

## **Proposal for introduction of professional cadastral surveying in Norway**

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**Key words:** cadastre, cadastral surveying,

### **SUMMARY**

The Ministry of Local Government and Modernization presented in August 2016 a proposal for introduction of professional cadastral surveying in Norway. Today cadastral surveying is the responsibility of the municipalities, as a monopoly task. There is no authorization system for persons undertaking cadastral surveying, and it is the responsibility of the individual municipality to define the level of education and skills for the appointed surveyor. The cadastre is managed by the Norwegian Mapping Authority and updated by the Municipalities. The Ministry proposes cadastral surveying performed as a profession-regulated service with free price formation. Requirements for education and practice should be in line with the requirements of other European countries and in accordance with EEA regulations. Public and private enterprises can undertake cadastral surveying. Updating of the cadastre is proposed to be transferred to the Mapping Authority, and performed by a central body. The paper will go present the proposal for a surveying profession, inputs that have been submitted to the Ministry from different “stakeholders” in the public consultation process, and the ongoing process.

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## 1. INTRODUCTION

The history of Cadastral surveying in Norway has evolved differently in the urban and rural areas up to 1980. In rural areas legislation was adopted in 1764 requiring boundary descriptions when land was subdivided. The legislation should be renewed in 1845 and 1909, and on this basis laymen should carry out boundary marking and descriptions in rural areas up to 1980, with no cadastral mapping. The quality could be poor. In cities and towns the development was different. In the 1800s the building legislation introduced chief surveyor and cadastral surveying in Oslo, Bergen and Trondheim, and from the latter 1800s cadastral surveying was introduced also in other cities and towns. With the building law of 1924 cadastral surveying in cities and towns became mandatory, and based on mandatory cadastral surveying prior to registration of title deeds, if there were no previous cadastral survey. The organization was the responsibility of the individual municipality. No authorization system was established. However the city councils were able to find qualified land surveyors with education and relevant experience, and accurate cadastral maps should be developed as an important source for city planning. In 1980 cadastral surveying system was introduced also for rural areas, and the municipalities were made responsible for undertaking cadastral surveying, still with no authorization system.

Thus, in 1980 the system in the cities was introduced for the rest of the country. We introduced a new cadastral law and cadastral surveys in a geodetic network nationwide. But it was one lack in the system, it was no requirements for education and no need for professional practice for land surveyors in the municipalities. After my opinion, Norway did not take the opportunity to develop a professional body responsible for cadastral surveys.

## 2. CURRENT SITUATION

### 2.1 Surveys done by employees in the municipalities

In Norway a cadastral survey is a task carried out by the municipalities. The cadastral surveyor has to be employed in the municipality or in a private company hired by the municipality. As many as at least 50 out of 426 municipalities has no employed land surveyor. They engage private companies to do the work. Many of the employed surveyors in the municipalities have no education after high school. It is the same situation in the private companies. This means that the land surveying sometimes is done by people without education and professional practice. We have the same situation with the people handling the applications for land subdivisions. The quality of the work is variable. Research (Mjøs) done to check the understanding of central questions in the cadastral law, show different practice from land surveyor to land surveyor. The understanding is based on knowledge and guidelines made by people working in the municipalities, the mapping authority or in the ministry. The quality control is poor, and there is little attention among the surveyors about court practice.

Kommentert [LBM1]: Her blandar du ansatt og innleigde

## 2.2 The Cadastre is updated by the municipalities

The municipalities are responsible for updating of the cadaster. More than 3000 persons are authorized by the Mapping Authority to do the updating of the Cadastre. FTEs used is about 100 (Menon 2016), but the number of people doing the work are maybe as many as 500. The situation is that in many municipalities, the number of cadastral surveys are low and the number of updates are low.

Kommentert [LBM2]: Kva er FTEs?

## 2.3 Mapping Authority responsible for the technical system

Norwegian Mapping Authority is responsible for the maintenance and development of the Cadastral database. The mapping authority is also responsible for guidelines for the surveyors.

## 2.4 Who is responsible for the quality of the data in the cadaster?

The question who is responsible for the quality if the data in the cadaster is not easy to give answer. As long as we have no authorized responsible land surveyors, quality in cadastral surveys can be poor. With limited quality control of the cadastral surveys, poor quality will also be the result in the cadastre.

## 3. PROPOSAL

The ministry presented August 2016 a proposal for new organizing of cadastral surveys in Norway.

- Cadastral surveys shall be performed as a professional regulated service
- A system with personal authorization shall be introduced
- Cadastral surveys may be done by public services or private companies as long as they fulfil the requirement for authorized land surveyors.
- The Norwegian Mapping authority shall be responsible for registration of boundaries in the cadastral map (responsibility is transferred from the municipalities to a central body at Hønefoss).
- Cadastral survey will be obligatory when properties are conveyed, if no previous cadastral survey is performed.

The proposal may introduce a system with similarities to many other European countries with authorized surveyors.

The proposal has been promoted by the Government (conservative) as a part of a plan to privatize and make Public Services more efficient. The next Parliament election will be in September and if there is a change in parliamentary majority and thus change in Government, the privatizing process may be reversed.

After my opinion, it is important to introduce authorization, it is important to centralize the registration in the cadaster. The result of this may be increased quality in the process with cadastral surveying. Obligatory cadastral surveys when properties are sold and there is no

previous cadastral survey, is also important to increase the quality and completeness in the Cadastre.

#### **4. CONSEQUENCES FOR LAND OWNERS**

If the Governments proposal is passed, a land owner can choose the Land Surveyor among those are authorised. Today it is the Municipality who appoints who will be the land surveyor. The land owner will have to make a contract with the land surveyor and the contract will regulate when the survey is to be done, prize, etc. Many land owners and land surveyors fear that the Land surveyor not will be neutral. Land owners have a fear that they must engage their own land surveyor similar to the system with lawyers in the court system. If we compare to how cadastral system work in Europe, this will not be a problem. The Land Surveyor must have an obligation to survey the correct boundary.

Land owners also fear that the costs of a cadastral survey will increase. This is a difficult question to answer. The task will not be the same as when people from the municipalities are doing the survey. The land surveyor will at some level, have to do investigations to ensure that it is the correct boundary that is surveyed. He has no direct access to municipal archives or he has to pay to get it. If the new authorized surveyors are to become part of a profession, the land surveyor will be responsible for mistakes. In the system we have today it's difficult to define who is responsible for mistakes and what the consequences might be.

The cost of the surveys can increase and probably the same way as it do for others who deliver services to land owners.

#### **5. CONSEQUENCES FOR THE MUNICIPALITIES**

The municipalities will lose tasks if the proposal is adopted. The Land surveyor doing the survey in the field will in most of the municipalities be redundant when Land Surveyors in private companies are allowed to do the work, engaged directly by the land owner.

Persons in the municipalities doing the registration will be redundant when the National Mapping authority will do the registration.

We have a municipal reform in Norway merging municipalities to form larger and stronger Professional Units. The municipalities will still be responsible for the Plan and the Building act. Removing the Cadastral work, gives new opportunities to have a stronger focus on Spatial Planning, Land Management, etc that are important for developing both cities and rural areas. The municipalities can focus on issues more important for local democracy.

#### **6. CONSEQUENCES FOR THE NORWEGIAN MAPPING AUTHORITY**

The Norwegian Mapping Authority will take over the responsibility for updating the cadastral map. This means that NMA needs to establish a body, specialized on doing this task.

Today we have about 3000 people approved for doing the registration in the Cadastre. The actual need for updating of the cadastral map is maybe 100 persons doing the work in full-

time. The quality of the registration can be better, but lack of local knowledge for a centralized body might be a challenge. On the other hand no local “smart” solutions will be developed and we will have standardized registration.

## **7. CONCLUSIONS**

If the proposal from the government is adopted, we will take the first step into developing a system with authorized land surveyors in Norway. I have been working in the University sector for many years, and I see the need for authorized land surveyors. As president for the Norwegian Association for Land Surveyors, I will work for developing a system with professional land surveyors with education on Master/Bachelor Level who will be able to give good service to Land owners and play an important role in developing the society. Authorized Land Surveyors will be important to develop Norwegian Professional Land Surveyors.

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## **BIOGRAPHICAL NOTES**

After graduating as Land Surveyor from the Norwegian Agriculture University in 1986, Arve Leiknes worked as a cadastral surveyor in Municipality of Vestby and with the Cadastre in Norwegian Mapping Authority. Since 1994 he has been working in Bergen University College and has been Head of the Department of Civil Engineering since 2012. Since 2010 Arve Leiknes has been the President of the Norwegian Association for Chartered Surveyors.

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