

An analysis of how the six CADASTRE 2014 statements have influenced the development of Brazil's cadastral system

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PRINCIPLES OF CADASTRE 2014

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

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

3 - The Cadastral mapping will be dead! Long live modelling!

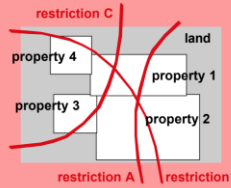
4 - 'Paper and pencil - cadastre' will have gone!

5 - Cadastre 2014 will be highly privatized! Public and private sector are working closely together!

6 - Cadastre 2014 will be cost recovering!

Statement 1 on Cadastre 2014

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

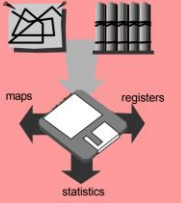


Comment: The population of the world is growing. The consumption of land is increasing. The absolute control of the individual or of legal entities of land is increasingly being restricted by public interest. To provide security of the land tenure, all facts about land must be made obvious by the cadastral system of the future.

Consequences: A new thematic model is necessary. Surveyors must take into consideration public law.

Statement 2 on Cadastre 2014

The separation between 'maps' and 'registers' will be abolished!

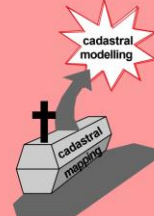


Comment: The separation was necessary because the available technology – paper and pencil – did not allow other solutions.

Consequences: The division of responsibilities between surveyor and solicitor in the domain of cadastre will be seriously changed.

Statement 3 on Cadastre 2014

The Cadastral mapping will be dead! Long live modelling!




Comment: Maps have always been models, but the available technology did not allow for the use of these models in a flexible manner. So in mapping flexibility had to be brought in by different scales. Different scales had to be represented by different data models. Modern technology allows the creation of maps of different scales and registers in different forms from the same data model.

Consequences: In 2014 there will be no draftmen and cartographers in the domain of cadastre.

Statement 4 on Cadastre 2014

'Paper and pencil - cadastre' will have gone!



Comment: Geomatics technology will be the normal tool for cadastral work. Real low-cost solutions are only possible when this technology is used in combination with lean administrative procedures. Developed, developing, and transitional countries need models of the existing situation to resolve the problems of population, environment and reasonable land use.

Consequences: The modern cadastre has to provide the basic data model. Surveyors all over the world must be able to think in models and to apply modern technology to handle such models.

Statement 5 on Cadastre 2014

Cadastre 2014 will be highly privatized! Public and private sector are working closely together!




Comment: Public systems tend to be less flexible and customer oriented than those of private organizations. Free economies demand flexibility in land markets, land planning and land utilization. Flexibility may be provided better by private institutions. For necessary security, however, public involvement is indispensable.

Consequences: The private sector will gain in importance. The public sector will concentrate on supervision and control.

Statement 6 on Cadastre 2014

Cadastre 2014 will be cost recovering!



Comment: Cadastral systems need considerable investment. But the land documented and secured by the cadastre represents a multiple of the investment. The investment and operation costs have to be paid back at least partially by those who profit.

Consequences: Cost/benefit analysis will be a very important aspect of cadastre reform and implementation. Surveyors will have to deal more with economic questions in future.

BRAZILIAN INITIATIVES

1972: National Rural Cadastre System (SNCR)

1970s: Municipal Taxation Registries

2001: Law 10.267 (georeferencing and certification of rural properties - SIGEF/INCRA)

2012: Rural Environmental Registry (CAR)

2016: National System for Territorial Information Management (SINTER)

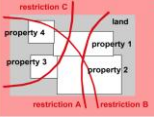
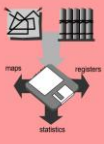




2022: Brazilian Real Estate Registry (CIB)

2022: MDR Ordinance N° 3.242 (Guidelines for Municipal Territorial Registration)

2022: ABNT NBR 17047 - territorial cadastral survey for public registration

2025: CNJ Provision N° 195 (SIG-RI)

BRAZILIAN INITIATIVES x STATEMENTS OF CADASTRE 2014

STATEMENTS OF CADASTRE 2014		Statement 1	Statement 2	Statement 3	Statement 4	Statement 5	Statement 6
OF BRAZILIAN INITIATIVES	STATEMENTS OF CADASTRE 2014	<p>Cadastre 2014 will show the complete legal situation of land, including public rights and restrictions</p>  <p>Comment: The population of the world is growing. The demand for land is increasing. The absolute control of the individual or of legal entities of land is increasingly being restricted by public interest. To provide security of the land tenure, all facts about land must be made obvious by the cadastre system of the future.</p> <p>Consequences: A new theme for model is necessary. Surveys must take into consideration public law.</p>	<p>The separation between 'maps' and 'registers' will be abolished</p>  <p>Comment: The separation was necessary because the available technology - paper and pencil - did not allow other solutions.</p> <p>Consequences: The division of responsibilities between surveyor and cadastre in the domain of cadastre will be seriously changed.</p>	<p>The Cadastre mapping will be dead! Long live modelling!</p>  <p>Comment: Maps have always been models, but the available technology did not allow for the use of these models in a flexible manner. No mapping flexibility had to be brought in by different scales. Different scales had to be represented by different data models. Modern technology allows the creation of maps of different scales and registers in different forms from the same data model.</p> <p>Consequences: In 2014 there will be no difference and cartographers in the domain of cadastre.</p>	<p>'Paper and pencil - cadastre' will have gone!</p>  <p>Comment: Geomatics technology will be the normal tool for cadastre work. Real-time solutions are only possible when this technology is used in combination with lean administrative procedures. Developed, developing and transitional countries need models of the existing situation to realize the problems of population, environment and reasonable land use.</p> <p>Consequences: The modern cadastre has to provide the basic data model. Surveyors all over the world must be able to think in models and to apply modern technology to handle such models.</p>	<p>Cadastre 2014 will be highly privatized! Public and private sector are working closely together!</p>  <p>Comment: Public systems tend to be less flexible and customer oriented than those of private organizations. Free economies demand flexibility in land markets, land planning and land utilization. Flexibility may be provided better by private institutions. For necessary security, however, public involvement is indispensable.</p> <p>Consequences: The private sector will gain in importance. The public sector will concentrate on supervision and control.</p>	<p>Cadastre 2014 will be cost recovering!</p>  <p>Comment: Cadastre systems need considerable investment. But the land documented and secured by the cadastre represents a multiple of the investment. The investment and operation costs have to be paid back at least partially by those who profit.</p> <p>Consequences: Cost-benefit analysis will be a very important aspect of cadastre reform and implementation. Surveyors will have to deal more with economic questions in future.</p>
	SNCR			no maps			
	Municipal Taxation Registries						
	Law 10.267						
	CAR						
	SINTER / CIB						
	MDR Ordinance N° 3.242						
	CNJ Provision No 195 (SIG-RI)						

Legend:

Completely meets requirements



Partially meets requirements



No answer

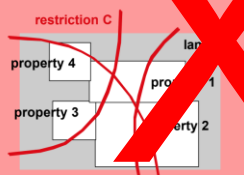


Decree 12.689/2025

(suspension of the certification process for the georeferencing of rural properties - SIGEF / INCRA - until 10/21/2029)

Statement 1 on Cadastre 2014

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




restriction C
property 4
restriction A
property 3
restriction B
property 2

Comment: The population of the world is growing. The consumption of land is increasing. The absolute control of the individual or of the state entities of land is increasingly being restricted by public interest. To provide security of the land tenure, all facts about land must be made obvious by the cadastral system of the future.

Consequences: A new thematic model is necessary. Surveyors must take into consideration public rights and restrictions.

Statement 2 on Cadastre 2014

The separation between 'maps' and 'registers' will be abolished!



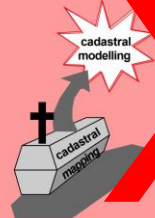
maps registers statistics

Comment: The separation was necessary because the available technology – paper – did not allow other solutions.

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The Cadastre mapping will be dead! Long live modelling!



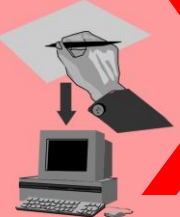
cadastral modelling
cadastre mapping

Comment: Maps have always been models. The available technology did not allow the use of these models in a flexible way. So in mapping flexibility had to be sacrificed in by different scales. Different models had to be represented by different data sets. Modern technology allows the creation of maps and registers in different scales from the same data model.

Consequences: In 2014 there will be no draftsmen and cartographers in the domain of cadastre.

Statement 4 on Cadastre 2014

'Paper and pencil - cadastre' will have gone!



Comment: Modern technology will be the norm for cadastral work. Real low-cost solutions are only possible when this technology is used in combination with lean and innovative procedures. Modern, developing, and transitional countries need models of the existing situation to solve the problems of population, environment, and reasonable land use.

Consequences: The modern cadastre has to provide a basic data model. Surveyors all over the world must be able to think in models and to apply modern technology to handle such models.

Statement 5 on Cadastre 2014

Cadastre 2014 will be privatized! Public and private are working closely together!




Comment: Public systems tend to be less flexible and customer oriented than those of private organizations. Free economies demand flexibility in land markets, land planning and land utilization. Flexibility may be provided better by private institutions. For necessary security, however, public involvement is indispensable.

Consequences: The private sector will gain in importance. The public sector will concentrate on supervision and control.

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Comment: Cadastral systems need a considerable investment. But the land documented and secured by the cadastre represents a multiple of the investment. The investment and operation costs have to be paid back at least partially by those who profit.

Consequences: Cost/benefit analysis will be a very important aspect of cadastre reform and implementation. Surveyors will have to deal more with economic questions in future.

AGRADECIMENTOS

pela atenção de todos!



execução



patrocinadores



MINISTÉRIO DA
GESTÃO E DA INOVAÇÃO
EM SERVIÇOS PÚBLICOS

