SUMMARY

Land administration in post conflict areas obviously is a difficult matter that requires an approach that copes with the local situation. But what are those approaches? What are the specific demands of a post conflict situation? To come to grips with this problem, FIG Commission 7 together with the UN/Habitat and the Kosovo Cadastral Agency organised a symposium in Geneva, 29-30 April 2004. This paper highlights the presentations, and attempt to jumpo to some conclusions. In the view of the authors the most important conclusion of the symposium is that there are basically two ways to deal with land administration in post conflict areas: a good way and a wrong way. When -at the end of the day- a land registrar writes down a name of an owner in a land book, and a land surveyor draws a boundary line on a cadastral map, it could be either the start of a prosperous economic development, or the overture to a new conflict. It all depends on how wise and sensitive the peace treaties or (interim) governmental action plans deal with the allocation of land ownership rights and access to land related opportunities that are perceived by the people as being fair and bringing social justice.

*The proceedings of the symposium are available on the FIG website, the OICRF website, and as a booklet at pauline.vanelsland@kadaster.nl.*
Land Administration in Post-Conflict Areas

Paul van der MOLEN and Christiaan LEMMEN, the Netherlands

1. INTRODUCTION

Good land administration, being ‘the process of determining, recording, and disseminating information about ownership, value and use of land, when implementing land policy’ (UN/ECE, 1996), requires sound institutional arrangements. A legal framework should be in place, providing rules for land tenure security, land market, and conflict resolution. Clear mandates in the public administration provide transparency who is entitled to issue titles to land and what the impact is of registration and cadastre. Appropriate workflows should be designed, and IT support developed. The citizen should have confident in the government.

In brief: all these circumstances are not present in post conflict areas. The question then is:

− what characteristics do have post conflict areas,
− to which extent does this provide a context for land administration,
− what are the approaches that fit best to the context.

Basically the question is: 'what' should we do with land administration in post conflict areas and 'how' are we going to do that.

2. BACKGROUND OF THE PROBLEM

The causes of conflicts and violence are many. For example ethnic envy, nationalistic tendencies, opposing interests, class conflicts, disputed frontiers, expansion actions, or economic interests. During such conflict people are killed, buildings and physical infrastructure destroyed, legal frameworks are set aside, public registers are destroyed, markets don’t function any more, properties are taken, and lands are occupied. If the conflict ends, peace treaties, UN resolutions, or national development plans aim at restoring governance and the rule of law, in all its variety (security, health, energy, shelter etc.). In many cases a substantial part of the restoration consists of the (re-) introduction of secure land tenure, mechanisms of resolution of land conflicts, land allocation, restitution, transparent land markets, land use planning, land taxation and the like. This implies both institutional (land law and public mandates) and operational measures (organisations and procedures). Some form of land registration and cadastre is needed as a provider of secure property rights, as a facilitator for the land and land credit market, and as a information source for various public tasks like planning, taxation, land reform, and the management of natural resources.

It is most likely that in post conflict situations different approaches are needed. Apart from the fact countries differ in history, culture and attitude, post-conflict situations may differ and require a specific policy. One situation might require short time emergency actions, others might allow for less hasty and more gradual actions.
A few examples of post-conflict situations are considered hereafter.

In **Kosovo** there is a real challenge in creating appropriate institutions supported by law and implemented according to those standards considered appropriate for a modern market based economy. In almost every sector there are major structural difficulties to be overcome. The transition to a market economy is made more difficult owing to the discriminatory policies of the last decade and the legacy of the conflict, which has left its marks on the land, the people, the economy and the hope for the future.

The rebuilding of society and the physical infrastructure is proceeding. A significant milestone has been achieved with the execution of the democratic elections of 2001 and the establishment of the Provisional Institution of Self-Government in Kosovo (PISG) from January 2002. The PISG has clearly established its intention to develop sound economic and social policies based upon democratic principles as evidenced in the framework of the agreement signed between the political parties of the 28th February 2002, and further elaborated in the policy document of 2nd May 2002.

The policy provides for:

- Consolidating the democratic structures of Kosovo;
- Increasing the transparency and efficiency of the administration;
- Improving educational standards for all inhabitants of Kosovo;
- Improving the quality of the health of all inhabitants of Kosovo;
- Promoting economic development and international economic Co-operation;
- Increasing employment;
- Establishing pension insurance & social assistance for vulnerable groups; and
- Integrating all ethnic communities into Kosovo society.

These eight priorities represent the government focus and several of them directly impact the land administration sector.

In **Guatemala** the World Bank indicates that most poverty is rural: poverty affects over 75% of the population, 86% of the rural population and 93% of the indigenous population. Land issues are key for poverty alleviation. These issues include (i) land property rights, which are unclear for most rural population, it is estimated that 95% of the rural parcels are not registered, and (ii) land distribution.

In the Treaty of Peace, December 29 1996 on Social and Economic Aspects and Agrarian Situation the land issue was strongly emphasised. In the paragraph 38 it indicates: ‘… to establish an efficient decentralised multi-user land registry and cadastral system that is financially sustainable, subject to compulsory updating and easy to update…’ According to this, fair distribution and tenancy of land is one of the solutions for peace in the country.

In **Cambodia**, on Oct. 23, 1991 a peace treaty was signed in Paris with elections planned for 1993. In Jan. 1992 the UN appointed Yasushi Akashi as head of the UN Transitional
Authority in Cambodia (UNTAC). On Sept. 21, 1993 the National Assembly ratified constitutional changes that restored the monarchy and in Nov. 1993 the UNTAC was disbanded.

Since 1998, and for the first time in 30 years, there has been no fighting anywhere in Cambodia. Nevertheless there still exists a context in which land grabs are common, and the protection of land rights is weak. Passage of the 2001 Land Law appears to represent a break with past practice, with the Law having support from the highest levels, but how that support will play itself out in practice remains to be seen. The Land Law establishes for the first time the right of private ownership for both residential holdings and agricultural holdings and establishes a parcel based registration system. The newly created Council for Land policy still has to resolve troublesome issues.

In Afghanistan Mr. Hamid Karzai became chairman of the Afghan Interim Authority on 22nd December 2001. In June 2002 the Loya Jirga appointed Mr. Karmai as the President of the Afghanistan Transitional Administration of the Transitional Islamic State of Afghanistan. The Administration adopted in 2002 a National Development Framework that revealed the following ambitions with respect to land: ‘...Access to land is regulated through Islamic and customary law. There is a need for a program to produce nationwide land registry and to settle disputes between individuals and groups on land. Such a registry would allow for the use of land as collateral for entrepreneurial activities’

In El Salvador, the civil war ended in 1992 with a Peace Treaty, followed by a National Plan for Reconstruction, that has as one of the fundamental pillars the creation of a new agricultural policy, providing for security of land tenure.

In Rwanda the Peace Treaty of Arusha 1993 between the Government of Rwanda and the Front Patriistique Rwandais terminated the genocide. Article 2 of the Treaty dictates the repatriation of refugees and the resettlement of displaced persons, giving them right to access to land. Registration of lands and certificates of land titles should provide for Land tenure security.

3. TRY TO FIND A SOLUTION: A SYMPOSIUM

FIG Commission 7 (on 'Cadastre and Land Management'), together with UN/HABITAT, UN/FAO, and the Kosovo Cadastral Agency KCA considered it necessary to bundle experiences and knowledge on the issue of land administration in post-conflict areas that might provide a good knowledge base for future operations through the organisation of a specialised symposium, that took place 29-30 April 2004 in Geneva (Palais des Nations). Discussion appeared to provide opportunity to identify good practices and lessons learned. The final discussion at the end of the symposium aimed at investigating possibilities for common findings and recommendations.

The symposium enjoyed attendance by peacekeeping professionals, land policy specialists, land administrators, land surveyors, land registrars, land managers, information-managers,
donors, non-governmental organisations, officials and politicians, who are involved in emergency and reconstruction activities in post-conflict areas.

4. PRESENTED PAPERS

Daniel Lewis, Chief Disaster Post Conflict and Safety Section of UNHABITAT introduced the opening paper on ‘Challenges to Sustainable Peace: Land Disputes Following Conflict’. In developing immediate responses and strategies in support of countries and communities emerging from conflict, it is critical that due attention is paid to sources of new or ongoing conflict. One of these is the resolution of land and property disputes arising either from displaced populations returning, or from internecine struggles for primacy over land and property rights. That land is one of the catalysts of secondary conflict, is illustrated by experiences in several post-conflict societies including Kosovo, Afghanistan, Somalia and Iraq, and lessons learned in these contexts need deeper assessment, and incorporation into future interventions planned in new societies emerging from war. This paper poses 4 key questions for debate namely: is land a conflict issue?, what is secondary conflict? can it be prevented? And: how can we learn from past experience?

Clarissa Augustinus, Chief, Land and Tenure Section, UNHABITAT and Michael Barry, Associate Head, department of Geomatics Engineering, University of Calgary presented a paper on ‘Strategic Action Planning in Post Conflict societies’. Developing a Strategic Action Plan in a stable situation is extremely difficult because of the numerous factors that have to be taken into account. A key to successful strategy implementation is being able to control the influences of many of these factors. Developing a sustainable Strategic Action Plan in post conflict countries is much more difficult. The authors argue that it is not possible to use conventional planning frameworks to underpin Strategic Action Planning in post conflict environments. In fact to do so might prove both biased his) and inefficient. This argument is based on work in Afghanistan, South Africa, Somalia, Mozambique, Uganda and Kosovo. Instead it is argued that, in concept, an approach based on Checkland’s (1999) soft systems theory and practice, such as that developed by Barry and Fourie (2002), should be used to ensure that the correct activities are prioritised.

Jaap Zevenbergen, Associate Professor, section Geo Information and Land Development, Delft University of Technology, The Netherlands, and Paul van der Molen, visiting professor land administration and cadastre, ITC, The Netherlands are discuss the ‘Legal aspects of land administration in post conflict areas’ in their paper. An array of issues has to be faced when the land administration functions are being reactivated in a post conflict area. The paper looks at several issues with a strong legal component. It deals with land rights, and the land records describing these, and especially with what they (still) mean and what not, and how to use them and other information as evidence in a procedure to “clear up” the legal situation in regard to land. This procedure can be compared to a process of adjudication and depending on the choices made, can hinder or even de facto block the formal land market for years. Solutions could be the avoidance of registered (and guaranteed) title (as under a title registration system), by sticking to a deeds registration system, or introducing provisional or qualified titles. That, however, means everyone runs some risks for some time to come, in a
formal land market that can start easier. The authors at least do not consider a post conflict period a good time to introduce title registration.

*Mika-Petteri Törhönen*, Land Tenure Officer, FAO and *Davis Palmer*, Land Registration and Cadastre Officer, FAO, introduce the first more country specific paper on: ‘Land administration in post conflict Cambodia’. The paper starts by identifying the importance of developing appropriate land administration responses if countries emerging from violent conflict situations are to make progress in increasing food security, reducing poverty and improving rural conditions. The paper then explores the case of Cambodia, a country and society that is recovering from a conflict of the most serious kind. The case is a cautious success story which shows that a lot can be done if there is a unified aim and will. The lesson applies both to the donors and to the country in conflict. The post conflict situation can also provide a momentum for change. This paper draws the following conclusions: systematic first registration can be feasible; a post-conflict situation is likely to boost both the community participation and donor interests; and a unified donor community can be an important catalyst for policy promotion, but that the process is slow and that sustainable results can only be gained over a long term.

*Jan van Hemert*, Manager Latin America, Kadaster International, The Netherlands presented his ‘Experiences with land administration in Guatemala’. In his paper he describes how the last half century the problems around land have regulated the development of Guatemala, from the revolution in the fifties in the last century, the armed conflict during more then thirty years and after the peace agreements of 1996 the attempts to stabilise the country. An important part of this process of stabilisation is to resolve the problems around land ownership. The paper describes the problems concerning land ownership, the way the country has tried to solve them and finally the description of the actual situation with some suggestions for the future.

A comprehensive overview on the situation in Afghanistan is given by *Liz Alden Willy*, independent land tenure and natural resources management advisor, in her paper: ‘Putting registration in perspective in rural areas: the case of Afghanistan’. During the symposium Liz represented the Afghanistan Research and Evaluation Unit in Kabul. The thrust of land planning by the post-Taliban Administration in Afghanistan is towards the establishment of nationwide registration of property rights. This objective typifies post-conflict strategising, reflecting the combined concerns to bring order to disorderly conditions and to establish the authority of the new administration. This paper argues that such approaches risk ignoring the issues that must be tackled for land relations to be secured on a lasting basis and risk entrenching injustices that helped give rise to the conflict in the first instance.

The characteristic failure of 20th century registration systems to properly account for common rights or for the complex access obligations that stem from the privilege of landlordism is shown to have been particularly pernicious in the creation of legal norms that possess low local legitimacy and trigger dispute. A fresh approach is required and which is able both to absorb the lessons of local history and work around the realities of limited rule of law or
confidence in the formal courts ability to fairly uphold rights. To this end a community based approach is suggested.

*Mia Flores-Bórquez,* research consultant at Oxford Brookes University introduces the paper ‘Land Administration in Post-Conflict Chile’. The overthrow of the Allende Government in 1973 by a bloody military coup d’etat was followed by brutal repression and the suppression and massive breaches of human rights. As well as committing acts of murder and its widespread use of torture, the military junta confiscated the property of its opponents and reversed the land distribution policies of the Allende Government. During the military dictatorship of General Pinochet, a new constitution was approved, paving the way for an eventual return to civilian rule. After being rejected in a plebiscite, the military leader, General Pinochet, stepped down in 1990, having first ensured that he and his regime were granted immunity from prosecution. However, progress towards restitution for the victims of the military junta has been very limited. A Truth and Reconciliation Commission has proved ineffective. Any act of restitution, however minor, extinguishes all other claims. Attempts to enforce rights to compensation or to recover lost property have not borne fruit. Some human rights abuses, such as the banishment of the military junta's political opponents have continued under the democratically elected governments.

*Milan Brajnik,* assistant director, Geodetic Institute of Slovenia, presents the ‘Slovenian Experiences: an Example from a Transition Country’. Conflicts are presented and are being resolved on different, frequently violent ways. Post conflict activities are a complex system of long-term measures and need a patient and sustained collaboration of all involved, strong international support and observation for some length of time. Every environment needs to find the own way and develop own opportunities. The combination of different processes, like post conflict and transition processes, multiplies the problems in a region. In this paper a short review of transition experiences in Republic of Slovenia is presented. The period of communist regime in countries of ex Eastern Block leaves serious consequences in whole nowadays society. From the authors point of view, the capacity building in private sector (not only reconstruction of the administration system) is of extreme importance for further development of the region. Transition from planned-administrative economy to market-oriented economy takes time and a lot of effort. Any foreign help and support is of a big importance.

*Murat Meha,* Chief Executive Officer of the Kosovo Cadastral Agency presents ‘Land Administration in Kosovo before and after the War (1999)’. He states that land Administration in post conflict areas is the main issue for stabilisation of human and social relations. Economical development of one country is closely linked with foreign investments, bank loans based on cadastral documentation regarding properties and landowners. For this reason it is required in post conflict areas to establish a good legal infrastructure and a digital cadastre with new model of the existing situation in order to solve problems of inhabitants and of environment as well as rational land use. The author identifies the phases to be to be passed for the establishment of a well functioning Land Administration and Cadastre in post conflict areas, of course dependant in which level it was found. Following this way a cadastre as a base data institution guaranties and facilitates land use according to the existing
documents. Anyhow, based on these analyses the action strategy and means for an effective accomplishment are established.

The next paper from Serbia and Montenegro is presented by three authors: **Ivan Aleksic**, General Director, Republic Geodetic Authority, **Zagorka Gospavic**, Deputy Director, Republic Geodetic Authority and **Zoran Popovic**, Assistant Director, Informatics & Communications, Republic Geodetic Authority. The paper is focussing on ‘Land administration in post conflict Serbia’. The paper shows the competencies of the Republic Geodetic Authority, its organisational structure, achieved results and prospect of future strategic plans and actions in the scope of the Mid-Term Development Program of the Republic Geodetic Authority supported by the proposed Real Estate Cadastre and Registration Project in Serbia, the loan provided by the World Bank. With the aim of successfully continuing with the implementation of the RGA Mid-Term Plan, for the period 2004-2008, as well as the implementation of the World Bank Project, for the same period, and in order to provide high-quality services and more efficient work of the RGA, in the forthcoming period, the following needs to be done: to replace the existing information technologies with modern ones, to keep professional staff, enhance the financial situation of the employees and upgrade the status and attitude towards geodetic experts on the whole and enable funding for planned projects of the Republic Geodetic Authority, in the upcoming period, to enhance co-operation with the local self-governing organisations, and to enhance co-operation with the geodetic organisations.

**J. David Stanfield**, land tenure specialist, Land Tenure Center, Madison, Wisconsin, USA and Terra Institute, East Mt. Horeb, Wisconsin, USA, presents a paper on ‘Property Registration System in Albania’. Since the late 1980’s, a massive transformation of land management is occurring in Eastern Europe and Eurasia. Prior to 1989, State institutions were responsible for the management of land, that is, State agencies made the decisions about how to use the land and about who would profit from that use. In property terms, the State owned most of the land and buildings in most socialist countries in the sense of controlling who got access for their use. After the sometimes violent turmoil accompanying regime changes in the late 1980’s, with the shift to private land and building ownership through privatisation policies and programs, the management of significant proportions of land and buildings became the responsibility of the private owners. The paper presents the results of the land and building privatisation experience, some core concepts of the immovable property registration system and reflections on the experiences with the Immovable Property Registration System. The paper closes with a reassessment of options.

**Željko Bačić**, Director General, State Geodetic Administration, Republic of Croatia, presents the ‘Transition of Land Administration in Post War Croatia’. The Republic of Croatia was created in the process of the break-up of Yugoslavia, which started in the 1980ies. The creation of the country was connected with the Homeland War which lasted for four years and which left great destruction, both material and social. Parallel with the patriotic war we have had the transition of the society from the communist to the politically economic system of market economy. This intertwining of the two comprehensive processes resulted in the fact that the role of Land Administration which was systematically neglected in the last fifty years, became very complex and multi-layered in the above events. On one hand, it was
necessary to make pragmatic and operative solutions which enabled the implementation for some processes in the given circumstances, while on the other hand it was necessary to define the future system of Land Administration which will permanently ensure the security in the legal transaction of immovable property and the efficient functioning of land registers in order to enhance the economic development. The paper presents the course of events, the role of Land administration in the events, the influence of the processes on the Land Administration, the new regulatory frameworks and its implications on the Land Administration, as well as the activities undertaken to achieve the set objectives. The stress is on the registration of immovable property and of ownership.

Jean-Luc Horisberger, legal advisor, Switzerland, with experience in the Sida/GTZ Land Registry Project in Bosnia and Herzegovina gives the overview on ‘Land administration in Bosnia and Herzegovina after the war’. After having been occupied by different empires more than 500 years long, Bosnia and Herzegovina (BiH) has declared its own independence in 1992, resulting from the implosion of the former Federal Socialist Republic of Yugoslavia. Simultaneously, a civil war began, due to high tensions between communities - Serbs, Bosnians and Croats – living in the country. War could stop only end of 2005 with the signature of the Dayton Agreement.

As generally civil wars are, this war was particularly hard: from a population of around 4.4 million, more than 0.2 million victims, 2.2 million refugees or displaced persons, hundreds and hundreds of villages totally destroyed by militias or armies in the name of the so-called “ethnic cleansing”. Cumulated with the still living sufferings from WW II, the consequences of war(s) will unfortunately remain sensitive for generations. The country was ruined by the war and the economy is today at a very low level.

The International Community has decided to strongly support the reconstruction of BiH. In particular, the Swedish and German Governments decided to finance the drafting of several laws in the economic law sector: law on obligations, law on bankruptcy, law on notaries, law on land registry, law on cadastre, law on property, etc. The law on land registry entered in force in 2003. Other laws on cadastre and on property rights are in drafting, and should be adopted hopefully in 2004, at the latest in 2005. The implementation of this new legal framework shall contribute to the reconstruction of social peace and to the strengthening of the economy.

The paper from Eugène Rurangwa, Director of Lands and Chief Registrar of Deeds, Rwanda, presents the ‘Rwanda Case’ in ‘Land Administration in Post Conflict Situation’. Unfortunately this paper could not be presented during the Symposium.

As long as land remains the basis for the sustainable development of the country, the land reform will be the engine of the development and will play an important role in enhancing peace, equity, unity and reconciliation of all Rwandans who have been covered in bruises by the genocide and massacres of 1994. It will definitely have a role to play in the process of poverty reduction in the Country. By clarifying the land tenure system and by having an appropriate land policy and land law, Rwanda will have built a society that is ready to face the challenges of the present and of the future. The paper gives a historical background on the land tenure in the country, a summary of the conflict, the role of the Land Administration in resolving conflicts, a set of solutions for legal and technical problems and recommendations for post conflict situations.
5. OBSERVATIONS AND CONCLUSIONS

Commission 7 chair, Paul van der Molen, observed that land administration in post-conflict areas was complicated; land was a conflict issue. Land might not always be the direct cause of a conflict but it was always related. The implementation of peace treaties could mark the beginning of economic development or it could equally result in the start of a new war if the land issue was not really solved. One situation might require short-term emergency action, others might allow for less hasty and more gradual response.

Conventional concepts of Land Administration did not work in unstable situations. The classical responses to property rights were limited; the restoration of land ownership is not always the same thing as restoration of social justice. ‘Fix the Cadastre’ was not the solution; land is not always a pressing issue. The (wo-)man-land relationship had to be recognised in community or locally-based processes and this did not necessarily mean community participation. Being aware of this might make it possible to identify ‘true owners’ as recognised by the community and to reach the crucial stage of trust in the authorities and in the registration of property rights.

Van der Molen concluded that land registration represented not the beginning of a reconciliation process, but its end. The relationship between land reform and reconciliation was very strong, so that land reform might indeed be part of the reconciliation process. It was most likely that differing approaches would be needed in different post-conflict situations. Apart from the fact that countries differed in history, culture and attitude, post-conflict situations may themselves differ, requiring a specific policy; land registration concepts might result in unconventional approaches. Often, he added, surveyors failed to be involved in peace treaties.

6. RECOMMENDATIONS

The relationship to land administration and land policy is relevant and should be recognised in peace treaties. Parties involved in formulation of peace agreements and/or strategic action plans should mention land registration not as an isolated objective but rather embed in such plans a wider development and land policy. Territorial land issues are a basis for conflict; there is acceptance within the international community that we need to be better prepared for this.

Workshops and reference materials have to be organised for humanitarian practitioners. FIG Commission 7 is committed to informing United Nations on the importance of land policy and land administration in relation to peace treaties in order to improve awareness on this issue. Effective land-administration institutional frameworks have to be developed. Knowledge concerning this issue has to be collected in the regions.
7. MOST IMPORTANT MESSAGE OF THE SYMPOSIUM

In our view the most important conclusion of the symposium is that there are basically two ways to deal with land administration in post conflict areas. When -at the end of the day- a land registrar writes down a name of an owner in a land book, and a land surveyor draws a boundary line on a cadastral map, it could be either the start of a prosperous economic development, or the overture to a new conflict. It all depends on how wise and sensitive the peace treaties or (interim) governmental action plans deal with the allocation of land ownership rights and access to land related opportunities, that are perceived by the people as being fair and bringing social justice.

REFERENCES

Andersson, B. and Meha, M., 2003, Land administration in Kosovo- Practice in Co-operation and Co-ordination, FIG and UN/ECE.WPLA, Athens Greece 2003
Childress, M., 2001, Cambodia maps its land tenure future, LTC Newsletter, University of Wisconsin, Madison, Fall 2001
Proceedings of the symposium are also published at www.oicrf.org and www.fig.net/commission7/index

BIOGRAPHICAL NOTES

Prof. Paul Van der Molen is visiting professor in land administration and cadastre at the International Institute of Geo-information Science and Earth Observation ITC, director of the International Department of the Dutch Cadastre, Land Registry and Mapping Agency, and Chairman of Commission 7 (Cadastre and Land Management) of the FIG 2002-2006. He acted as peer reviewer during the writing of the previously mentioned land management evaluation tool (UN-HABITAT, 2003).

Ir. Christiaan Lemmen is an assistant professor at the International Institute of Geo-information Science and Earth Observation ITC and an international consultant at Kadaster International, the International Department of the Netherlands Cadastre. He is vice chair administration of Commission 7, Cadastre and Land Management, of the International Federation of Surveyors (2002-2006), contributing editor of GIM International and guest

CONTACTS

Paul van der Molen and Christiaan Lemmen
Cadastre, Land Registry and Mapping Agency
P.O. Box 9046
7300 GH Apeldoorn
THE NETHERLANDS
Tel +31 55 5285695
Fax +31 55 3557362
E-mail: paul.vandermolen@kadaster.nl
Web site: www.kadaster.nl

International Institute for Geoinformation and Earth Sciences
P.O. Box 6
7500 AA Enschede
THE NETHERLANDS
Tel +31 534874444
Fax +31 534874400
E-mail: molen@itc.nl
lemmen@itc.nl
Web site: www.itc.nl