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

POLICY FRAMEWORK/ LEGAL BASIS

Pillar One
Land Registration and Cadastre
(title & rights)

Pillar Two
Land Valuation
(market based)

Pillar Three
Financial Services
(capital & credit)

GOODS & SERVICES
(land & property)

PARTICIPANTS
(people & legal entities)

LAND MARKET

FINANCIAL INSTRUMENTS
(mortgages & finance)

Source: Dale, Peter: The Importance of Land Administration in the Development of Land Markets - A global perspective
Evolution of Cadastres

Main Phases in Humankind/Land Relationship

- **Up to late 1700s**
  - Agricultural Revolution then Feudalism
  - Land = Wealth

- **Late 1700s-WWII**
  - Industrial Revolution & Land Markets
  - Land = Commodity as well as Wealth

- **Post WWII**
  - Post-War Reconstruction
  - Land = Scarce Resource as well as Wealth and Commodity

- **1980s onwards**
  - Information Revolution
  - Sustainable Development
  - Social Equity
  - Land = Community Scarce Resource as well as Wealth and Commodity

Fiscal + Transfer + Planning + Multi-purpose

Cumulative Evolution of Application for Cadastre

Trends in Geomatics – Technical University of Munich – Ian Williamson 2000
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.

Source: German Federal Constitutional Court, 1967
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

voluntary

private law

agreement of use
§§ 145 et sqq. BGB

rent
§§ 585 et sqq. BGB

purchase
§§ 433 et sqq. BGB

sale
§§ 433 et sqq. BGB

exchange
§ 515 BGB

inheritance
§§ 1922 et sqq. BGB

beneficence
§ 516 BGB

voluntary exchange of use
§§ 585 et sqq. BGB

public function

public law

reallocation of land
according to § 45 BauGB

adjustment of boundaries
according to § 80 BauGB

permission to subdivide plots
according to § 19 BauGB

comprehensive land consolidation
according to § 1 FlurbG

simplified land consolidation
according to § 86 FlurbG

accelerated consolidation
according to § 91 FlurbG

reorganization of ownerships
according to § 56 LwAnpG

land consolidation for public interests
according to § 87 FlurbG
(look also at § 190 BauGB)

expropriation

voluntary exchange
of land
according to
§ 103a FlurbG and
§ 54 LwAnpG

voluntary land regulation
according to
§ 11 (1) Nr. 1 BauGB
(urban agreement)

© Univ.-Prof. Dr.-Ing. Holger Magel, 2004
Chair of land readjustment and land development, TU München
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.
**Land Policy and Land Tenure**
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)

**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

**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:

- **Spatial Planning and Participation**
- **Controlling and Securing**
- **Land Administration and Land Readjustment**
  Reconciliation of individual legal rights with objective planning goal
- **Technical and Ecological „Development“, Calculation and Financing**
- **Mobilising Resources and Land Banking**

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

**Land Administration (with renewed Cadastre and Land Register) and Land Readjustment**
New (rearranged) constitution, distribution, use and documentation of land and land ownership

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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

Consultancy (e.g. for local/regional development or Agenda 21 etc.)

(Land) Resource Managing

Property Managing

Construction (Infrastructure, Facility) Managing

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

Geodäsie  Geoinformation  Landmanagement
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

Pre Diploma

1.-2. sem.

3.-4. sem.

5.-6. sem.

7.-8. sem.

9. sem.

Basic Elements
Theory and Concepts

Basic Elements
Technical Skills, Methods and Tools

Intensification of Technical Skills, Methods and Tools

Specification
with compulsory subject and compulsory subject choice

Remote Sensing
and Cartography

Land Management

Surveying/Geoinformation Systems

Astronomical and Physical Geodesy

Advanced Studies

Diploma thesis

Accompanying Examinations

Basic Examination

Diploma Examination
... A Lifelong Learning Perspective

THE PROFESSIONAL COMPETENCE MODEL

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

Programm

Montag, 18. März 2002

Eröffnungsveranstaltung:

10.00 Uhr Begrüßung und Einführung
Grußworte

Univ.-Prof. Dr.-Ing. Holger Magel
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 31st of the same year.

Deadline for DAAD-Scholarship: October 15th 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
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DAAD
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German Academic Exchange Service

International Graduate Program

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

Faculty of Civil Engineering and Geodesy

Institute of Geodesy, GIS and Land Management

Germany
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.
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

Facing the new world

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