

# **RESULTS OF WORKING GROUP 1 OF COMMISSION 1 - ORGANISATIONAL STRUCTURES IN THE SURVEYING WORLD**

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**Key words** : Organisational structure.

## **INTRODUCTION**

The surveying business is as fragmented as its image in the world. From streamline centralism to chaotic confusion all types of organisational structures occur. This could be the headline of this paper.

It is regrettable that only less than 20 % of FIG members felt obliged to answer the questionnaire of Commission 1. With the help of other sources rough results can be presented.

## **QUESTIONNAIRE**

In accordance with the workplan Commission 1 wanted to find out about

1. "The public sector organisational structure that covers FIG activities;
2. The management philosophy behind the structures;
3. The method of providing services and the role of the private sector herein leading to possibilities of outsourcing or contracting out of government services."

Why do we need this information? It is not only our working party which wants the information but also society, the general public or governments need this information from an environmental point of view, for sustainable development, from a humanitarian aspect, for military purposes or because of shortage of natural resources. The data should be compatible and surveyed in an efficient way.

To get research data a questionnaire was sent out to all FIG members. Answers came back from Chile, Columbia, Denmark, Egypt, Finland, Italy, Japan, Korea, the Netherlands, New Zealand, Norway, Spain, Switzerland and the UK. Countries with a long history and experience in FIG matters and activities are still missing. However there are some results to be presented out of the given answers and out of other sources for example from the world-wide-web.

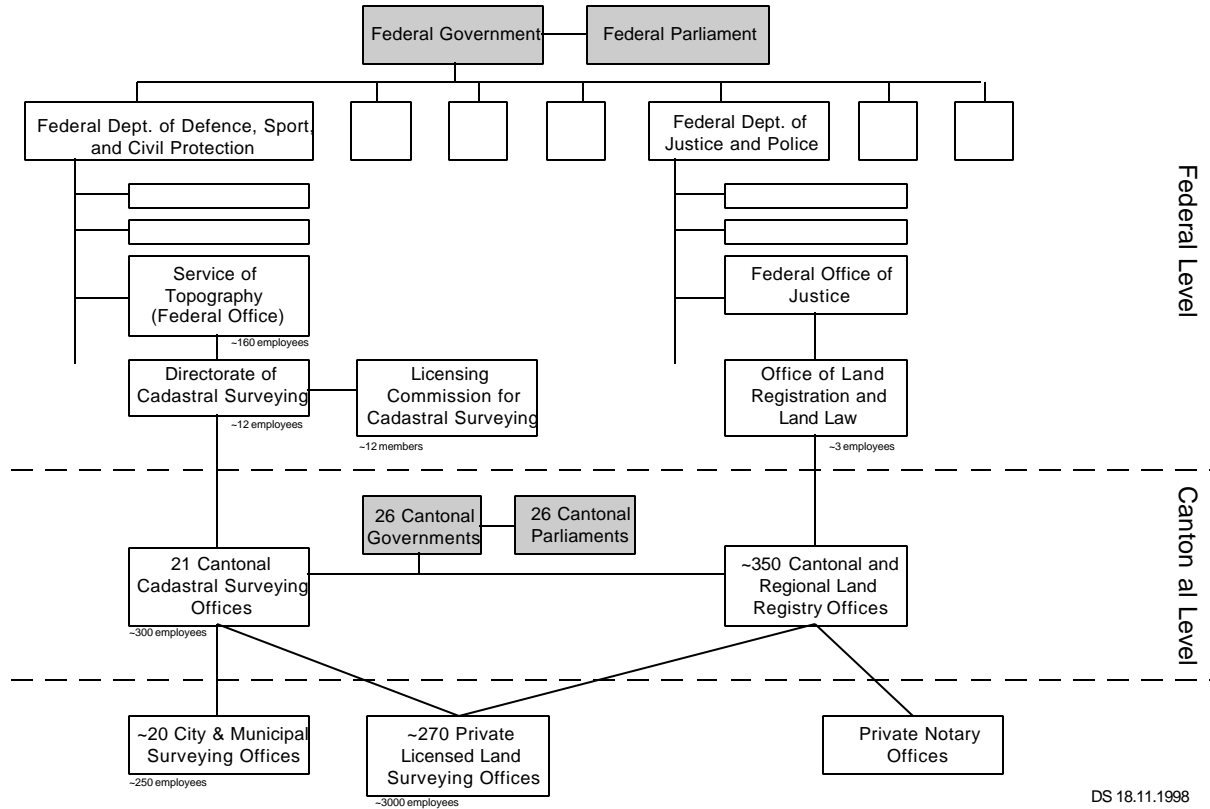
## **RESULTS**

### **Question 1 - Organisational Structures**

As follows some examples will be presented:

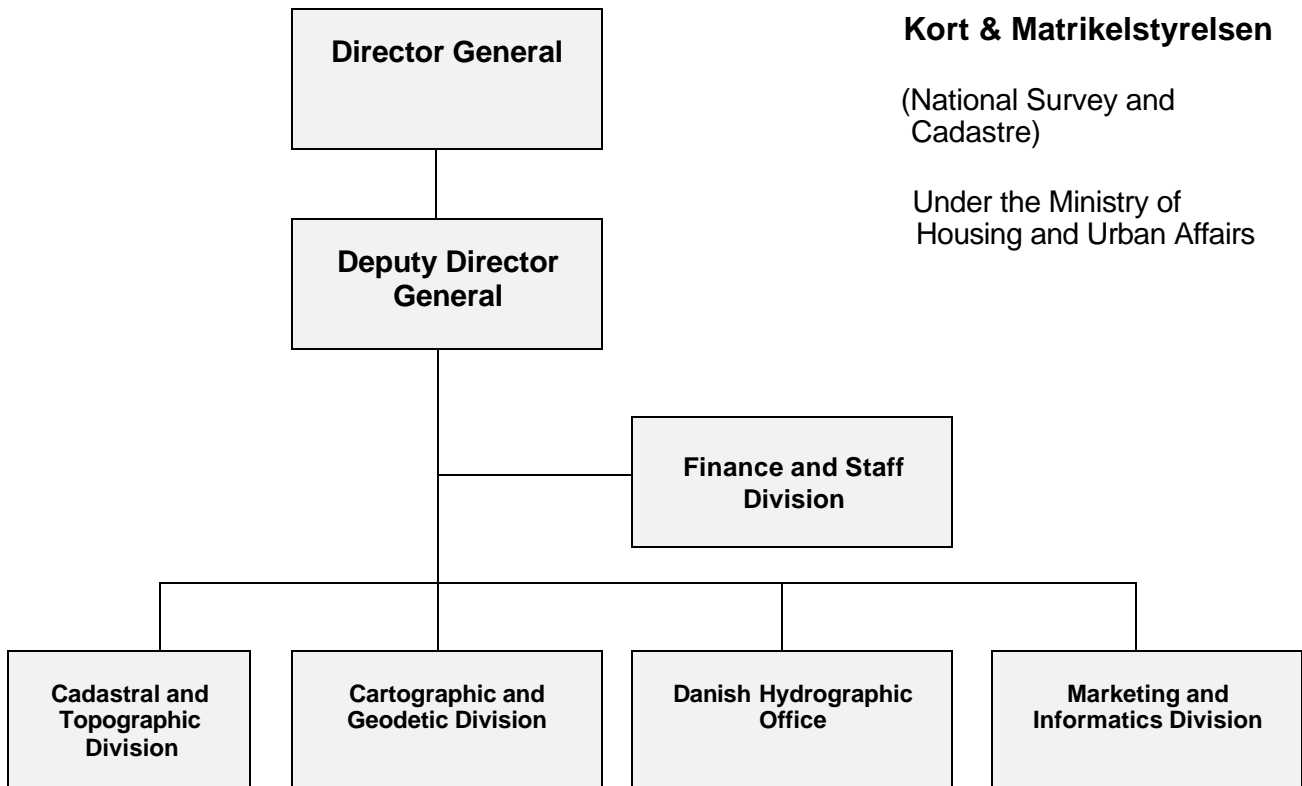
# SWITZERLAND: Organizational units involved in Land Administration

valid: January 1999



DS 18.11.1998

## Organisation Diagrams



**Kort & Matrikelstyrelsen**

(National Survey and Cadastre)

Under the Ministry of Housing and Urban Affairs

Denmark

Other examples can be found in the annex.

## Question 2 - Philosophy

It was asked why is the structure like it is. The most given answers were '..because it is regulated by law.., ...it is been like this all the time... or ...unknown reason..'. In nearly all cases history and local mentality runs like a red line through the organisational structures of the respective country.

If the reason for surveying is originated in military purposes the main department of surveying is located in the defence ministry structure. If the reason is originated in tax purposes surveying is lead by the ministry of finance and so on (agriculture, navy, law)

And once being built up it is nearly impossible to change this organisational structure. Sometimes this can happen the other way round as well. Denmark for example the cadastral department (part of Minister of Agriculture), the Geodetic Institute (part of Minister of Defense) and the Nautic Mapping Division (part of Minister of Traffic) amalgamated in 1989 and established the Danish Survey and cadastre.

Sometimes parts of surveying activities simply disappear if they are not necessary any longer and with them the organisational structure for that activity as well.

## Question 3 - Functions and Responsibilities

With this question we want to know who does the daily routine work and who is responsible for it. Some countries had difficulties to give an answer because the respective activity does not exist in this country or is not carried out by surveyors in the sense of FIG. But there are results and you can see some trends.

private sector	%
Engineering surveying	100
Building design/construct	91
Topographical surveying	82
Valuation	73
Hydrographic surveying	55
Cadastral surveying	45
Urban planning	45
Rural planning	45
Geodetic surveying	36
Land management	36
Land registration	27

public sector	%
Rural planning	100
Urban planning	100
Land registration	91
Cadastral surveying	82
Geodetic surveying	82
Hydrographic surveying	82
Land management	82
Building design/construct	82
Topographic surveying	73
Valuation	64
Engineering surveying	36

If you calculate the average of given answers you can see that 80 % of the work is done by the public sector and only 58 % by the private sector.

With this questionnaire it was asked **who does the work** and not **who should do the work**. We might find that out with a second step and maybe with a different result.

List of answers where services are being carried out in both sectors:

both sectors	%
Building design/construct	73
Topographical s.	55
Urban planning	45
Rural planning	45
Engineering s.	36
Hydrographic s.	36
Valuation	36
Land management	27
Cadastral s.	27
Geodetic s.	18
Land registration	18

Amazingly in nearly no answer to the questionnaire the box 'other' than public or private was ticked. I think a possible reason for that is a kind of misunderstanding the question or possibly this type does not exist at all. Maybe an explanation or a clear definition would have been helpful to get answers for what Commission 1 is looking for. Let me ask a question to give an example: Is a PLC (Public Limited Company) still a private supplier of services if the majority of shares is held by the state? This question should have been clarified before being able to draw proper conclusions.

In some countries there are a kind of cooperatives or public law cooperations in use which provide surveying services. Sometimes you will find trade associations of communities, municipalities or local authorities to perform surveying activities.

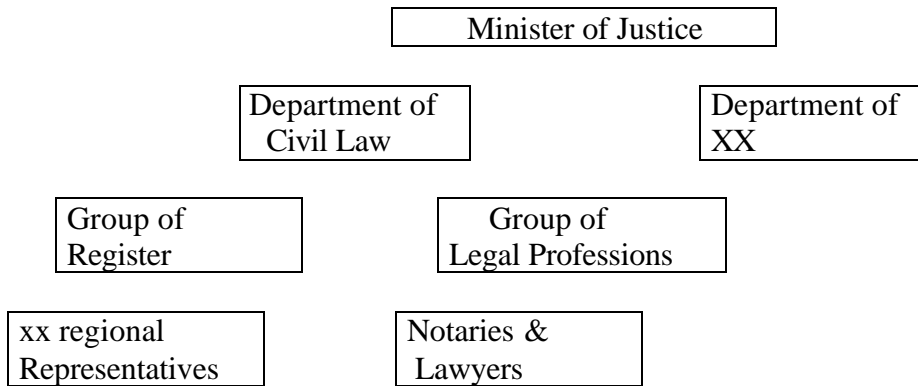
#### **Question 4 - Contracts and Penalties**

It is quite difficult for me to work out reasonable results out of the given answers. First I have to become an expert in different languages because most of the answers were given in the language of origin. But nevertheless in discussions with colleagues I found out that all over the world the terms of 'deadlines', 'warranty' and 'penalties' are well known and in use. I guess that is rather an economic reality than a specific issue of FIG activities.

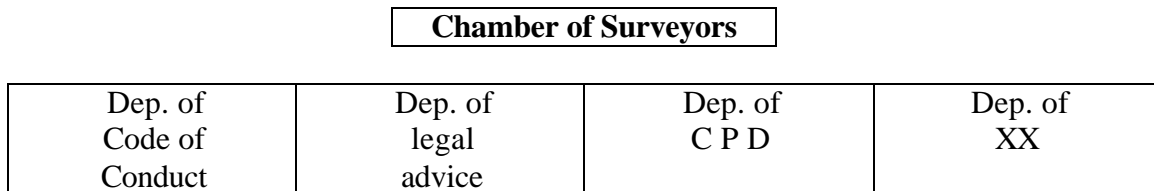
#### **CONCLUSIONS**

An organisational structure in general should be slim, easy to handle and reduced to the indispensable needs. Therefore activities must be defined in advance where supervision is needed. If there are services which are based on constitutional rights or laws the government might build up a convenient structure to guarantee these rights. All other activities could be monitored by a selfgoverning professional body and legal regulations.

Example:



Example:



However these are no recommendations which can simply be taken over but only a presentation of possible models which might serve as a starting point to think about different solutions. Working party 1 will continue its work on this issue. International agencies and governments – particularly in developing countries and countries in economic transition will then benefit from these results.

One key issue seems to be the transition from a proprietor-based to a parcel-based registration system. Switzerland did this transition with the introduction of Civil-Law in 1912. The second key issue is the introduction of a system that land registry has to be based on official cadastral surveying. With highly qualified colleagues carrying out this work high quality of service can be guaranteed.

Though there is no need to impose any of the presented structures. Whatever type of structure to be implemented it should be sown and nurtured carefully by recognizing local history, culture and economic requirements.

## REFERENCES

Questionnaire of WG 1

## BIOGRAPHICAL NOTES

Dipl.-Ing. Klaus Rürup is currently Vice Chair of FIG Commission 1 (Professional Standards and Practice) and Vice President of CLGE (Comite de Liaison des Geometres Europeens). From 1994 to 1998 he acted as Secretary of FIG Commission 1.

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