

CADASTRE 2014: FROM THEORY TO PRACTICE

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ABSTRACT

- Cadastre 2014 - A Vision for a Future Cadastral System: A publication from FIG.
- How did the surveying community react to these ideas?
- Cadastre 2014 - the book-keeping system for land management and land administration!
- Examples of initiatives taken.

1. Cadastre 2014

At the XX. FIG Congress 1994 in Melbourne was given the task to FIG Commission 7's Working Group 7.1 to investigate cadastral reforms and to develop a vision how cadastral systems would look like in about 20 years to be able to better satisfy the needs of the steadily developing humankind. The results of these studies have been published at the XXI. FIG Congress 1998 in Brighton in a brochure with the title 'Cadastre 2014 - A Vision for Future Cadastral Systems'.

The vision says that the cadastral systems will have to adapt to the development of the legislations of the different countries. Increasingly societies are regulating the natural resource utilization in view of a sustainable development of humankind and nature by public law. The results of this process are juridical arrangements defining rights and restrictions of land use.

The key statements of Cadastre 2014 are the following.

Statement 1: Cadastre 2014 will show the complete legal situation of land, including public rights and restrictions!

Cadastral systems traditionally based on private law, are to be developed to land information systems containing and securing the full range of information on rights and restrictions on land. Cadastre 2014 shall follow the fundamental principles of the traditional property cadastres proven a long time. These principles are: the booking principle, the consent principle, the principle of publicity and the principle of specialty.

Statement 2: The separation between 'maps' and registers will be abolished!

Statement 3: Cadastral mapping will be dead, long live cadastral modelling!

Statement 4: 'Paper and Pencil Cadastre' will have gone!

Statement 5: Cadastre 2014 will be highly privatized! Public and private sectors are working closely together!

Statement 6: Cadastre 2014 will be cost recovering!

2. Reactions of the surveying community

The surveyor's reaction to the brochure was rather positive. A huge interest was shown all over the world. The brochure was translated into further languages such as Albanian, Bulgarian, Finnish, French, Georgian, German, Greek, Korean, Latvian, Macedonian, Polish, Russian, Serbian, Slovenian, Ukrainian. The Australian Institution of Surveyors, asked for the copyright and reprinted 5'000 copies to distribute them to all Australian and New Zealand surveyors.

Several universities and other educational institutes have included Cadastre 2014 in their curricula.

In several important events, Cadastre 2014 played an important role. Among others, it was taken into consideration during the "International Workshop on Land Tenure and Cadastral Infrastructures For Sustainable Development" in Bathurst, NSW, Australia and the resulting International Seminar in Melbourne in October 1999. **Cadastre 2014 was shown there in its future role of a book-keeping system for land management and land administration to support sustainable development.**

The interest in the vision is still very strong and FIG's Annual Review 99 finds that 'similar best-seller status is predicted for Commission 7's companion publication on reforming the cadastre 'Cadastre 2014'.

3. Examples for initiatives

3.1 Swiss Association of Licensed Surveyors (IGS)

The Swiss society of Licensed Surveyors has launched in 1999 an initiative to promote Cadastre 2014. Several laws regulating spatially related subjects have been analyzed to find and model the respective legal land objects. These models, described in the data definition language INTERLIS, were implemented in land information systems as real world examples for Cadastre 2014. The results are discussed broadly with professionals, politicians and even bankers. Politicians and bankers understand well the role of Cadastre 2014 as a tool to obtain reliable, updated and complete information on the legal situation of land, which is a very important political and economic factor. In Switzerland US\$270 billion are secured by mortgages. The initiative brings together the surveyors and the land registrars to provide better services to governments and citizens.

3.2 Reform of the physical law about land use planning in the Swiss Canton of Zurich

In the context of a completely redesigned law about land use planning in the Canton of Zurich, Cadastre 2014 is the tool to register all private and public rights and restrictions, to exchange this information between organizations interested in land matters, sustainable development and environmental protection. Cadastre 2014 also helps to resolve the sensitive questions of protection of data and individuals.

3.3 The multipurpose cadastre in the Principality of Liechtenstein

In the Principality of Liechtenstein the new cadastral system is designed according to the visions of Cadastre 2014. The cadastral law declares every set of legal land objects to be part of the national spatial data infrastructure. The cadastre contains, besides the private property parcels, the encumbrances, the land use zones and the water, soil, landscape and noise protection zones, the rockfall, avalanche and landslide risk zones, the monument and building protection zones, the agricultural production zones, the civil protection and water, sewerage and energy infrastructures, etc. This information is shared by the state and municipal authorities, the citizens and the market. The private sector plays an important role and cost recovery has reached a high level.

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