

O. Univ. Professor Dr.-Ing. Holger Magel

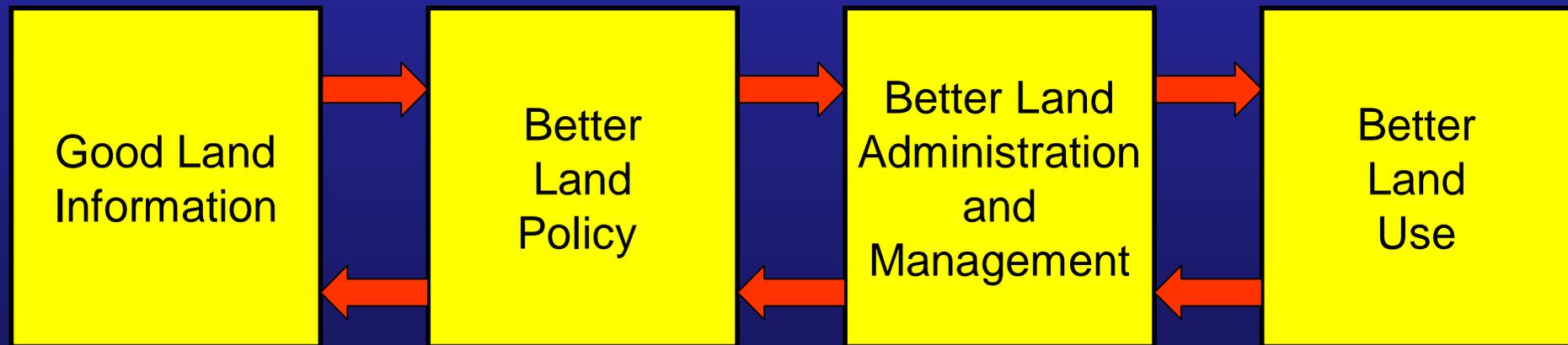
President of FIG

at DdL Annual professional Meeting 2004 in Nyborg, 31 January

## **Land Policy and Land Management – a challenge for surveyors Visions and experiences in Germany**

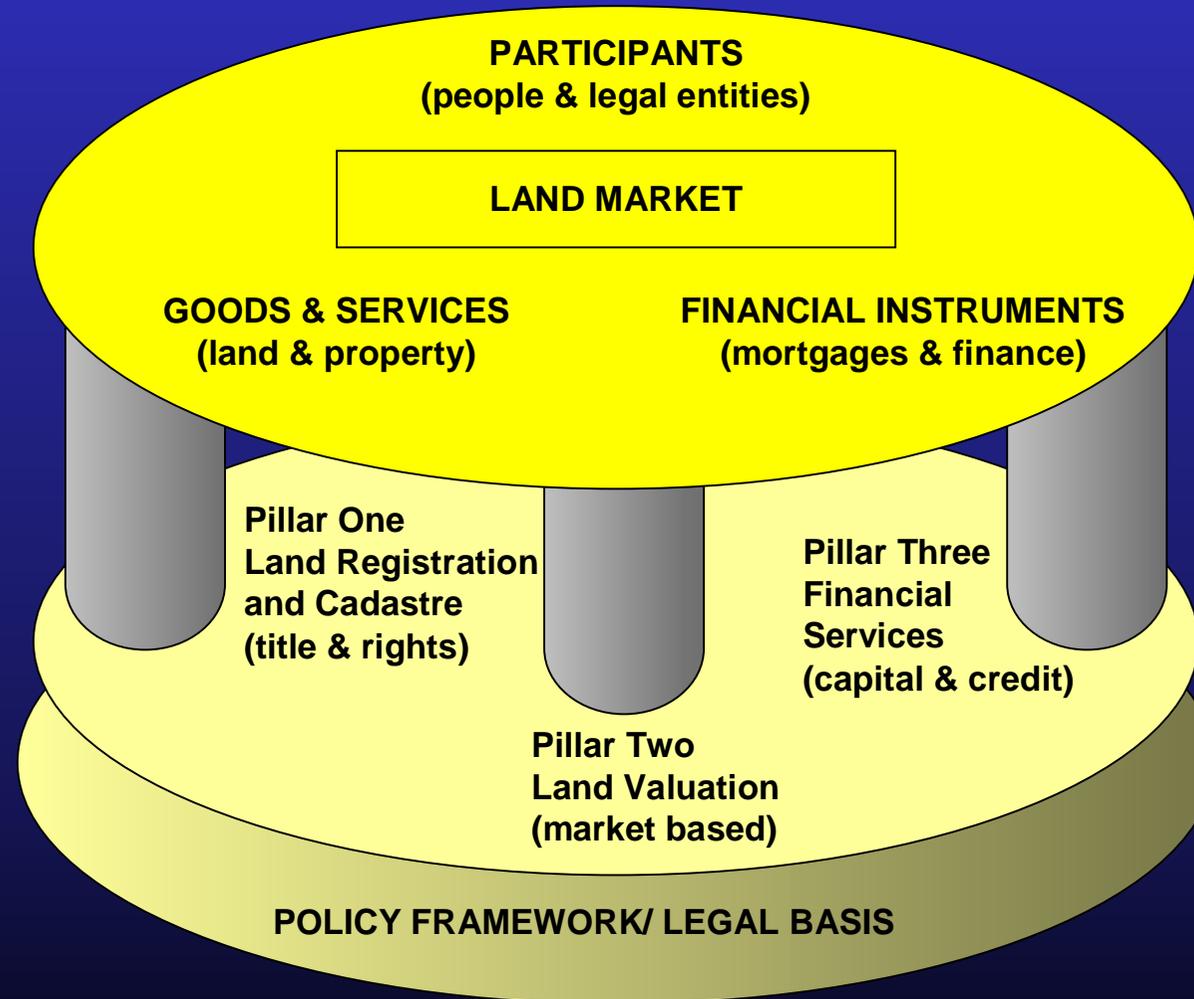
- I. The Land Issue – politically very sensitive but for the State of decisive importance for the future**
- II. Germany has a complex system and a rich case law on land policy and instruments**
- III. Land Policy and Land Management – a Challenge for Geodesists**

Sustainable development is not attainable without sound Land administration



Source: The Bathurst Declaration FIG-Publication No. 22/1999

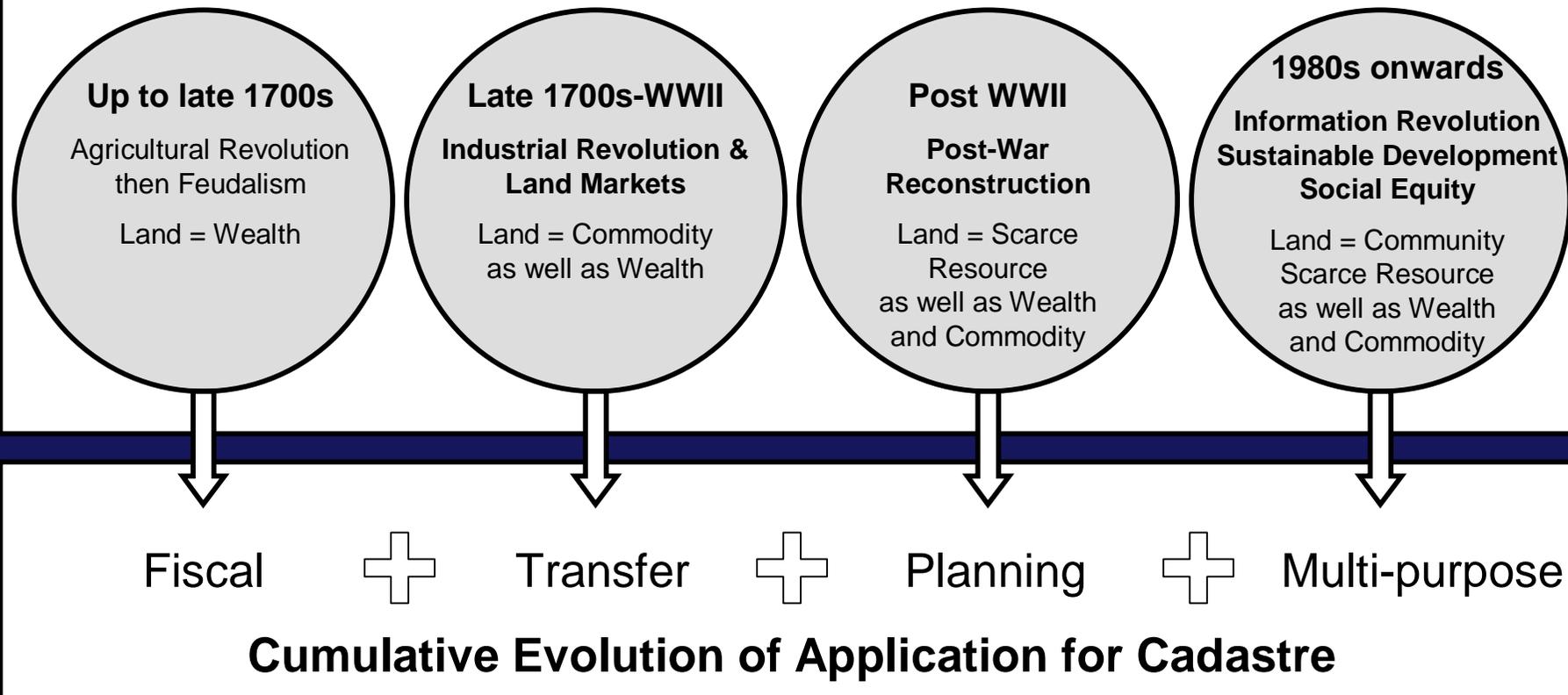
# The Three Pillar Model



Source: Dale, Peter: The Importance of Land Administration in the Development of Land Markets - A global perspective  
Proceedings of UDMS 2000, 11.-15. September 2000, Delft, Netherlands

# Evolution of Cadastres

## Main Phases in Humankind/Land Relationship



## The special thing LAND ...

This fact makes it impossible to leave its use to be determined by the obscure interplay of market forces and the whim of the individual. An equitable legal and social system calls instead for the public interest to play a much stronger role in the case of land than in the case of other property assets. **That is why land cannot be treated as moveable goods in legal relationships.**

**Land policy** is regarded in accordance with an Advisory Opinion of the Federal Constitutional Court in 1954 as a part of regional planning. It comprises the totality of the activities of public authorities in relation to land.

**Land policy** is understood as conscious action to bring about an optimal use of land as well as of a socially just distribution of landownership and of income from land.

Source: Federal Constitutional Court, Baugutachten, 1954

**Land law** is defined as the sum of the rules which regulate those matters which, arising from the interests of society, require regulation in relation to land transactions, parcels of land, property relations and kinds of use.

Source: Federal Constitutional Court, Baugutachten, 1954

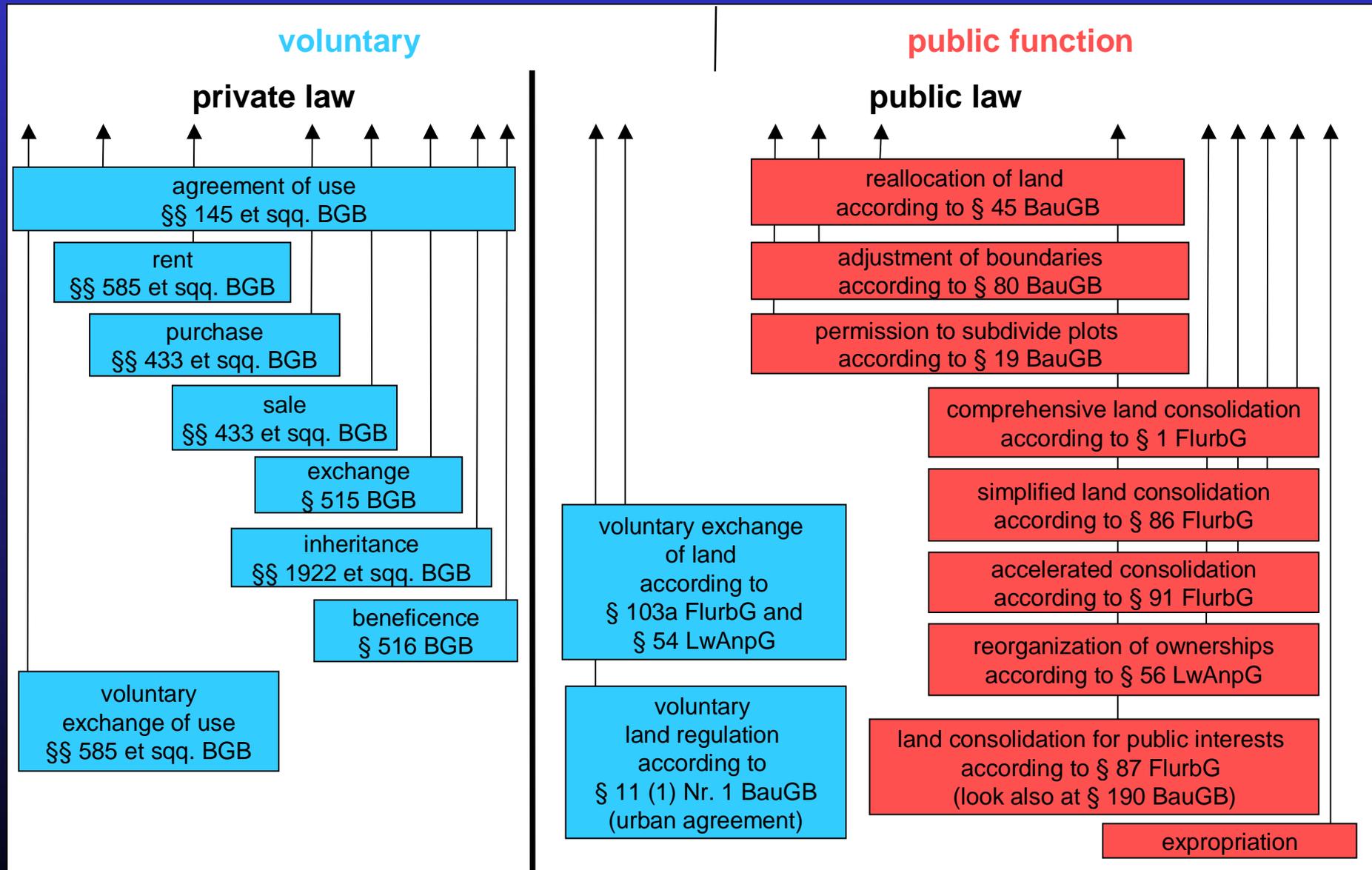
## Article 14 of the Basic Law

(1) Property and the right of inheritance shall be guaranteed. Their content and limits shall be defined by the laws.

(2) Property entails obligations. Its use shall also serve the public good.

The substance of this second paragraph of Article 14 of the Basic Law is concerned with the frequently invoked **social ties on property** particularly on property in land.

# Land readjustment in Germany



## Two fold concept of *Bodenordnung* (land tenure and land readjustment) in Germany

On the one hand this refers to the more **static concept** of *Bodenordnung* in the sense of land tenure. It comprises the contemporary concept of ownership of land, including its use and taxation as well as the overall concept of development aims for the future (new) land administration

On the other hand the experts speak of the **dynamic components** of *Bodenordnung*. In this sense of land readjustment it comprises all measures which serve the reconciliation of the (subjective) ownership, tenure and use of land relationships with the (objective) aims of spatial and technical planning like land consolidation planning and the resolution of conflicts between public and private interests (SEELE, 1979).

I will accordingly speak of land tenure and land readjustment as appropriate.

# Relationships between Land Policy, Land Tenure and Land Management in Germany

## L a n d P o l i c y a n d L a n d T e n u r e

overall concept and basic conditions of land related action  
 as well as the initiation of corresponding measures by public authorities  
 based on Art. 14 German Basic Law and § 903 German Civil Code and special laws (substance and limits)

Stat. LR

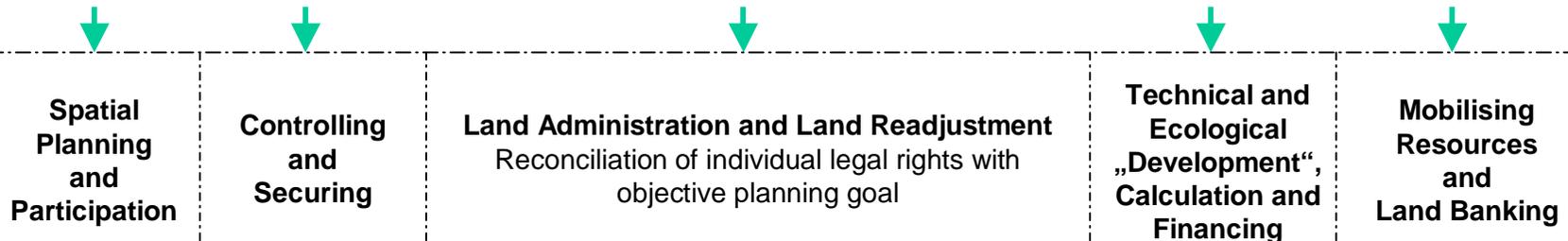
### Land Administration (with Cadastre and Land Register as central elements) and Land Readjustment (LR)

existing constitution, distribution, use and documentation of land and land ownership as well as overall concept and regulations for its socially fair and sustainable use in conformity with the relevant plan in urban and rural areas

Dynamic Land Readjustment

### Land Management

Policies and fields of action for efficient consulting, planning, controlling and coordination of all measures and instruments for access, availability, use and change of use, development, allocation and building up of land including buildings for urban, ecological, economic and other purposes in urban and rural areas by means of:



Different Programmes (e.g. urban and rural development), GIS, land valuation, taxation, land transactions, credit system

Stat. LR

### Land Administration (with renewed Cadastre and Land Register) and Land Readjustment

New (rearranged) constitution, distribution, use and documentation of land and land ownership

# LAND MANAGEMENT IN GERMANY

## The new challenge to geodetic teaching, research and practice

From

**Land administration (cadastre and Grundbuch) as well as urban and rural land readjustment (according to Building Code or Land Consolidation Act )**

implementation of pre-determined or individually developed goals and plans

via

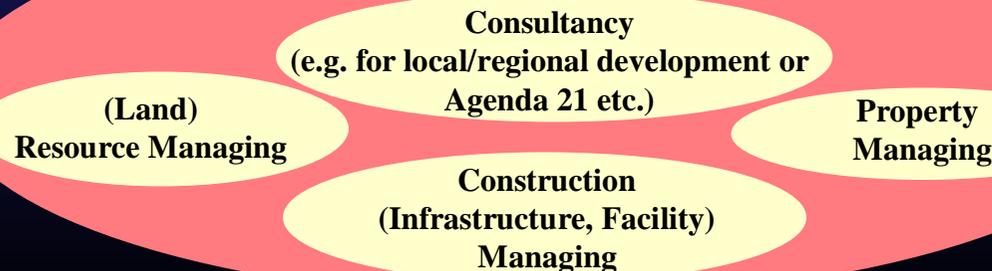
**local and regional land development incl. land administration and land readjustment**

development of one`s own goals and plans for settlement and landscape with strong implementation (arrangement, construction)

to

**Land Management**  
**“quadrophony of consulting, planning, arrangement and construction”**  
**with and without formal implementation of procedure under Building Code or Land Consolidation Act etc.**

**sphere of activities in urban und rural land management**



**classical and new fundamentals, methods and models in the field of geodesy and geoinformation**

such as mathematics, cadastral and engineering measuring, GPS, GIS, geospatial data management, photogrammetry, remote sensing, cartography, readjustment, computer and programming skills etc.

**fundamentals, methods and models from other fields**

such as (planning, administrative, property, building etc.) law, planning and decision theories, valuation, land markets, (real estate) economy, sustainable land use, urban and rural development, project management, participation, political and social system theory, “soft skills”, various expertise on settlement, landscape and road planning, road construction, water management or agriculture and forestry etc.

# INTERGEO®

*Kongress und Messe der Geodäsie und Geoinformation  
Frankfurt a. M. 16. bis 18. Okt. 2002 Messegelände*



**Geodäsie**

**Geoinformation**

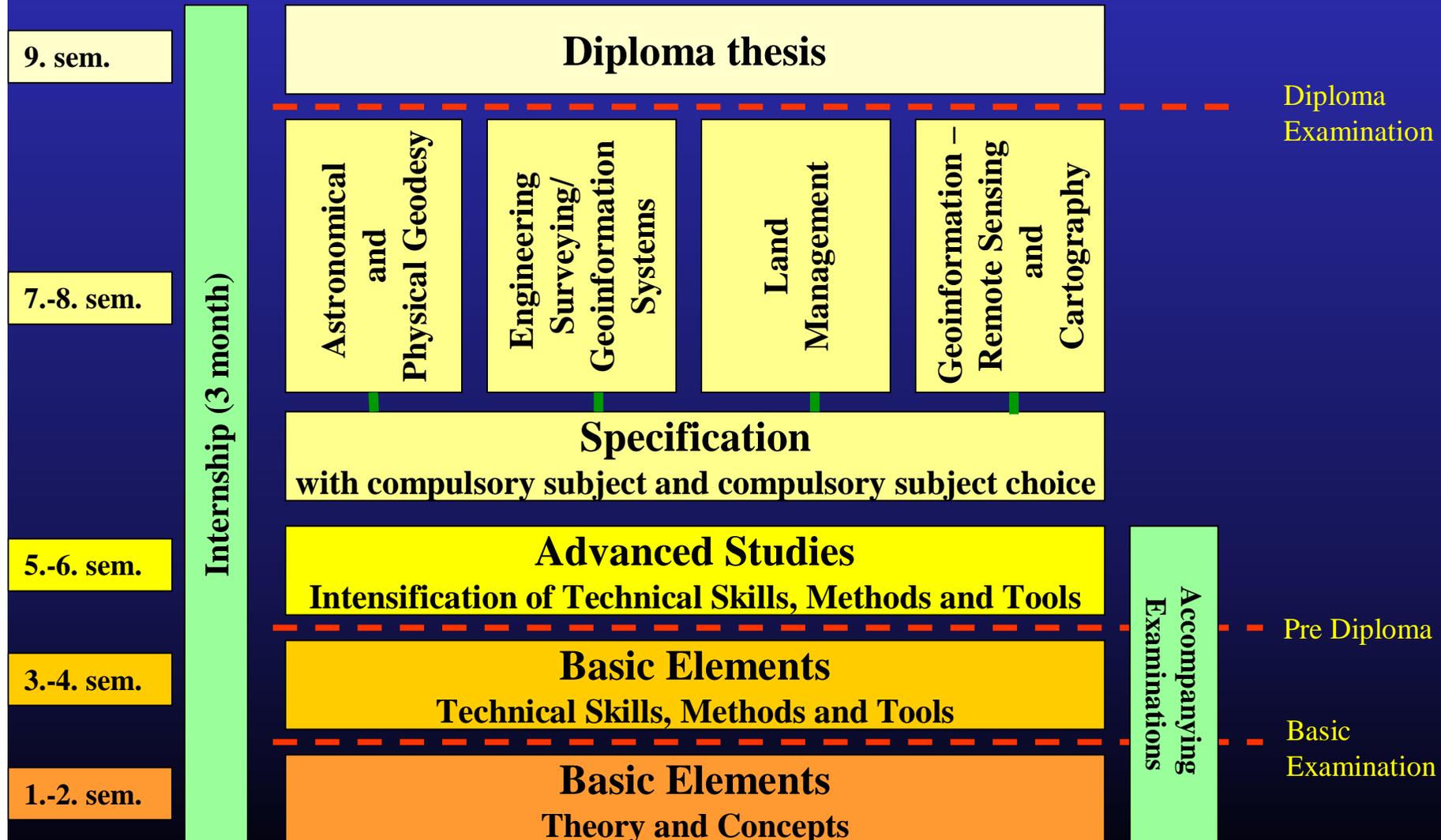
**Landmanagement**

D V W

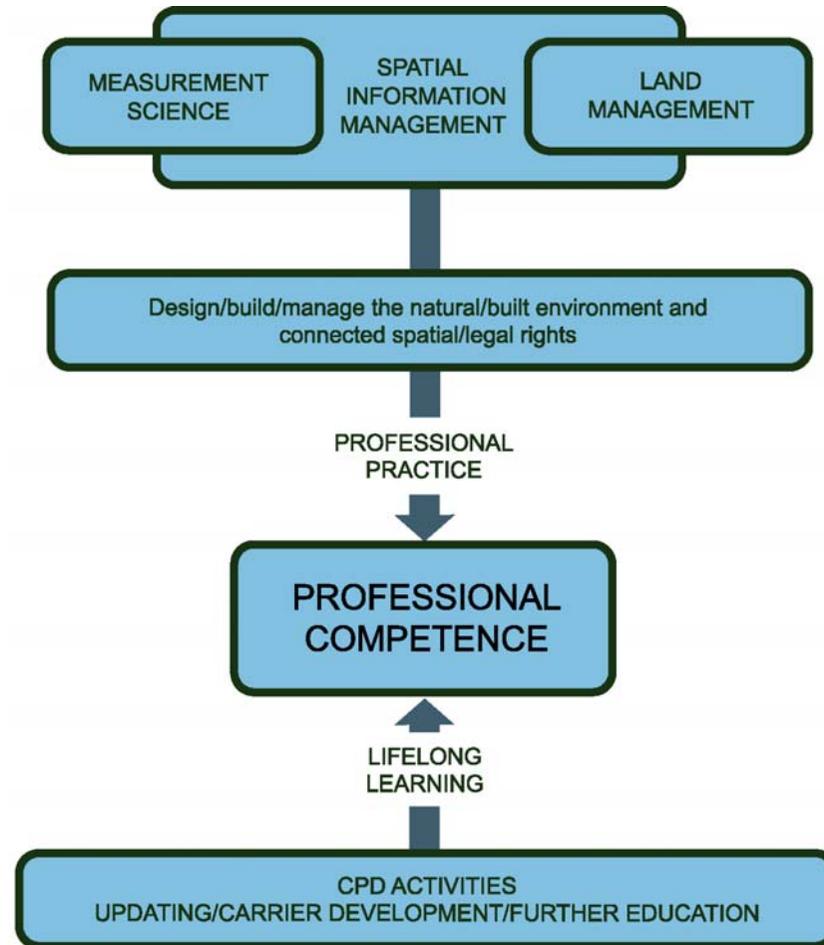
# Profile of Surveyors/Geodesists Education at Technical University of Munich (TUM)

- Preparation for activities in research and practice with the wide range „from the single parcel to the planet mars“
- Comprehensive scientific education in the fields of Geodesy, Geoinformation and Land Management
- The Graduates finally should have become a “wellgrounded specialised Generalist”, based on ethical values and a commitment to society.

# New Structure of the Curriculum for TUM-Geodesy and Geoinformation



# ... A Lifelong Learning Perspective



***THE PROFESSIONAL COMPETENCE MODEL***

#### 4. Münchner Tage der Bodenordnung und Landentwicklung 2002

#### Vom Biotop- zum ganzheitlichen Ressourcenschutz

#### – Neue Herausforderungen an die Landentwicklung in Deutschland –

in Zusammenarbeit mit der Bund-Länder-Arbeitsgemeinschaft Landentwicklung

am 18. und 19. März 2002 an der Technischen Universität München

Veranstalter und Leitung:

Univ.-Prof. Dr.-Ing. Holger *Magel*

Lehrstuhl für Bodenordnung und Landentwicklung, Institut für Geodäsie, GIS und Landmanagement der Technischen Universität München

#### Program m

**Montag, 18. März 2002**

#### Eröffnungsveranstaltung:

10.00 Uhr Begrüßung und Einführung

Univ.-Prof. Dr.-Ing. Holger *Magel*

Grußworte

*Vigdis Nipperdey,*

Vorsitzende des TUM-Hochschulrats

MR Prof. Axel *Lorig,*

*Geschäftsführer der ARGE Landentwicklung*

#### Vom Biotop- zum ganzheitlichen Ressourcenschutz

10.30 Uhr Festvortrag:

Paradigmenwandel in der Umwelt- und Naturschutzpolitik? Zur Wiederentdeckung der Kulturlandschaft und ihrer Ressourcen

Staatsminister

Dr. Werner *Schnappauf*

Bayerisches Staatsministerium für Landesentwicklung und Umweltfragen

11.15 Uhr Festvortrag:

Ministerialdirektor

Prof. Dr. Hermann *Schlagheck*

Bundesministerium für Verbraucherschutz, Ernährung und Landwirtschaft

## Deadline for Application

Deadline for the academic year starting each year in October: May 31<sup>st</sup> of the same year.

Deadline for DAAD-Scholarship: October 15<sup>th</sup> of the previous year.

**Application forms and further information about the Master 's Program are available from:**

Univ.Prof.Dr.-Ing.Holger Magel  
Chair of Land Readjustment and Land Development,  
FIG-President 2003 –2006, Program Director  
Dipl.-Geogr.M.A.Babette Wehrmann  
Program Manager

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[www.landmanagement-master.de](http://www.landmanagement-master.de)

**The Master 's Program "Land Management and Land Tenure "is supported by:**



**DAAD**

Deutscher Akademischer Austausch Dienst  
German Academic Exchange Service



Application



## Master of Science (MSc) in Land Management and Land Tenure

Faculty of Civil Engineering  
and Geodesy

Institute of Geodesy, GIS  
and Land Management

Germany

International Graduate Program



MASTER OF SCIENCE  
in  
Land Management and Land Tenure



## Philosophy of the Program

To demonstrate and illustrate the important role of land rights and land policy, land management and land administration for a sustainable urban and rural development in the broader context of good governance and to teach adequate approaches and tools for their implementation.



MASTER OF SCIENCE  
in  
Land Management and Land Tenure



## List of Courses

### Basic Elements

- Global Framework for Land Management and Land Tenure
- Rural and Urban Development
- Land Rights and Land Tenure Systems
- Land Policy
- Land Economics (Land Valuation, Land Markets, Land Taxation)
- Land Management
- Land Administration
- Natural Resource Management
- Land Management and Land Tenure in Germany

On this background surveyors/geodesists will be ready and best prepared for



Source: Prof. Stig Enemark, Head of School of Surveying and Planning Aalborg University, Denmark, Intergeo, Hamburg, 12 September 2003