source
- It should be easy to get an overview of the available data and internet services
- There should be clear conditions which assure that data can be utilized by many users in many contexts

This “philosophy” results in a spatial data infrastructure model based on collections of sector specific geodata themes build up on a “platform“ of common multi-sector, reference data and shared infrastructure internet services that allow access to documented geodata and to metadata from distributed sources of data (fig. 2). It means that the information in the Danish LIS is sectorized in charge of the resort authority, but taking responsibility for cross-agency

public sector cooperation.



Fig. 2. The Danish spatial infrastructure model (The Geodata Agency 2011)

There exists a unified national collaboration between central, local, and regional authorities, universities and private businesses in order to ensure that the national SDI “meets its users’ requirements.

3. PROFESSIONAL FRAMEWORK AND REQUIREMENTS FOR LICENSED CHARTERED SURVEYORS

The property surveyors acting in the cadastral process, are basically entrusted with official authority. They have the professional authority to perform a number of special tasks either representing a public authority, or acting on behalf of a public authority or in cooperation with a public authority.

When the property surveyors represent public authority through their activities, society must set requirements for the professional practice. High professional, business and disciplinary requirements and standards for the profession must be assured through education, consumer protection and claim systems and ethical codes of conduct established by law under national authorities or by self-regulation and self-justice by national surveying associations

3.1 Professional qualifications and requirements

In order to fulfill societal and consumers expectations regarding the exercise of cadastral work, there is a need for a continuous high level of knowledge and professional skills regarding the licensed chartered surveyor performing cadastral work.

3.1.1 Educational level

In order to ensure a high professional level of knowledge, the educational background of the licensed chartered surveyor is based on a scientifically high academic education. 5 years on university level at Aalborg University (campus Aalborg or Copenhagen) consisting of a bachelor degree (3 years) and a master degree (2 years) in surveying and cadastral science - Surveying & Mapping, Geoinformatics, Land Management, Property Economics) (fig. 3)



Fig. 3 The bachelor and master program within Surveying, Planning and Land Management (Aalborg University)

Aalborg University, stands out through a special education model Problem Based Learning (PBL), which shapes and contributes positively to the surveyor's professional DNA.

The “Aalborg Model” is based on regular lectures in the fields of the semester theme

combined with problem based work in small groups with real life problems that relates to the semester theme. It provides students with the possibility of acquiring knowledge and skills independently and at a high academic level working analytically and according to interdisciplinary and problem and result oriented methods. During this study model the students will cooperate with the business community on the solution of authentic professional problems.

Besides professional skills the students will develop their abilities within teamwork and will become well prepared for the labor market

3.1.2 Professional practice

To establish the necessary experience, knowledge and skills to exercise cadastral work it is required that the chartered surveyor must have at least three years of practical supervised experience in performing general cadastral work in a private chartered surveying company or in a cadastral administration doing cadastral work, undergoing further education.

3.1.3 License

Only the one-line combination of the bachelor and master of Science in Surveying, Planning and Land Management can lead to a license as a chartered surveyor in Denmark, in combination with at least three years of professional experience in the employment of a practicing surveyor, doing cadastral work.

The achievement of the license is based on an application to the Danish Geodata Agency with documentation of necessary requirements. The Danish Geodata Agency decides whether to grant applicants licenses as chartered surveyors. The license is personal and can only be used for performing cadastral work in a private chartered surveying company.

3.1.4 Continuing Professional Development

To ensure and maintain high and updated professional skills, development and quality of the professional performance by the chartered surveyor, the The Danish Association of Chartered Surveyors (DdL) recommends 37 hours professional training, knowledge and dissemination per year. Continuing Professional Development (CPD) is not compulsory but de facto.

3.2 Professional business and disciplinary requirements

In order to fulfill societal and consumers confidence to the licensed chartered surveyor in conducting the professional tasks there is a need for professional liability insurance, claim systems and ethical codes of conduct, with aim of securing high consumer protection.

3.2.1 Insurance obligation

To protect customers against financial loss that may rise from performance of the cadastral work and other chartered surveying works carried out by practicing chartered surveyors and

their employees the Chartered Surveyors Act stress that it shall be mandatory for the practicing chartered surveyor to be covered by professional indemnity insurance, which must be personal

The insurance must cover at least 5 years after the surveyor permanently ceased company. The Danish Geodata Agency registers and monitors that the demands of compulsory insurance are met.

3.2.2 State board of appeal

Any claims raised against a practicing chartered surveyor or licensed chartered surveyor's assistant that they has disregarded the obligations in performing cadastral or surveying works it can be brought for the Chartered Surveying Committee. The same applies to claims concerning chartered surveying companies.

The board concerns malpractice complaints in cases of activities which are, by law, performed by licensed chartered surveyors. The board assesses the surveyor's work in order to decide whether he has failed to fulfill his obligations to such an extent that there is reason to impose a penalty in the form of a reprimand or a fine, or if special circumstances justify a withdrawal of the license.

3.2.3 Disciplinary board

To support the increased professional liability the licensed chartered surveyors are subject to, the Danish Association of Chartered Surveyors (DdL) sets up a Disciplinary Board which considers complaints of all types of work carried out by chartered surveyors or their assistants who are members of the association. It can give an assessment of the quality of the surveyor's work, with an opinion.

The Disciplinary Board has the opportunity to recommend to the surveyor to carry out rectification of work performed. Such a request will usually be followed.

3.2.4 Remuneration board

Complaints relating to the fee, calculated by a practicing chartered surveyor for any work performance can be brought for the Remuneration Board. The board is established under the Danish Association of Licensed Surveyors.

An opinion of the board will be the basis for an assessment of whether the claim should be brought before the courts. A statement from the board that goes against the surveyor will usually be followed up by the surveyor, and will usually be the basis for any decision if the dispute shall be settled by the court.

3.2.5 Ethical codes

In order to ensure high ethical standards in the execution of work carried out by practicing chartered surveyors and their employees, their works is based on Statutes of Surveyance, a code of conduct developed and enforced by the Danish Association of Chartered Surveyors (DdL). It concerns rules for customer contact and contractual work, including information on the work progress and cost overruns.

In addition the Danish Association of Chartered Surveyors and the Association of Licensed Surveyors (PLF) have joined the “Code of Conduct of European Surveyors” issued by the Council of European Geodetic Surveyors – CLGE.

3.3 Professional representation of interests

In Denmark there are two organizations that represent and take care of the professional interests of the surveyors – working to develop and strengthen the surveying profession, frameworks for performing surveying activities not least cadastral work and related work for the benefit of its members and for society.

It is two recognized professional bodies in the Danish cadastre sector active cooperating and consulting partners in a variety of professional relevant legal and technical areas both in relation to both public and private professional network.

3.3.1 The Danish Association of Chartered Surveyors (DdL)

DdL is responsible for the professional, economic and social interests of the surveying profession as well as member’s personal work and professional interests including not least the salary and employment conditions and educational interests. Membership is personal.

General professional orientations communication and knowledge communication is achieved through the association's journal and web site, professional forums and workshops. The association is also responsible for the development and provision of continuing education activities, just as the association is represented in the advisory board for surveyor educational program at Aalborg University.

3.3.2 The Danish Association of Licensed Surveyors (PLF)

PLF is a professional association for chartered surveying companies performing surveying business under the Chartered Surveyors Act. PLF is a political, professional and employers association carrying out business interests by creating the best possible conditions for exercise of the cadastral work and related business and promoting professional developments.

PLF is included as an active party in legislative development partnerships with various ministries within cadastral work, land management and surveying.

PLF also takes a responsibility in the appeal system on cadastral work and other surveying

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works by being responsible for the operation of the remuneration committee.

Like DdL, PLF also contributes to knowledge transfer and knowledge sharing by at conferences, workshops and training activities aimed cadastral work. PLF is represented in the advisory board for surveyor educational program at Aalborg University.

The work in PLF is structure around the Board, as the central driver in all business areas and representation of interests. The Board establish internal committees, working groups and task forces on special work and areas of interest and is represented in relevant external committees and working groups (fig. 4).

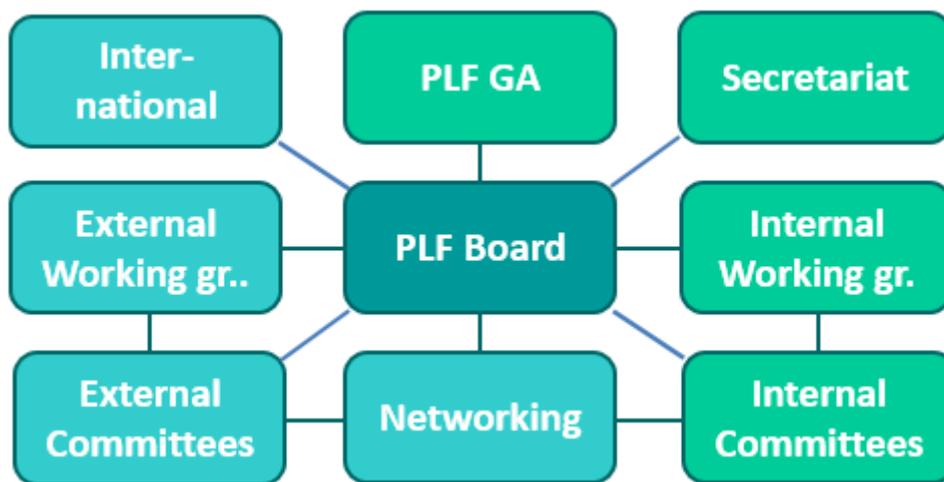


Fig. 4. The Association for Licensed Surveyors (PLF) – representation of interests

4. THE DANISH CADASTRAL SYSTEM

The Danish cadastral system is based on a title system, “*a register of properties presenting “what is owned by whom”*” (Enemark 2010). Titles are based on the cadastral identification, and the cadastral registration is prior to land registration. The cadastre plays a central role as basis for land and property identification and registration in Denmark, based on registration of property boundaries determined by licensed chartered surveyors.

The Danish cadastral system itself “*provide a basic land information infrastructure for running the interrelated systems within the areas of Land Tenure, Land Value and Land Use*” (Enemark 2010) (fig. 5) – land administration and land governance.

The Danish cadastre has during time evolved to be a multipurpose cadastre, so in addition to support land administration and land governance the cadastral geo-related authoritative basic data including, not least, the digital cadastral maps is the entrance to eGovernance and digital solutions in the Danish Society

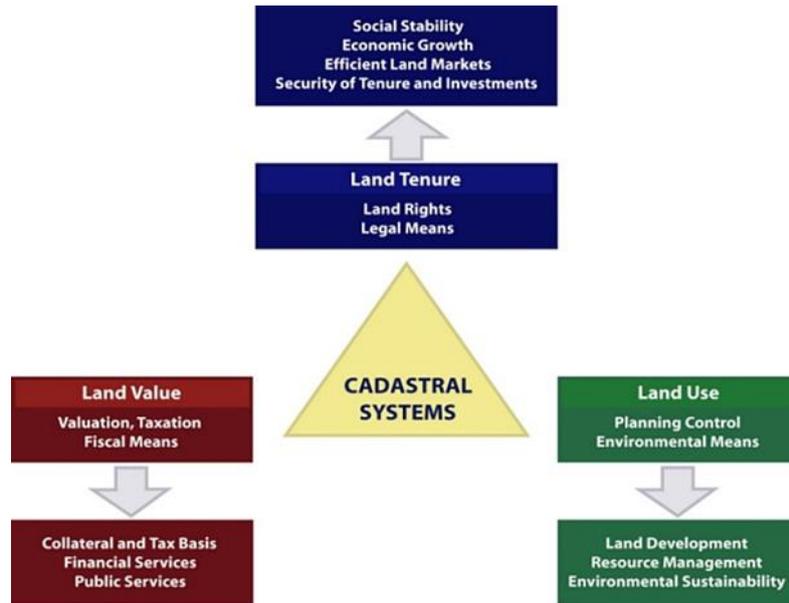


Fig. 5. Cadastral system – a basic land information infrastructure (Enemark 2004)

Due to this central role in the Danish economical and digital infrastructure we will pay attention to the cadastre and the cadastral process and especially the role of the licensed chartered surveyor in execution of the cadastral work in relation to ensuring a credible and sustainable cadastral registration taking into account third party.

4.1 The Danish Cadastre

The Danish cadastre is basis for all land registration in Denmark and consists of a cadastral map, a cadastral register and a cadastral archive. The cadastre contains information about properties unique identification, geographical extent in the cadastral map, boundary definition, size of area and certain other property ownership records.

The cadastre provides the spatial integrity and unique identification of every land parcel through the cadastral map updated by cadastral surveys carried out by the licensed chartered surveys.

Factual the Danish cadastre consists of approximately 2,5 million parcels. The first cadastre was in force in 1688 and has developed since. In 1997 a digital reform completed the computerizing of approximately 15.000 analogue cadastral maps. In 2001 a digital update system MIA was in place and in 2008 a cadastral digital updating and quality system MiniMAKS was in place.

In 2014 the measurement archive became partly digital (information's back to 1950) with digital web based access from the cadastral surveyors. It completed a full digitally cadastral process between the surveyor and the cadastral authority.

4.1.1 The Cadastral Map

The cadastral map is a digital legal cadastral map however, not to be mistaken for a coordinate cadastre, and is a key component of the Danish cadastre. It will be more indicative to handle the map as a geo-related index map presenting the cadastral register in a visual form, so that individual parcels can be identified and located.

It provides a geometric description of the land parcels represented as a digital closed object in by quality labeled coordinates in the UTM-reference system and connected with informative attributes in the cadastral register – first of all the unique property identification. It also represents a visualization of public and private roads and information about protected areas as forest conservation areas, coastal zoning (registration of protection line of coastal and dunes areas).

Due to the original production method of the cadastral map - digitization of analogue cadastral maps - accuracy is variable from few centimeters to several meters (especially in the rural area) New GPS-based measurements of boundaries and updates improve the quality of the cadastral map.

The cadastral map is updated daily on basis of new property registrations, boundary changes and field surveys. (Danish Geodata Agency 2015.04.16)

4.1.2 The Cadastral Register

The cadastral register is a database of property information containing the unique cadastral identification numbers (e.g. 20h Holstebro Markjorder fra Hjerm), property areas, area of private roads and a few public administrative registrations of public rights or restrictions connected to the use of land – e.g. agricultural property (land designated for continued agriculture purposes).

Like the cadastral map, the cadastral register is updated daily. (Danish Geodata Agency 2015.04.16)

4.1.3 The Cadastral Archive

The cadastral archive consists of historical information of property registration and includes the documents that have defined property formation through the ages. Not least it includes scanned and digital measuring sheets with field surveys of boundaries which is the basis the determination and marking of boundaries. The archives also includes scanned historical cadastral maps. (Danish Geodata Agency 2015.04.16)

4.2 Cadastral process

Cadastral work reflects a change in the property division and often a change in the use of the physical environment. In Denmark the use and development of land / real property is, for natural reasons, a matter not only for private interests but also for public and rightholders interests. Consequently today's legislation on land management in Denmark is trying to find a reasonable regulatory framework for management of the balance between public and private interests.

The consideration for third parties in the property formation and changes process is reflected in the cadastral process. It is set out in the rules of boundary determination, compliance with other laws, mortgagee consultation and allocating easements.

In Denmark the cadastral process is the formal and legal acts and agreements that ensure the implementation of a sustainable and holistic process of project realization. As responsible for the case preparation the licensed chartered surveyor ensures and drives the entire process.

The licensed chartered surveyor is acting in the intersection between public and private interests and as an objective advisor he/she has to represent and manage all the interests related to property change and the future use. The licensed chartered surveyor is popularly said "the ambassador of the boundary". The role as private advisor gives the surveyor a significant legitimacy to be able to handle the balance between private and public interests around the property formation and use, and gives the surveyor the opportunity to take part in both an advisory and design stage.

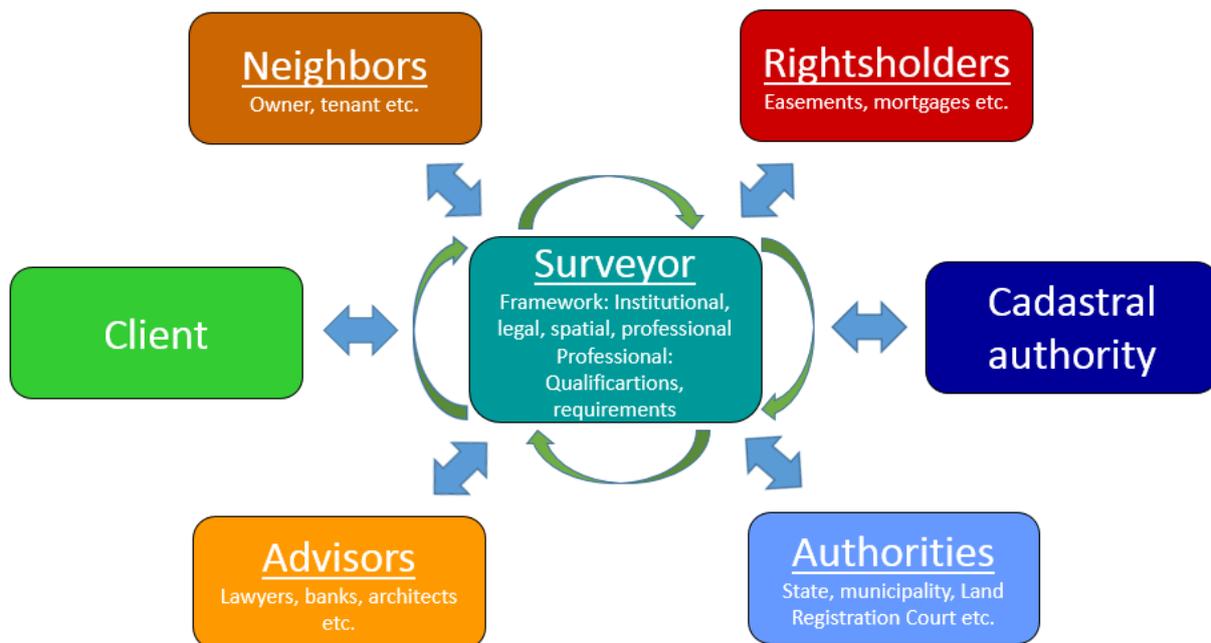


Fig. 6. The licensed chartered surveyor – a central objective advisor conducting the cadastral process

Simplified the Danish cadastral process includes the following main phases

- Requisition and advisory
- Case preparation
- Approval and registration

A more detailed paradigm of the Danish cadastral process with focus on the practicing chartered surveyors central role in conducting the process is outlined in the following paradigm (fig. 7). Which also illustrates potentially involved parties, phases and information flow.

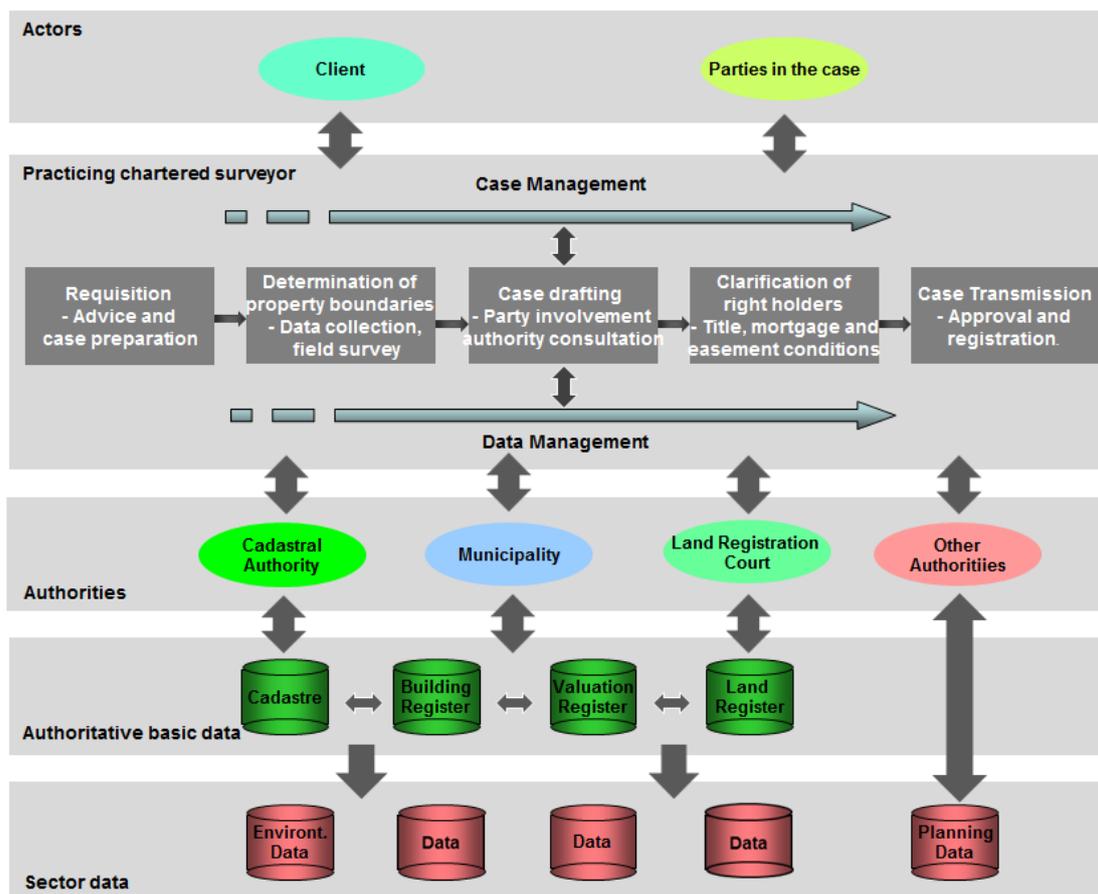


Fig. 7. The Danish cadastral process - parties, phases, tasks and information flow

Based on this paradigm key processes and phases will shortly be described in a licensed chartered surveyors perspective.

4.2.1 Consultancy and preparation

When the licensed chartered surveyor receives a requisition on a cadastral change he/she makes a screening of property information, public and private legal restrictions. Based on these investigations the surveyor advises and formulates the cadastral case / property changes with the client.

4.2.2 Boundary determination

The basis for determining existing boundaries are information from the cadastre – measuring sheets or in case of none or insufficient field measuring the cadastral map.

The boundary may under Danish law change through prescriptive acquisition. Therefore, when determining and marking the boundary, the licensed chartered surveyor has to investigate whether the property boundary in the field agrees with the information in the cadastre.

If there is no deviation the licensed chartered surveyor can mark the boundary in accordance with the cadastral information. At the same time the surveyor is required to inform neighbors about the boundary marking. It must give neighbors the opportunity to submit any comments to the marking for providing a fully informed process and to prevent later boundary disputes.

However, if there is a discrepancy, the licensed chartered surveyor must allow the parties to make a statement before marking the boundary. After this, the licensed chartered surveyor must decide whether the boundary can be fixed in accordance with the Cadastre or whether the matter has to be settled in accordance with the rules on rectification of boundaries, transfer of part of property or technical changes. If there shows to exist an irreconcilable disagreement between two neighbors about the property boundary it may be necessary for the party wanting to set the boundary to ask the surveyor to hold legal determination of boundary.

Legal determination of boundary is a formal process conducted by a licensed chartered surveyor given public authority as first instance. It consists of a local inquiry meeting involving the parties to clarify the boundary issue and the licensed chartered surveyor must try to get the parties to agree on the location of the boundary. In that case the surveyor will set the boundary, and it will be binding on parties when they have approved in writing. If the parties do not reach an agreement, on the basis of the information available, the surveyor will set a preliminary boundary and draw up a statement on the legal determination of boundary. The boundary set is binding for the owners of the properties affected, if none of them bring the case before the district court, with a claim that the boundary lies in a different position.

When new boundaries are determined and marked, they shall be approved in writing by the owners of the affected properties, before they can be registered in the cadastre.

The general process for boundary determination is conflict preventing which finds concrete expression by performing only about 65 legal determination of boundary are held per year and under five of these brought to court

4.2.3 Clarification and consultation authorities

When the cadastral changes are finally decided and the boundaries are determined the licensed chartered surveyor prepares the formal and the technical documents as the basis for approval by the authorities, party involvement, right holders involvement and registration in the cadastre.

The consultation process by the authorities is called “the subdivision control”, and this process has to clarify and document that the cadastral changes and the future use of the property is legal with respect legislation and public regulations. In certain situations, the surveyor has public authority to attest that the cadastral changes do not conflict with public regulations without submitting the case to the authority.

If there is a need for dispensation of laws or public restrictions applying the surveyor applies for the necessary permission, which can be done in cooperation with the owner or other advisors.

4.2.4 Clarification and consulting rightholders

The Land Registration Act and the Subdivision Act ensures protection of mortgages and easement rights by cadastral change of private property.

The Land Registration Act states, that in connection with a land transfer there must be permissions / accept from the mortgagees to the change, as in ordinary cases must be registered as an endorsement of the mortgage in the land register. In special cases when the value of transferred land is insignificant and below a certain threshold value (currently 16.710 Euro), the licensed chartered surveyor has authority to certify, that the land transfer can be done without risk of mortgagee and that the property after the change are still capable of carrying security for the mortgage.

This so-called “harmlessness certificate” replaces the registration of mortgages release in the land register, and shall be submitted by the case documents for approval and registration of the cadastral changes.

In relation to rightholders of easements on affected properties, the licensed chartered surveyor must locate the rights and ensure that the easement in future they are registered on the right properties after the cadastral change. The requirement applies to both subdivision and land transfer. The land register will be updated by the new registration of location of easements by a so-called “easement statement” from the licensed chartered surveyor.

The Subdivision Act prescribes that land transfer only can only be registered in the cadastre, if it is established that the provisions of securing mortgages and easements is observed, which must be documented by a judge certificate

4.2.5 Approval and registration of cadastral changes

When the surveyor has documented the conditions for registration of the cadastral changes, the documents (registration documents, owner declarations, authority approvals and Certificate of land registration Judge on mortgage, easements and title deeds) will be packed in a digital file package, and submitted through the digital update system MIA to the Danish Geodata Agency for approval and registration. Approval procedures include a technical and legal control of the submitted cadastral case. If case is insufficiently clarified or contains errors, the surveyor will be contacted for additions or corrections.

After the control the property changes will be approved and the cadaster will be updated by the new property registrations. When the registration is complete updated other public records / registers will be updated with the new property information.

5. FINAL REMARKS

The cadastral system is a part of the Danish societal and economical infrastructure assisting the functions of land tenure, land value, land use and land development. The basic purpose of the system is to ensure a reliable and trustworthy formation, registration and change of property and access to up-to-date authoritative proprietary basic data.

The cadastre plays a central role as a multipurpose register with a two-part primary role legal and administrative as:

- Authoritative proprietary basic data register
- Reference data for spatial eGovernment

The performance of cadastral work – basically determination of boundaries and conducting and preparation of the documents necessary for registration of cadastral changes – is in the Danish context organized in a public private collaboration model with a two shared responsibility:

- The Danish Geodata Agency (state authority) – approval and registration
- Practicing chartered surveyor (private) – cadastral work is performed by appointed surveyors in private practice and by their appointed assistants

5.1 Sustainability

The cadastral work in Denmark is performed in a democratic and constitutional State framework with a strong account of third parties – in this context multifaceted and can be neighbors, mortgagees, rights holders, the community and even the cadastral register. Both the cadastral system and the cadastral process are open and transparent.

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TS 1.3 - Actors and Partnerships in Cadastre & Public-Private Sectors

Henning Elmstrøm and Torben Juulsager

A Transparent Cadastral System . The Danish public-private cooperation model. (102)

WCS-CE - The World Cadastre Summit, Congress & Exhibition
Istanbul, Turkey, 20 –25 April 2015.

In order to manage this complex task the professional identity of the licensed chartered surveyor is holistic and solution oriented. A licensed chartered surveyor has to listen carefully to the clients to know their needs, have a good knowledge in the cadastral legislation and the land management legislation, have to navigate task performance in an intersection of disparate interests (public and private) and finally give the parties a possibility to make an agreement / a sustainable solution. This kind of dialogue based solutions includes a high grade conflict prevention and ensure sustainable solutions.

Due to

- regulations on ownership and management in practicing surveying companies, that ensures the surveyor's independence of economic and specific interests in the cadastral change or the underlying project
- legal framework conditions
- professional and business requirements
- high codes of ethics

the confidence to the cadastral system and the performing professionals is very high in Denmark. The licensed chartered surveyor has a high degree of professional legitimacy.

Overall the cadastral system is organized so that it provides a high degree of legal certainty and consumer protection which results in a high degree of credibility in society

5.2 Fit for purpose

The Danish cadastral system fulfill the constitutional protection of private property and a democratic society's requirement of legal certainty, consumer protection and interests of rightsholders in property.

Over time the Danish cadastral system has managed to evolve from being an analog primarily fiscal oriented system to be a digital multifunctional system. The cadastre has become a digital multipurpose cadastre with a basic role in the Danish spatial infrastructure containing authoritative basic data and is today the entrance to eGovernance and fits in an open digital community structure.

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6. POST SCRIBT – PLF OBSERVATIONS ON DEREGULATION INITIATIVES

The European Commission reached a political agreement in June 2013, which addresses and requires each Member State to perform a review and to modernize their regulations on qualifications governing access to professions or professional titles. The overall purpose is improving access to professions, in particular through a more flexible and transparent regulatory frameworks in Member States, to facilitate the mobility of qualified professionals within the internal market and the cross-border provision of professional services.

This should also have a positive impact on the employment situation and enhance economic growth. In order to boost growth potential and consolidate the way to economic recovery, this review of regulated professions should be a priority. The Commission therefore urges Member States to begin reviewing at national level the qualifications requirements imposed on regulated professions and the scope of reserved activities.

At the same time and in full compliance with EU recommendations, the Danish government launched a study of the abolition of ownership regulation of Danish practicing surveyor companies in order to create growth by

- reducing administrative burdens
- increasing productivity
- increased competition - lower prices.

It is growth initiative no. 49 in a in a comprehensive growth plan for the Danish society.

6.1 PLF point of view

Currently there is no workload neither in the Danish Cadastral Agency or in practising surveying companies in reporting and containing changes in ownership and management and supervisory board.

Property formation and change is nearly 100 percent depended on general societal conditions. Pricing on honoraria can not create growth or increased competition. In a larger ordinary subdivision represents surveyors fee about one percent of the sales price.

The competition in the profession is intact, In the moment approximately 75 percent of all cadastral works is based on is based on a tender, an offer or another tested price.

The Danish Association of Licensed Surveyors (PLF) has the opinion, that the premises for growth initiative no. 49 are wrong and promoting growth initiative no. 49 can weaken both legal certainty and consumer protection.

A prerequisite for the legal certainty of the total property formation process are "citizens" access to independent surveyors free of special interests that are the surveying company irrelevant, and as only handles ownership and boundary interests for the benefit of the whole society and taking account of third parties.

The existing ownership and management restrictions, which states that licensed chartered surveyors have a controlling influence in the group of owners in the company and in the business management, ensures the independency and impartiality of the practising chartered company.