

PN-ART-728  
92437

# Shelter Sector Reform Project Newly Independent States of the Former Soviet Union

An ICMA Report

Prepared for the Office of Housing and Urban Programs  
Agency for International Development



**Real Estate Registration and  
Valuation System for the  
Republic of Kazakhstan**

August 1994

Prepared for the U.S. Agency for International Development,  
Bureau for Europe and the New Independent States,  
Office of Environment, Energy and Urban Development,  
Urban Development and Housing Division

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INTERNATIONAL CITY/COUNTY MANAGEMENT ASSOCIATION  
USAID Contract No. CCS-0008-C-00-2056-00  
Project No. 110-0008  
Task Order No. 54  
Shelter Sector Reform Project for  
the Newly Independent States of the Former Soviet Union

## ABSTRACT

This report further investigates and recommends continued development of a national real estate registration and valuation system for the Republic of Kazakhstan. It proposes continued technical assistance in creating the legal framework for real estate registration.

Recommendations are made for the implementation of a pilot real estate registration system to develop a conceptual model for registering newly created use rights in land, apartments, and commercial offices. The goals of the registration system include providing an efficient, secure system to serve the growing market in real estate and to provide the foundation for an equitable real estate valuation system.

## EXECUTIVE SUMMARY

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This report summarizes a short-term technical assistance mission to Kazakhstan by Gary Jeffress in July/August 1994. The purpose of the mission was to assist an interagency working group set up by the First Deputy Minister of Housing, Construction, and Land Planning to develop a real estate (land) registration system. The mission was expanded by the First Deputy Minister to include assistance in developing a real estate valuation system. Annexes C, D, and E are reports written in Kazakhstan during the mission. These three reports were translated into Russian at the ICMA office in Almaty and were commented upon by the working group. These comments were taken into account for the drafting of the final versions of these three reports. The three reports were adopted by the interagency working group and are to be presented to the Vice President of Kazakhstan.

#### A. RECOMMENDATIONS FOR CONTINUED IMPLEMENTATION OF REAL ESTATE REGISTRATION AND VALUATION SYSTEMS

- 1) Real Estate Registration
  - a. Kazakhstan has made substantial progress in extending private use rights of real estate to Kazakhstani citizens, judicial entities, and foreigners. The government of Kazakhstan is presently rewriting the land code and housing code to bring these necessary changes into the law. Continued technical assistance is critical to expedite these changes for the legal foundation of a real estate registration system in Kazakhstan.
- 2) There is an immediate need to train staff at the State Committee on Land Relations and Land Tenure (Goskomzem) on the theory, concepts, and practical application of real estate registration.
- 3) A conceptual model for a real estate registration system needs to be developed to take into account the social and legal requirements of the Kazakhstani Government's real estate privatization policies.
- 4) A pilot project needs to be undertaken to test the conceptual design of the real estate registration system and to develop adequate information flow processes to attain accurate registration of all rights in real estate.
- 5) Technical assistance is required to train Kazakhstani personnel in modern land measurement technology and land information management. Short term training and the development of tertiary educational programs in geomatics and land information systems is required.
- 6) Technical assistance is required to support the design and securing of funding for a long-term real estate registration and titling project.

b. Valuation

- 1) Laws are in effect which permit the government to collect real estate taxes. These laws set tax rates per hectare or per square meter and have become unworkable during the current economic crisis with inflation running at 30% per month. The land tax laws require rerafting to create an ad valorem tax system based on current real estate market value. Technical assistance is required to draft these needed changes to the real estate tax laws.
- 2) Real estate appraisal is a totally new concept in land administration in the former USSR republics. Training is needed to develop expertise in this field. Technical assistance is required to undertake short-term training and to develop tertiary educational programs in real estate appraisal and valuation.
- 3) A conceptual model for mass appraisal based on market values for determining current real estate value needs to be developed and tested.
- 4) Technical assistance in the area of real estate taxation is required to develop and introduce an equitable real estate taxation system over the short and long term.

B. OPTIONS FOR A REAL ESTATE REGISTRATION SYSTEM AND VALUATION SYSTEM INSTITUTION

After reviewing the options for the institutional introduction of both real estate registration and valuation, the working group proposed that **separate but linked autonomous divisions of real estate registration and real estate valuation be set up within Goskomzem**. This agency is relatively new; created two years ago to implement the government's policy of privatizing land use rights. Goskomzem has a network of offices in major Cities, all Oblasts, and in local districts. It has already implemented a system for recording privatization of land use rights which could form the basis of a real estate registration system. As a requirement for privatization, Goskomzem assesses the value of land to establish prices for sale by heads of local administrations and has started the training of its staff in real estate appraisal.

C. REAL ESTATE INDEXING AND IDENTIFICATION SYSTEM

Each land parcel and each distinct unit of a building which may be owned separately (such as a condominium apartment or office) should be referenced by a unique identification number. The numbering system already used by Goskomzem for land parcel identification should be maintained and expanded to include apartments and commercial real estate users. The existing numbering system has an alphabetical code for Oblast or City with a seven digit numeric extension for each individual parcel. Number series can be coded to allow for breakdown of oblast into rayons, and cities into districts. This allows for ten million real estate units in each of the 19 Oblasts and two City offices of Goskomzem.

D. REAL ESTATE REGISTRATION SYSTEM

Kazakhstan must put in place a system to record all private and institutional interests in every real estate parcel (including apartments and commercial offices) in order to guarantee the security of real estate investment. The system must include records of primary real estate users and secondary interests such as mortgages, easements, and liens.

## 1. Institutional Framework for a Real Estate Registration System

A real estate registration system should record and update changes to title (entitlement) or rights and interests in every real estate parcel (including apartments and commercial users). In doing so, an unambiguous description of the parcel is required along with the records of all rights and interests. The unambiguous description is best provided by maps, aerial photography, or survey plans. Existing mapping and aerial photography is adequate for identifying real estate parcels for the purpose of registration. There is a need to update the technology of existing maps to take advantage of improved economies of scale offered by digital mapping methods. Maps and aerial photography are currently available from the State Committee on Land Relations and Land Tenure (Goskomzem), the Administration of Geodesy and Cartography, and the City Architects Office.

Records on the privatization of land rights have been systematically kept by Goskomzem since it was given the function of implementing land reform and the issue of "Akt" certificates which certify the privatization of land use rights. The records of the Akt certificates could be modified to form the basis of a real estate registration system. The records of Akt certificates are computerized which would enhance conversion to a title. The introduction of condominium laws within the housing code would enable apartments and commercial offices to be registered on the same system as land thus creating a real estate registration system covering all types of real estate.

The interagency working group has recommended that Goskomzem be the agency to embrace a nationwide real estate registration system incorporating land, apartments, and commercial offices. Goskomzem has a network of offices in major Cities (two), all Oblasts (19), and in local districts (217). It has already implemented a system for recording privatization of land use rights which could form the basis of a real estate registration system.

## 2. Real Estate Registration Implementation

With privatization of real estate well under way and an active real estate market in place, there is an urgent need to create a fully operational real estate registration system. The register must be accurate, up-to-date, and open to the public. The implementation of a real estate registration system must set out to achieve four goals:

- 1) register ongoing privatization of real estate during the privatization process;
- 2) register interests in real estate brought about by real estate sales;
- 3) register existing privatized real estate; and
- 4) systematically register all parcels of real estate.

Priority should be given to 1, 2, and 3 above as these represent real estate parcels that are subject to private investment and are most likely to stimulate economic activity. Ideally, all transactions must be recorded and available within 24 hours of lodgment.

### 3. Land Purchase and Sale Procedures

During the mission the author obtained a copy of a document describing "Temporary Regulations for Land Tenure Regulation Procedures During Purchase or Sale of Right to Hereditary Life Tenure, the Right to Use or Lease Land Parcels", dated July 6, 1994 and issued by the State Committee on Land Relations and Land Tenure (Goskomzem). This document expands the role of Goskomzem to allow the sale of state lands by the heads of local government. The document also appears to give Goskomzem the power to regulate the sale and sale price of land which has previously been privatized. Sale prices are set according to tables of fixed value categorized by land use, agricultural production potential and location.

The document attempts to interpret Regulation #625 of the Cabinet of Ministers of June 14, 1994. The interpretation appears to give Goskomzem regulatory power to set the sale price of land use rights between private buyers and sellers. This interpretation is contrary to the establishment of a free market in real estate. Technical advice in the drafting of these regulations is urgently required to free up the real estate market and to allow for the recording of real estate transactions.

### 4. Develop an Efficient Title Registration System

The conceptual model of a real estate registration system has not been fully developed for Kazakhstan. While Goskomzem has a system for recording original "Akt" certificates for privatization, the ongoing transfer of rights of use, mortgage, easements, liens, and covenants has not been incorporated into an official recording system. A simplified model for real estate title registration is proposed in Annex D. To avoid unnecessary future changes and the implementation of cumbersome parallel systems, such a model is urgently required.

Technical assistance is needed to advise Goskomzem on the design and implementation of a workable real estate registration system. The present system of recording Akt certificates contains some redundant and useless information. Minor changes to format and recording of Akt certificates would greatly enhance the production of privatization and could render them easily convertible to the real estate registration system.

### 5. Implement a Pilot Real Estate Registration Project

A small pilot project to conceptually design and implement a working real estate registration system is needed. Such a project would not yield a large number of registered land parcels (5,000 to 10,000 parcels). Its purpose would be to serve as a model for Goskomzem to fully understand the technical requirements and the need for efficient information management when dealing with the large projected volumes of real estate transactions that will occur under a fully operational free market economy.

A small town or a small section of Almaty could serve as a project site. Existing mapping is adequate to allow the physical description of real estate parcels while personal computers could easily accommodate the textual data base associated with number of land parcels. The majority of the pilot project would be spent on experimenting and perfecting the conceptual design of the registration data base. A cross referencing system from map indices and parcel identification based on Akt certificate numbers needs to be developed. Standard PC data base software (available in Russian) could be adapted to manage the textual data base. The results of such a pilot project will enable the government to fully assess the requirements for a nationwide real estate registration system.

## E. REAL ESTATE VALUATION SYSTEM

On the basis of a sound legal framework and with the implementation of accurate real estate registration records, a real estate valuation and an ad valorem taxation system can be implemented. While any tax is a disincentive to investment, land users realize that government revenues are required to put in place the infrastructure to service land. Real estate must be seen by land users to be valued and assessed equitably and correctly. Tax rates must also be at a level to generate much needed revenue but not at a level that discourages investment and development.

Although the real estate registration system and the valuation system share information, they are separate professional functions and should be linked but administratively separated. They should share common elements of mapping and parcel numbering while maintaining professional autonomy to pursue efficient methods of carrying out their specialist functions.

### 1. Institutional Framework for Real Estate Valuation

Presently real estate markets are in their early stages of formation, reliable information on existing sales is scarce, and there are very few trained real estate valuers. The design of a real estate valuation system is constrained by these realities but is very much needed if government revenues are to increase. An essential component of valuation are records of improvements to real estate. Some of these records can be found at the Bureau of Technical Inventory (BTI). BTI records cover information regarding buildings and improvements to real estate. Goskomzem, however, has detailed information on land and is gathering information related to valuation for the purpose of privatization.

Goskomzem's research division (State Scientific and Production Center for Land Resources and land Planning, Gosnpczem) has established a Department of Evaluation to establish land value for the equitable privatization and sale of state land. This department assesses the value of land above established limits and sets a sale price for the acquisition of land for citizens wishing to purchase land above these established limits. This department is currently taking advantage of USAID sponsored land appraisal training. It appears to have the resources and legislative authority to undertake the appraisal and valuation function needed to set up an equitable land valuation system. This function should be extended to include apartments and commercial offices created under new condominium laws.

Gosnpczem is in need of technical assistance to refine its methods and procedures for privatization, valuation, and appraisal of land. Temporary regulations issued July 6, 1994 for "Land Tenure Regulation Procedures During Purchase or Sale of the Right to Hereditary Life Tenure, the Right to Use or Lease Land Parcels" need modification to allow a free market in land to operate efficiently.

## 2. Real Estate Valuation System Implementation

With the sale of state land and the fledgling land market, the government of Kazakhstan has introduced a valuation system based on a fixed rate per square meter which varies with location. This system will need to be replaced with an ad velorum based valuation system if the government is to realize the true market value of lands it is willing to sell for private use. An ad velorum based system will also be required for an efficient and equitable land tax.

Immediate assistance is required to accelerate the training and education of appraisers for the privatization and sale of state lands. The demand for privatization of land is increasing as the public becomes aware of the advantages of private land use rights. The number of state employees who have even the minimum of training in real estate appraisal is far below the number required to meet the demand. There is also the need for the establishment of private appraisers to work within the banking industry and to service the emerging private land development sector. Assistance in the development of a private sector appraisal association and licensing system for appraisers is required.

The development of tertiary education programs in real estate appraisal is required to allow for long term development of educated personnel to undertake real estate valuation in both government and private sectors. Such courses need to be established at the equivalent level to technical colleges or community colleges. Expertise in real estate appraisal education is required to advise and to assist the government of Kazakhstan in establishing a career path for future Kazak real estate appraisers.

The work in this report follows earlier missions by J. K. Eckert and N. Kalinina, "Recommendations for Creating Property Titling and Real Estate Information Systems To Support Property Tax Systems and the Privatization Process in Kazakhstan", ICMA, May, 1993 and Holstein, L. C., "Kazakhstan: Land Registration, Property Tax, and Information Sharing", ICMA, May, 1994.

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## I. BACKGROUND

The Republic of Kazakhstan declared its independence from the former Union of Soviet Socialist Republics 16 December 1991. Since that time the government of Kazakhstan has made several steps towards extending rights to private use of real estate for citizens of Kazakhstan, legal entities, and foreigners. This chapter describes government legislative initiatives, existing real estate records, and touches on previous work carried out by ICMA consultants on real estate registration and valuation.

### 1. Government Priorities

The Government of the Republic of Kazakhstan has set four areas of high priority in order to move towards a market economy, raise standards of living, and implement democratic reform. The four priorities are:

- 1) Reform of the Supreme Soviet and the Government;
- 2) Reform of Banking and Finance;
- 3) Macroeconomics Reform;
- 4) Informational Systems Implementation for Registration of Land Resources.<sup>1</sup>**

The Government has placed a high priority on land issues which is reflected by the pace of change in government policy on real estate, newly created diversity of rights in land, and the move towards privatization of use rights in real estate. The need to privatize real estate rights and to establish a real estate market has been recognized by several decrees issued by the President, the Prime Minister, and the Cabinet of Ministers over the past two years. In the 29 July 1994 issue of *Kazakhstan Pravda* (the official newspaper of the government) the Kazakhstan Government published details of *A Program of Actions the Government Plans to Undertake in Order To Strengthen the Reforms and Overcome the Economic Crisis*. The program reinforced the governments commitment to the fourth priority listed above.

The program identified seventeen *Main Directions for Accelerating and Strengthening the Reforms*. Direction number fourteen titled *Creating and Developing the Housing Market* stated in part:

*In September 1994, the Parliament shall consider amendments and additions to the Land Code and other legislation on land for the purpose of improving land relationships and, consequently, attracting foreign investors....*

*By the end of 1995, a title registration system on land and other real estate in the settlements (urban development cadastre) will be designed.*

*By March 1995, a state program of compiling a tax cadastre, which is necessary for the system of real estate value registration for the purpose of*

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<sup>1</sup> Reported by Dr. Zairolla Dussenbekov, Director General, State Scientific and Production Center for Land Resources and Land Tenure. 8/2/94

*ensuring equity in taxation of physical and juridical persons, will be designed.*

*During the same time period, the legal basis will be established for compulsory land and other real estate valuation, so that by 1997, mass appraisal will be completed and the system of title registration when transferring the rights or committing other transactions will be introduced....*

*At the beginning of 1995, pilot programs for creating condominiums for the purpose of upgrading the level of housing maintenance will be initiated.*

The above program is directly in line with recommendations of ICMA short-term consultants Eckert and Kalinina<sup>2</sup>, 1993, and Holstein<sup>3</sup>, 1994.

## 2. The Constitution and Legal Review<sup>4</sup>

Three articles of the Constitution of the Republic of Kazakhstan refer to ownership of property and land:

*Article 18. A citizen of the Republic has the right to be an owner. He shall own and use his property at his own discretion. The use of property shall not endanger the ecology or violate the rights and legally guaranteed interests of citizens, legal entities, or the state.*

*Article 46. The land, its natural deposits, waters, flora and fauna, and other resources are within the exclusive ownership of the state.*

*Article 47. Private property is "inviolable." No one can be deprived of property except by a decision of the court.*

Article 46 reflects the governments reluctance to surrender absolute freehold (fee simple) ownership of land. Articles 18 and 47, however reinforce the commitment of the government to allow private property and exclusive rights of use of private property.

Although the government continues to maintain absolute ownership in land under the constitution, this ownership could be interpreted, in relative terms, as similar to the power of eminent domain held by governments in free market economies. Land use rights are defined in the Land Code and by decrees issued by the President, Prime Minister, Cabinet of Ministers, or the Supreme Soviet (Parliament.) There have been several decrees by the government supporting exclusive private rights in real estate. These decrees, so far, have established four types of rights in real estate:

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<sup>2</sup> J. K. Eckart and N. Kalinina, "Recommendations for Creating Property Titling and Real Estate Information Systems To Support Property Tax Systems and the Privatization Process in Kazakhstan", ICMA, May, 1993.

<sup>3</sup> Holstein, L. C., "Kazakhstan: Land Registration, Property Tax, and Information Sharing", ICMA, May, 1994.

<sup>4</sup> Gaynor, R., "Current Framework for Land Relations in Kazakstan", unpublished notes, ICMA, July, 1994.

- 1) hereditary life tenure
  - right to use for life and pass onto heirs;
  - only available to citizens resident for at least 5 years;
  - only available for specific purposes (farm, residential house, dacha, and other limited purposes)
  - can transfer by sale or agreement;
  
- 2) permanent use rights
  - apparently lasts indefinitely (for life of grantee) unless terminated by government;
  - available to citizens, legal entities, joint ventures, and foreign citizens;
  - allocated for specific use;
  - right to transfer are unclear;
  
- 3) temporary use rights
  - short term - 3 years, long term - 10 years, long term agricultural - 25 years;
  - right to transfer are unclear;
  
- 4) leasehold
  - local government may lease land to citizens, legal entities, or foreigners;
  - up to 99 years;
  - leases can transfer by sale or agreement with lease term starting over upon transfer.

Interpretation and refinement of real estate rights by the government continue to evolve. The following is a summary of government decrees issued in 1994 related to rights in real estate in Kazakhstan by Richard Gaynor, ICMA Director, Legal and Policy Assistance, ICMA, Kazakhstan.

1) 24 January 1994. Decrees of the President "Concerning Issues on Regulation of Land Relations."

- Any individual or legal entity can obtain land by lease, either through short term leases (less than 5 years) or long term leases (up to 99 years)
- In cases of privatization of non-agricultural property (buildings and enterprises), rights to land underneath property go with it
- The state can either sell land rights or take a share or interest in the buyer (it is unclear whether the state can share in the property with the buyer or take a share in the buyer)
- The State Committee on Land Relations and Land Tenure (Goskomzem) is to establish prices for the sale of land
- Citizens can obtain land for permanent hereditary use regardless of their term of residency.

2) 9 March 1994. Decree of the Cabinet of Ministers "Procedures for Acquisition of Right to Use or Lease Land for Non-Agricultural Purposes"

- Citizens and legal entities have the right to use or lease land; foreigners and joint ventures with foreign participants have the right to lease land
- Local/regional branches of Goskomzem are to establish prices and other terms of sale
- Average estimated prices are listed in the decree; e.g. 50 Tenge/sq. m. of land in Almaty, 13.4 Tenge/sq. m. in Aktau, Karaganda, and Ust Kamenagorsk, etc.
- City or district branches of Goskomzem have the discretion to alter prices within half or double prices listed in the decree.

3) 28 March 1994. Decree of the Vice President "Concerning Creation of a Working Group on Improvement of Some Aspects of Land Legislation of the Republic of Kazakhstan"

- Created a working group headed by the First Deputy Minister of the Ministry of Construction, Housing, and Land Development including representatives of the Vice President, the Ministries of Justice, Economy, and Finance, Goskomzem, the State Property Committee, and ICMA
- Ordered the working group to produce recommendations and proposed legislation by October 1994.

4) 5 April 1994. Resolution of the President "On Further Improvement of Land Relations"

- Local administrations (within their authority under the Land Code) will sell hereditary life tenure to individuals and the right to use or lease land to legal entities - individual citizens are given land for free up to established limits
- Holders of hereditary life tenure can sell, mortgage, lease, or give away hereditary life tenure - legal entities may sell, sub-lease, or mortgage lease rights
- Local administrations cannot sell the right to use or lease certain types of land: streets, parks, national parks, historical monuments, recreational lands, forests, water, and lands used for defense
- Goskomzem is to determine the prices of land use rights and leases and to develop forms for processing registration
- Cabinet of Ministers is to confirm the procedures and basic prices

5) 14 June 1994. Regulation #625 of the Cabinet of Ministers "Procedure for the Purchase and Sale by Natural and Juridical Persons of the Republic of Kazakhstan of the Right to Hereditary Life Tenure, and the Right to Use or Lease Land Parcels"

- Confirms the procedures for the sale and sale prices of hereditary life tenure and use rights
- Goskomzem is to check and verify documentation for hereditary life tenure
- Goskomzem is to appraise sales prices for land according to land use and

- agricultural value
- Sellers and buyers of rights to land parcels must give notice of intentions to sell and buy to Goskomzem
- The local branch of Goskomzem shall check documents of the sellers rights to use the land parcel subject to sale, including surveying the parcel, conditions of sale and sale price

The above confirms and reinforces recommendations made by Eckert, Kalinina, and Holstein regarding the urgency of establishing a comprehensive nation-wide real estate registration system. In order to meet the government's implementation timetable, a comprehensive real estate registration and valuation system needs to be proposed, appraised, funded, and implemented. Issues related to technical options for the development of a proposal are discussed in chapter II of this report.

### 3. Existing Registration and Land Information

#### 3.1 General Background.

Kazakhstan is striving to create private rights in land and real estate which will be sufficient to support and encourage private investment without violating Constitutional mandate. Even during the Soviet period, Kazakhstan and the other Republics of the former Soviet Union had highly developed systems for granting and registering private rights to apartments, land plots and other forms of real estate.

As a result, Kazakhstan currently has a very comprehensive and highly developed information base on all land and improvements throughout the Republic. Many of the institutions and much of the expertise and data needed to create workable fiscal and legal cadastres are in principle already in place. However, additional organization and coordination is needed to convert to a single real estate registration system covering all of Kazakhstan including land, apartments, and commercial offices.

#### 3.2 Registration of Buildings and Apartments.

The Bureau of Technical Inventory (BTI) currently keeps a reasonably complete registry for all buildings and apartments in Kazakhstan. BTI is responsible for keeping records of owners or occupiers, physical characteristics and value of all residential and public buildings and apartments. It is also responsible for keeping inventories and values of other types of buildings such as factories and enterprise buildings.

#### 3.3 Initial Registration of Land Rights.

Allocation of land rights and land leases in Kazakhstan occurs according to a detailed administrative procedure involving city or oblast administrations, city architects and planners, and mapping agencies. Once a land allocation decision is final, the State Committee on Land Relations and Land Tenure or its local branch (Goskomzem) issues a state deed (Akt) or lease agreement to the land user or renter. Goskomzem consequently has reasonably comprehensive

registries of all land users and land renters throughout Kazakhstan. Goskomzem has a network of offices throughout Kazakhstan and is processing a large volume of applications for real estate rights.

### 3.4 Positive Aspects of the Existing System.

As already mentioned, BTI and Goskomzem have reasonably developed registries of apartments, homes and other buildings and land rights. The registries (at least in large cities such as Almaty) appear to be well organized and in good condition.

In addition, detailed maps and other data needed for a cadastre already exist in various agencies. For example, Goskomzem or its local branches have access to maps produced using photogrammetric techniques at a variety of scales ranging from 1:500 in cities to 1:100,000 in rural agricultural areas. Many of these maps already show parcel boundaries which have been surveyed based on existing monuments. Detailed maps (at scales of 1:10,000 and 1:100,000) are also available showing a wide variety of physical characteristics including soils, vegetation, topography, land surface, and physical and chemical properties.

City and Oblast architect's offices possess detailed maps (1:5,000) showing topography, seismic areas, roads and buildings. Maps at 1:2,000 show details of buildings in relation to survey control and street boundaries. In Almaty (and maybe other cities), city blocks are indexed along a grid index to a series of 1:500 scale maps showing land parcel boundaries and references to individual files on buildings and parcels. These maps are more than adequate for purposes of land parcel and building location for a legal cadastre. All maps are based on a national coordinate system established in 1942. This standard coordinate system will greatly facilitate the automation of Kazakhstan's base mapping.

Some agencies like BTI, the Almaty City Architect's office and Goskomzem have begun automation of maps and data using state-of-the-art computer equipment and software. Purchase of additional equipment and software is under consideration but funding is scarce.

### 3.5 Shortcomings of Existing System.

3.5.1 Accessibility of System. Registration systems and information storage in Kazakhstan were designed in the Soviet era to provide inventories and information to government planners and economists for statistical and planning purposes. The system needs to be re-oriented so that registration and information systems are readily accessible to the public. As a market economy emerges in Kazakhstan, it will become increasingly important for the government to view the public as the "client" or end user of the registration and information systems. The systems must be open to public use. The more the public uses the system, the more value both government and private sector extract from the system.

3.5.2 Unification of Registration Function. The registration functions for buildings and land rights which are currently performed by different agencies like BTI and Goskomzem must be unified into one agency. Under the existing system, a buyer of

real estate or a lender who intends to take a mortgage on real estate does not know with certainty where to verify the seller's or borrower's rights in the property. For the market to work efficiently and effectively, buyers, lenders and investors must be able to obtain all information about legal rights to real estate in one office.

**3.5.3 Registration Law.** Kazakhstan does not have a law which clearly and specifically describes how and where real estate rights (such as ownership, use, leases, easements and mortgages) are registered. The law must also describe the advantages of registration, like priority of rights over others who have not registered.

**3.5.4 Consistent Indexing System and Sharing of Information.** Real estate information is housed in many different agencies which do not have consistent indexing systems so they can easily share information. Moreover, agencies seem to take a proprietary interest in information and are extremely reluctant to make it available even when other agencies need the information. The value of this information comes from its accuracy, reliability, currency, and above all its use.

**3.5.5 Classified Information.** Many of the maps and much of the data that will be most useful for establishment of the cadastre is currently classified as secret. If the maps and information are declassified and made available for the cadastre project, the cost and timing of the project will be reduced dramatically.

**3.5.6 Discretionary Authority.** Local officials currently have a high degree of discretion regarding whether to register real estate rights or not. Citizens wanting to register real estate rights are often denied the ability to do so based on the arbitrary discretion of government employees. Citizens and juridical entities should have the right to register their real estate rights without approval of government officials as long as required fees are paid and documents are submitted in the required form.

### **3.6 Documents Required to Purchase an Apartment in Almaty**

The steps involved with the sale and purchase of an apartment are shown below in Table 1. The table describes the documents and approvals required for the sale of an apartment to be completed.

The current system for the issue of documentation to transfer private use of real estate is cumbersome and time consuming. Documented information is required from five agencies and a notary. Within each of these agencies the public is often confronted by government employees who exercise arbitrary approval authority. Some of the information required is in conflict with recent Presidential Decrees allowing citizens to have private use of more than one apartment. The registration of private use of an apartment is recorded at the Bureau of Technical Information (BTI) and at the City Department of Housing. The current system is not coordinated with the governments policy on privatization of use rights and is awkward for the public to understand.

### 3.7 The Land Code

The major legislation defining real estate use rights is the land code. This important document defines the legal framework for real estate tenure. Presently the land code is undergoing extensive revision to incorporate the many changes being made by the decrees from the president, prime minister, cabinet of ministers, and the parliament. During the time spent in Kazakhstan on this project, the Kazakhstan government had made little progress in the reform of the land code. These revisions are being overseen by a working group. Mr. Rick Gaynor, ICMA Resident Advisor, Almaty, is a member of the working group. Mr. Gaynor advised that the land code was in such a state of flux that any attempt to interpret its current form would be meaningless.

Table 1. Requirements for the Purchase of an Apartment in Almaty

Document	Agency	Required by Purchaser	Required by Seller
Certificate stating lack of housing allocation	Bureau of Technical Information (BTI)	Yes	
"Form number three" about existing accommodation. Stating: 1. Number of persons occupying present housing. 2. Principal owner. 3. Total area. 4. Living area.	Local Housing Management Office	Yes	
Plan of the apartment being sold.	Bureau of Technical Information (BTI)		Yes
Permission to sell and buy property	City Department of Housing	Yes	Yes
Statement showing seller is free from debts related to the apartment	District Tax Inspectorate		Yes
Purchase-sale agreement	Notary of the District	Yes	Yes
1.5% Transfer tax receipt	Government Savings Bank	Yes	

#### 4. Working Group on the Legal and Fiscal Cadastre

In order to facilitate effective technical assistance on the legal and fiscal cadastre to the Republic of Kazakhstan, a working group was formed prior to the start of the TDY. The chair of the working group was First Deputy Minister of Housing, Construction, and Land Development. The working group also had representation from the Ministry of Finance and the State Committee on Land Relations and Land Tenure. The list of working group members appears in Annex A. During the course of the TDY the working group or smaller meetings of working group personnel met twelve times.

At the initial meeting held on July 13, 1994, the chair, First Deputy Minister of Housing, Construction, and Land Development, Mr. Bair Dosmagambetov outlined the objectives of the working group. The objectives included the production of three documents:

- 1) Concept paper: an outline of international experience in the development of legal and fiscal cadastres, an analysis of existing real estate records in Kazakhstan, the aims and goals of legal and fiscal cadastres, a general description of the structure of legal and fiscal cadastres, the legal basis for the introduction of legal and fiscal cadastres.
- 2) Technical paper: an outline of the organizational structure for legal and fiscal cadastres for Kazakhstan, an indication of real estate information flow between the legal and fiscal cadastres and the public, technical assistance and support needed to set up legal and fiscal cadastres, approximate time requirements for the implementation of legal and fiscal cadastres, legal foundations related to the introduction of legal and fiscal cadastres..
- 3) Costs paper: an estimate of the costs of implementing the institutional framework and technical requirements for legal and fiscal cadastres for Kazakhstan.

Subsequent meetings were held to conduct research, develop the concept paper, seek comments from the members of the working group, report on changes to the reports, and finally, to present the papers and make recommendations for the next steps required. The papers appear as Annexes C, D, and E of this report.

## II. OPTIONS FOR A REAL ESTATE REGISTRATION SYSTEM AND VALUATION SYSTEM INSTITUTION

### 1. Background

There is an urgent need for the Government of Kazakhstan to fully define legal rights in real estate and to streamline the registration of those rights both upon original issuance and upon subsequent transfer through purchase/sale, bequest, inheritance, instrument (e.g. mortgage, lien), or discharge of instrument. An efficient national real estate registration system is therefore required that incorporates the functions presently performed by several agencies including the Bureau of Technical Inventory, State Committee on Land Relations and Land Tenure (Goskomzem), and the City Architects Office.

The real estate registration function is a large ongoing task. For example, there are approximately 400,000 land plots and apartments in Almaty. If 5% of these transfer use rights in one year, then 20,000 transactions will need to be recorded. Add to this the introduction of mortgage documents and the development of new parcels and apartments and the number of transactions may reach 60,000 per year or 200-300 transactions per day.

Under the existing system, a buyer of real estate or a lender who intends to take a mortgage on real estate does not know with certainty where to verify the seller's or borrower's rights in the property. For the real estate market to work efficiently and effectively, buyers, lenders and investors must be able to obtain all information about legal rights to real estate in one office. A National Real Estate Registration Office will satisfy these needs and also provide secure use rights or legal proof of possession of real estate use rights.

This section reviews the three options for establishing a network of National Real Estate Registration Offices. Please note that the options described below address only the registration function (a new function for the government). Agencies with jurisdiction over planning decisions and land allocation would continue to exercise existing functions.

### 2. Option 1. Create a New Agency

This option requires the setting up of a new agency that registers the use rights of all real estate, including land plots, apartments, and office space in the Republic of Kazakhstan. This agency will need to have a network of offices at all major centers throughout the country organized by oblast, rayon, settlement, or city depending on the density of real estate units and population. This agency will be responsible for recording and issuing certificates of real estate use rights. However, surveying, mapping, and unambiguous parcel descriptions will remain the province of Goskomzem and the City Architect's offices.

Expertise required to set up this agency may be recruited from BTI, the State Committee on Land Relations and Land Tenure, the Ministry of Construction, Housing and Land Development, Goskomzem, or City Architects. These agencies may have individuals possessing skills required for the management of real estate records. If this agency is formed

to register all real estate rights, BTI could discontinue the registration function and specialize in the building inventory function which will be needed for real estate valuation and appraisal for taxation purposes.

#### Advantages of Option 1:

- \* Avoids the need to coordinate several agencies supplying parts of the information needed for an operational real estate registration system.
- \* Allows a fresh approach to design and implementation of new systems for recording use rights to real estate.

#### Disadvantages of Option 1:

- \* The logistical requirements of establishing up to 20 new regional offices plus staff will be expensive and time consuming.
3. Option 2. Expand the role of the State Committee on Land Relations and Land Tenure (Goskomzem) to Include Real Estate Registration

The State Committee on Land Relations and Land Tenure is responsible for registering the initial allocation of use rights to real estate. Use rights are allocated and documented on State Akts which record the individuals or entities receiving the rights and a description of the real estate in question. Each State Akt is uniquely numbered by oblast and a sequential number. Copies of State Akts are kept for recording purposes. This function establishes the initial information required for a real estate registration system. This process can be expanded to include recording of ongoing changes within a real estate registration system.

The State Committee on Land Relations and Land Tenure has a network of regional offices in all major centers. Offices have close relations with City Architect's offices where they draw upon surveying and mapping expertise to identify and delineate real estate.

#### Advantages of Option 2:

- \* Initial use rights are already allocated and recorded.
- \* Networked office structure already in place.
- \* Relatively new agency capable of accepting new systems.
- \* Staff have expertise in real estate recording, surveying, and mapping.

#### Disadvantages of Option 2.

- \* May involve political disagreement among existing agencies.
- \* State Committee on Land Relations and Land Tenure is accustomed to exercising discretion over real estate allocation, whereas the registration function is a non-discretionary function.

4. Option 3. Expand the role of the Bureau of Technical Inventory (BTI) to Include Real Estate Registration

The Bureau of Technical Inventory records the physical characteristics and estimates value of all residential buildings, public buildings, and enterprises. BTI keeps historical and current records of residential occupants. Most of the BTI records are paper based, however records of newly privatized apartments are automated. Records are indexed by street name, street number of the building, and apartment number. Presently records from BTI form the only proof of rights in apartments.

Advantages of Option 3.

- \* Long standing history of record keeping.
- \* Networked office structure already in place.

Disadvantages of Option 3.

- \* Old bureaucracy, may be reluctant to change.
- \* Has many functions already.
- \* Slow to respond to existing information requests.
- \* May involve political infighting.
- \* Presently responsible only for rights to buildings, not land.

The working group concluded that the State Committee on Land Relations and Land Tenure (Option 2) is best situated to take on the role of real estate registration.

### III. REAL ESTATE INDEXING AND IDENTIFICATION SYSTEM

1. Real Estate Indexing.

Each land parcel and each distinct unit of a building which may be owned separately (such as an apartment or office) should be referenced by a unique identification number. The numbering system already used by Goskomzem for land parcel identification should be maintained and expanded to include apartments and commercial offices. The existing numbering system has an alphabetical code for Oblast or City with a seven digit numeric extension for each individual parcel. Number series can be coded to allow for breakdown of oblast into rayons, and cities into districts. This allows for ten million real estate units in each of the 19 Oblasts and two City offices of Goskomzem. The numeric number can be expanded to allow for extra digits if required in the future. An extra code will be needed to distinguish land title from title to apartments or commercial offices. This extra code need only be added to apartment or office titles. The existing coding system can be easily modified to identify apartments and commercial offices. Goskomzem has of August 1994 issued some 400,000 Akt Certificates for the privatization of land parcels. The existing numbering system provides a useful indexing system that can be used for all information purposes including valuation and taxation.

It has been estimated that 60-80 percent of the 300,000 apartments in Almaty have been privatized. These records are computerized at the Bureau of Technical Inventory (BTI). The records for privatization of apartments and commercial offices should be organized in a similar way to condominium title in the United States. A condominium system can easily adopt the same numbering system used by Goskomzem with an added identifier indicating condominium title. At present there is no mechanism for private apartment owners to share in the management and costs of maintenance and insurance of their buildings. This oversight will result in many disputes in the future, especially if major building damage is sustained during an earthquake.

## 2. Unambiguous Real Estate Descriptions

Present descriptions of real estate for the purposes of privatization are unclear as to establishing unambiguous location and size. Each and every real estate parcel must be unambiguously identified in terms of its size, shape, and location with this information recorded on a map, aerial photograph, plan, or building plan in the case of apartments or commercial offices. These mapping or graphic records must be systematically indexed and cross referenced to title records. The accuracy of maps, aerial photographs, plans, and condominium plans must be regulated to reflect the need to define parcel boundaries to an accuracy that will minimize disputes among adjoining land users while at the same time be economically feasible. Much of the existing mapping available at the City Architects office and Goskomzem will be suitable for registration if copies can be made accessible to the public. For example, Goskomzem or its local branches have access to maps produced using photogrammetric techniques at a variety of scales ranging from 1:500 in cities to 1:100,000 in rural agricultural areas. Many of these maps already show parcel boundaries which have been surveyed based on existing monuments.

City and Oblast architect's offices possess detailed maps (1:5,000) showing topography, seismic areas, roads and buildings. Maps at 1:2,000 show details of buildings in relation to survey control and street boundaries. In Almaty (and maybe other cities), city blocks are indexed along a grid index to a series of 1:500 scale maps showing land parcel boundaries and references to individual files on buildings and parcels. These maps are more than adequate for purposes of land parcel and building location for a real estate registration system. These maps should continue to be updated as changes occur.

## IV. IMMEDIATE REQUIREMENTS TOWARDS REAL ESTATE REGISTRATION AND VALUATION

### A. Real Estate Registration System

Kazakhstan must put in place a system to record all private and institutional interests in every real estate parcel (including apartments and commercial offices) in order to guarantee the security of real estate investment. The system must include records of primary real estate users and secondary interests such as mortgages, easements, and liens.

Privatization of real estate use rights has been in place for over two years. Private use rights to land, apartments and commercial offices and the newly allowed marketability of these rights has created a fledgling but robust real estate market. The market exists without the ability to create a mortgage or to borrow on the equity of real estate. The transfer of rights is cumbersome, involving several government agencies and includes an imposition of a one and one half percent transfer tax. Sale price under valuation is rampant. Sales prices are not advertised in the real estate section of the independent newspapers. However, the classified advertisements for real estate run into several pages and are sectioned into apartments, land, residential houses, and dachas. This free market activity in real estate would be greatly enhanced with the introduction of a real estate registration system.

#### 1. Framework for a Real Estate Registration System

A real estate registration system should record and update changes to title (entitlement) or rights and interests in every real estate parcel (including apartments and commercial offices). In doing so, an unambiguous description of the parcel is required along with the records of all rights and interests. The unambiguous description is best provided by maps, aerial photography, or survey plans. Existing mapping and aerial photography is adequate for identifying real estate parcels for the purpose of registration. There is a need to update the technology of existing maps to take advantage of improved economies of scale offered by digital mapping methods. Maps and aerial photography are currently available from the State Committee on Land Relations and Land Tenure (Goskomzem), the Administration of Geodesy and Cartography, and the City Architects Office.

Records on the privatization of land rights have been systematically kept by Goskomzem since it was given the function of implementing land reform and the issue of "Akt" certificates which certify the privatization of land use rights. The records of the Akt certificates could be modified to form the basis of a real estate registration system. The records of Akt certificates are computerized which would enhance conversion to a title. The introduction of condominium laws within the housing code would enable apartments and commercial offices to be registered on the same system as land thus creating a real estate registration system covering all types of real estate.

The interagency working group has recommended that Goskomzem be the agency to embrace a nationwide real estate registration system incorporating land, apartments, and commercial offices. Goskomzem has a network of offices in major Cities (two), all Oblasts (19), and in local districts (217). It has already implemented a system for recording privatization of land use rights which could form the basis of a real estate registration system.

Details of the technical aspects of the real estate registration system can be found in Annex D.

## 2. Real Estate Registration Implementation

With privatization of real estate well under way and an active real estate market in place, there is an urgent need to create a fully operational real estate registration system. The register must be accurate, up-to-date, and open to the public. The implementation of a real estate registration system must set out to achieve four goals:

- 1) register ongoing privatization of real estate during the privatization process;
- 2) register interests in real estate brought about by real estate sales;
- 3) register existing privatized real estate; and
- 4) systematically register all parcels of real estate.

Priority should be given to 1, 2, and 3 above as these represent real estate parcels that are subject to private investment and are most likely to stimulate economic activity. Ideally, all transactions must be recorded and available within 24 hours of lodgment.

The first phase of implementation should focus on a pilot project using land parcels in the City and Oblast of Almaty. Goskomzem's research division (State Scientific and Production Center for Land Resources and Land Planning, Gosnpczem) has the responsibility to design and introduce new systems and procedures for real estate registration. This division of Goskomzem is located in Almaty. An efficient automated title registration system cross-referenced to existing large scale mapping should be researched, developed, tested, and implemented. A unique parcel index system based on each City and Oblast has been developed by Goskomzem. This numbering system can be easily modified to code districts within each City and Oblast.

Training and technical assistance will be required during this phase of implementation to ensure the proper design and functionality that will reflect the legal foundations, eliminate possibility of fraud, and avoid future disputes among land users.

Subsequent phases will be the export of the real estate registration system to all Oblasts and Cities. During implementation, technical assistance will be required for the introduction of digital surveying and mapping technology. These technologies include satellite positioning using the global positioning system (GPS), analytical photogrammetry, and geographic information systems (GIS). These technologies can be incrementally introduced to improve surveying and mapping economies of scale. Immediate mapping requirements for real estate registration can be accommodated from existing maps.

The development of tertiary education programs in all aspects of real estate registration is required to allow for long term development of educated personnel to undertake surveying, mapping, and real estate registration in both government and private sectors. Such courses need to be established at the Academies now teaching geodesy, surveying, mapping, and land planning. Expertise in surveying and mapping education is required to advise and to assist the government of Kazakhstan in establishing a career path for future Kazakh real estate developers and administrators.

### 3. Land Purchase and Sale Procedures

During the mission the author obtained a copy of a document describing "Temporary Regulations for Land Tenure Regulation Procedures During Purchase or Sale of Right to Hereditary Life Tenure, the Right to Use or Lease Land Parcels", dated July 6, 1994 and issued by the State Committee on Land Relations and Land Tenure (Goskomzem). This document expands the role of Goskomzem to allow the sale of state lands by the heads of local government. The document also appears to give Goskomzem the power to regulate the sale and sale price of land which has previously been privatized. Sale prices are set according to tables of fixed value categorized by land use, agricultural production potential and location.

The document attempts to interpret Regulation #625 of the Cabinet of Ministers of June 14, 1994. The interpretation appears to give Goskomzem regulatory power to set the sale price of land use rights between private buyers and sellers. This interpretation is contrary to the establishment of a free market in real estate. Technical advice in the drafting of these regulations is urgently required to free up the real estate market and to allow for the recording of real estate transactions.

### 4. Develop an Efficient Title Registration System

The conceptual model of a real estate registration system has not been fully developed for Kazakhstan. While Goskomzem has a system for recording original "Akt" certificates for privatization, the ongoing transfer of rights of use, mortgage, easements, liens, and covenants has not been incorporated into an official recording system. A simplified model for real estate title registration is proposed in Annex D. To avoid unnecessary future changes and the implementation of cumbersome parallel systems, such a model is urgently required.

Technical assistance is needed to advise Goskomzem on the design and implementation of a workable real estate registration system. The present system of recording Akt certificates contains some redundant and useless information. Minor changes to format and recording of Akt certificates would greatly enhance the production of privatization and could render them easily convertible to the real estate registration system.

### 5. Implement a Pilot Real Estate Registration Project

A small pilot project to conceptually design and implement a working real estate registration system is needed. Such a project would not yield a large number of registered land parcels (5,000 to 10,000 parcels). Its purpose would be to serve as a model for Goskomzem to fully understand the technical requirements and the need for efficient information management when dealing with the large projected volumes of real estate transactions that will occur under a fully operational free market economy.

A small town or a small section of Almaty could serve as a project site. Existing mapping is adequate to allow the physical description of real estate parcels while personal computers could easily accommodate the textual data base associated with number of land parcels. The majority of the pilot project would be spent on experimenting and perfecting the

conceptual design of the registration data base. A cross referencing system from map indices and parcel identification based on Akt certificate numbers needs to be developed. Standard PC data base software (available in Russian) could be adapted to manage the textual data base. The results of such a pilot project will enable the government to fully assess the requirements for a nationwide real estate registration system.

## B. Real Estate Valuation System

On the basis of a sound legal framework and with the implementation of accurate real estate registration records, a real estate valuation and an ad valorem taxation system can be implemented. While any tax is a disincentive to investment, land users realize that government revenues are required to put in place the infrastructure to service land. Real estate must be seen by land users to be valued and assessed equitably and correctly. Tax rates must also be at a level to generate much needed revenue but not at a level that discourages investment and development.

Although the real estate registration system and the valuation system share information, they are separate professional functions and should be linked but administratively separated. They should share common elements of mapping and parcel numbering while maintaining professional autonomy to pursue efficient methods of carrying out their specialist functions.

### 1. Institutional Framework for Real Estate Valuation

Presently real estate markets are in their early stages of formation, reliable information on existing sales is scarce, and there are very few trained real estate valuers. The design of a real estate valuation system is constrained by these realities but is very much needed if government revenues are to increase. An essential component of valuation are records of improvements to real estate. Some of these records can be found at the Bureau of Technical Inventory (BTI). BTI records cover information regarding buildings and improvements to real estate. Goskomzem, however, has detailed information on land and is gathering information related to valuation for the purpose of privatization.

Goskomzem's research division (State Scientific and Production Center for Land Resources and land Planning, Gosnpczem) has established a Department of Evaluation to establish land value for the equitable privatization and sale of state land. This department assesses the value of land above established limits and sets a sale price for the acquisition of land for citizens wishing to purchase land above these established limits. This department is currently taking advantage of USAID sponsored land appraisal training. It appears to have the resources and legislative authority to undertake the appraisal and valuation function needed to set up an equitable land valuation system. This function should be extended to include apartments and commercial offices created under new condominium laws.

Gosnpczem is in need of technical assistance to refine its methods and procedures for privatization, valuation, and appraisal of land. Temporary regulations issued July 6, 1994 for "Land Tenure Regulation Procedures During Purchase or Sale of the Right to Hereditary Life

Tenure, the Right to Use or Lease Land Parcels" need modification to allow a free market in land to operate efficiently.

## 2. Real Estate Valuation System Implementation

With the sale of state land and the fledgling land market, the government of Kazakhstan has introduced a valuation system based on a fixed rate per square meter which varies with location. This system will need to be replaced with an ad velorum based valuation system if the government is to realize the true market value of lands it is willing to sell for private use. An ad velorum based system will also be required for an efficient and equitable land tax.

Immediate assistance is required to accelerate the training and education of appraisers for the privatization and sale of state lands. The demand for privatization of land is increasing as the public becomes aware of the advantages of private land use rights. The number of state employees who have even the minimum of training in real estate appraisal is far below the number required to meet the demand. There is also the need for the establishment of private appraisers to work within the banking industry and to service the emerging private land development sector. Assistance in the development of a private sector appraisal association and licensing system for appraisers is required.

The development of tertiary education programs in real estate appraisal is required to allow for long term development of educated personnel to undertake real estate valuation in both government and private sectors. Such courses need to be established at the equivalent level to technical colleges or community colleges. Expertise in real estate appraisal education is required to advise and to assist the government of Kazakhstan in establishing a career path for future Kazak real estate appraisers.

## A. ACKNOWLEDGMENTS

During the mission the author consulted with many individuals. Without exception, their interest and cooperation was outstanding. All the following gave enormous assistance to the ideas presented in this report and all show exceptional dedication to the future of Kazakhstan:

- ◆ Mukhtar Abdygapparov Department Head, Land Computer Management, State Scientific and Production Center for Land Resources and Land Tenure (Gosnpczem) (tel. 42 29 60)
- ◆ Arslan Abishev Deputy Chair of the Almaty City Land Committee (tel. 53 87 12)
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- ◆ George Edgar Project Manager, European Union Coordinating Unit, Almaty (tel. 50 61 75)
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- ◆ Olga Gorpinich Specialist, Almaty City Land Committee (tel. 53 82 91)
- ◆ Alexander Ibraghimov Computer systems programmer. private computer consultant. Has developed GIS software for PCs. (tel. 47 57 52)
- ◆ Kumesh Kalabay Head, Administration of Geodesy and Cartography, Cabinet of Ministers (tel. 68 04 19)
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- ◆ Bolat Kuspangaliev Professor, The Kazak State Academy of Architecture and Construction (tel. 20 55 66)



## Annex B. LEGAL AND FISCAL CADASTRE WORKING GROUP

The following are members of a Working Group formed by the Ministry of Housing, Construction, and Land Development (Ministroi) to report on the development of a unified state cadastre for the Republic of Kazakhstan.

1	Bair Dosmagambetov	First Deputy Minister of Housing, Construction, and Land Development (Head of the Working Group)
2	Yuliy Aibassov	Head of Planning and Development of Territories and Habitable Areas (Ministroi) (tel. 32 46 19)
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6	Kazbek Chikanayev	Head, Land Cadastre and Land Monitoring Department State committee on Land Relations and Land Tenure (Goskomzem) (tel. 63 13 64)
7	Inessa Kim	Head, Tax Policy Department, Ministry of Finance
8	Laura Massanova	Specialist, Tax Policy Department, Ministry of Finance
9	Tamara Zalogina	Chief Economist, Almaty Genplan
10	Maira Amirkhanova	Head, Investments Department, State Committee on Statistics
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CONCEPT PAPER

REPUBLIC OF KAZAKHSTAN  
NATIONAL REAL ESTATE REGISTRATION,  
LAND VALUATION, AND  
PLANNING INFORMATION RATIONALIZATION PROGRAM

Gary A. Jeffress and Richard Gaynor

16 August, 1994

1. Introduction

1.1 Background

Land is a nation's most valuable natural resource. It provides the foundation for the production of food, the extraction of minerals and energy, the construction of shelter for homes and businesses, and open space for recreation and relaxation. Moreover, it contains most of the wealth upon which people and nations rely.

Regardless of the form of a nation's economy, land resources must be carefully managed to avoid waste or destruction. Access to accurate information about land is a prerequisite to effective and efficient management. It is also essential to private individuals making decisions about investment or development of land.

A diverse group of specialists and institutions generates different kinds of information about land. The group includes surveyors, cartographers, appraisers, lawyers, geologists, engineers, tax officials and planners. Land has different meanings to these different specialists. To a geographer, land is a physical landscape. To the city planner land is the canvas upon which cities are designed. To the lawyer and surveyor land is a volume of space and a bundle of rights to use that space.

As with the land itself, information about land must be carefully managed to be put to its best use. Countries throughout the world are developing more and more sophisticated systems for managing land information and for making it available to all who need it.

1.2 The Cadastre

One way to organize land information is in a "cadastre" or parcel-based land information system. In this system, all data are organized around a specific plot of land. The information consists of maps and text and is linked by some identifier for the land plot such as the coordinates of the plot, the street address, or a unique index number. Ideally, a land plot's identifiers can be used to access all information about that land plot.

The principal function of the cadastre is to provide information about the rights to the land plot (whether they are ownership rights or use or lease rights), its value and uses. Land administration specialists throughout the world generally agree that there are three types of cadastres based on the information they contain and the primary purpose for which they are used:

- a) The legal cadastre: The foundation of the legal cadastre is a system for registering and updating real estate<sup>5</sup> property rights covering an entire jurisdiction. The legal cadastre also includes laws that define

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<sup>5</sup> Real estate is defined as the space created by projecting planes starting at the center of the earth upwards through the intersection of the boundaries of the land plot on the surface of the earth and continuing upwards into the sky. Thus, real estate includes all land, fixtures, and immovable improvements attached to land.

real estate, rights in real estate, contract law for the exchange of rights in real estate, and the associated forms, regulations, and fees for the updating of records. Such systems are designed to eliminate fraud and to allow for fast and efficient storage and retrieval of recorded information. Registration of real estate rights provides proof of rights which are recognized by the government, the courts, and the public.

b) The fiscal cadastre: The fiscal cadastre is a complete inventory of real estate, including land and improvements to land, for the purposes of appraising the value of real estate and assessing real estate taxes. The fiscal cadastre covers an entire jurisdiction and includes records of persons and legal entities responsible for the payment of taxes levied upon real estate. The fiscal cadastre provides the basis for fair and equitable imposition of real estate taxes and encourages efficient use of land resources.

c) The multipurpose cadastre: The multipurpose cadastre includes both the legal and fiscal cadastre as well as other information on the physical features of the real estate parcel such as land use and planning information, and information on soil type, vegetation coverage, topography, geomorphology, hydrology, climate, engineering systems, transport, communications, demography, and environment (ecology). A multipurpose cadastre is basically a universal real estate information system which incorporates all spatially referenced information used for policy, planning, and regulation of the use of land resources.

This concept paper focuses on issues relating to the establishment of legal and fiscal cadastres in Kazakhstan because they are most urgently needed to facilitate the transition to real estate markets.<sup>6</sup> The paper also addresses overall management of the legal and fiscal cadastres with an eye towards the eventual establishment of an automated multipurpose cadastre.

### 1.3 Benefits of Legal and Fiscal Cadastres

As already mentioned, land and other real estate is a nation's largest resource. Real estate also contributes significantly to the gross national product (GNP) of most countries. For example, in the United States the real estate industry<sup>7</sup> totaled US\$ 749 billion in 1988, which was 16.6% of total GNP and 19% of private sector GNP<sup>8</sup>. This activity depends largely on the operation of a reliable real estate registration system. In addition, the official registration of rights in real estate is especially important if a finance system is to operate using real estate as collateral. Finally, along with substantive land codes and financial regulation, an efficient real estate registration system is a pre-condition for the operation of an efficient land market.

Real estate registration benefits both the private sector and the government sector. Of the approximately 185 nations of the world, only 25 have developed fully functioning market economies. These 25 countries represent the world's wealthiest nations and, without exception, all have strong and active real estate markets.

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<sup>6</sup> The New Program of the Cabinet of Ministers for the Government of Kazakhstan approved by the President on July 15, calls for the design of a title registration system on land and other real estate in settlements by the end of 1995 and for the design of a fiscal cadastre by March, 1995.

<sup>7</sup> The "real estate industry" is defined as services involved in transferring, financing, and valuing real estate; construction of residential and business-related buildings; investment in real estate; and services related to leasing, and managing buildings and land.

<sup>8</sup> US National Association of Realtors, 1988.

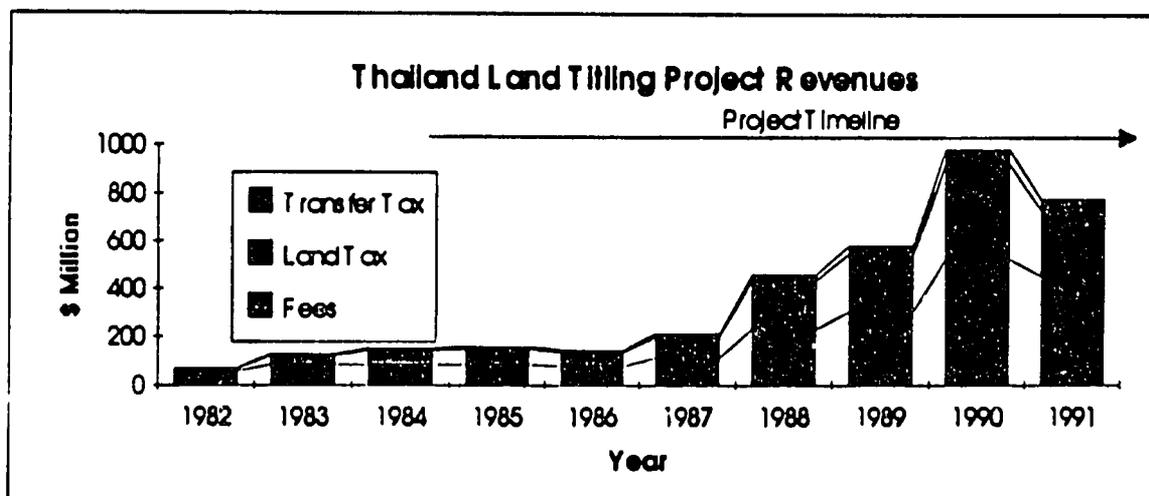
They also have efficient and well-developed real estate registration and recording systems.

Real estate registration systems provide direct income to government through fees, land taxes and transfer taxes (taxes imposed when real estate is bought and sold.) Table 1. and Figure 1. show income to the Government of Thailand as a result of the real estate registration project which began in October 1984.

**Table 1. Thailand Land Titling Project Revenues (Millions of US Dollars)**

Year	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Fees	59.24	85.52	84.68	85.76	80.36	114.8	231	303.44	525.4 4	453.4 8
Land Tax	13.28	38.64	58.44	63.32	55.68	86.04	204. 6	244.68	399.8 8	276.8 8
Transfer Tax	0.08	4.44	7.96	9.04	8.48	12.2	24.8	34.76	59.96	46.52

**Figure 1. Thailand Land Titling Project Total Revenues (Millions of US Dollars)**



Real estate registration systems contribute immeasurably to overall economic activity by providing investors with security of rights. The more secure these rights, the more investment there will be in real estate. Investments in real estate have a multiplier effect on other sectors of the economy such as construction, production of construction materials, improvements to infrastructure, production of housing, and increased employment. More intensive real estate market activities will result in increased need for urban planning which in turn leads to increased demand for information from the multipurpose cadastre.

#### 1.4 Countries Engaged in Creating Real Estate Registration Systems

Over the past ten years real estate registration initiatives have been undertaken all over the world including Britain, Russia, Japan, Cuba, Tanzania, Brazil, Malawi, St. Lucia, Ecuador, Thailand, Indonesia, Kenya, Mexico, Peru, Costa Rica, China, Papua New Guinea, Taiwan, and Malaysia.

The World Bank is currently financing a real estate registration project in Indonesia which is projected to last 25 years with initial funding of US\$ 150 million. The Indonesian project has been designed using the Thailand project as a model. The World Bank has approved funding for a similar real estate registration project in Russia called the Land Reform Implementation Support Project. The project supports an initial five year implementation period with total funding of US\$ 115 million.

#### 1.5 Factors Contributing to Success or Failure of Registration Systems Projects

Of the projects listed in 1.4 above, the Thailand project stands out as a success, notwithstanding that over the first ten years of the project there have been four changes in government administration and two coup d'etat (one successful and one unsuccessful). The factors contributing to this success are:

- a) the Thailand project, at the time of its inception, was the only project solely concerned with real estate registration, the remaining initiatives have been related to agricultural reform programs or real estate development projects;
- b) the Thailand project was implemented within only one agency, the Department of Lands in the Ministry of the Interior;
- c) prior to the project, the Department of Lands already had a well distributed network of offices throughout the country - headquarters in Bangkok (2,100 staff), 3 Bangkok metropolitan offices (500 staff), 72 Provincial offices and 674 District offices (6,100 staff);
- d) the administrative procedures of the department were very responsive to the public demand for services and information and, as a result, the public accepted the value of the project and readily used the system to register their real estate and secure their rights (See Table 1 and Figure 1);
- e) The objectives of the project have not been threatened by the changes in government described above. Senior executives in the Department of Lands and the Ministry have maintained strong and sustained support for the project<sup>9</sup>.

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<sup>9</sup> Burns, A. F., "Land Titling: The Big Picture", Paper presented at the Land Titling and Land Administration Regional Workshop, Bali, Indonesia, November, 1993.

In contrast, international experience has shown that the following factors seriously hamper the implementation of real estate registration projects:

- a) adding land titling as a small component to larger agricultural or urban development projects;
- b) an overall lack of political support or intra-government battles over which agency will house the registration system;
- c) lack of institutional capacity or an unwillingness to commit adequate resources;
- d) design weaknesses such as underestimation in the preparation phase of the complexity and/or costs of the tasks to be carried out<sup>10</sup>;
- e) imposing high user fees and taxes which deter the public from using the registration system and encourage under reporting sales figures.

## 1.6 Planning Information Rationalization

As information technology allows for greater access to geographic information needed for land use management and planning, there is an opportunity to use the technology to rationalize the way governments collect and distribute planning information. In Kazakhstan, like many other nations, government agencies are responsible for the collection, analysis, and distribution of geographic information used for planning. Over time, and for many different reasons, agencies collect data and information that may already exist in another agency.

Requests for information to satisfy an immediate need have historically required each agency to respond by sending data gatherers into the field to obtain the required information. In the past this process has been inefficient and costly. Information in paper form is difficult to find and may or may not be in the desired scale or format. With the introduction of geographic information systems technology the economics of electronically locating existing planning data and information are far more attractive.

In order to prepare for the introduction of this technology, governments need to assess their planning information needs to allow for the efficient allocation of resources among agencies responsible for various land related data bases. A policy and strategy for the government's planning information requirements should be formulated. The policy should address the need for agencies to share data and information to avoid duplication and unnecessary expenditures by agencies capturing information that already exists in another government agency.

## 2. Current Systems for Registration and Storage of Information in Kazakhstan

### 2.1 General Background

The Constitution of Kazakhstan provides that the land, its natural deposits, waters, flora and fauna and other resources are within the exclusive ownership of the state<sup>11</sup>. The lack of a clear legal framework establishing private land rights and the large number of laws and decrees confirming the state's authority have been an impediment to investment growth. This year the President of the Republic of Kazakhstan issued two

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<sup>10</sup> Wachter, D. and J. English, "The World Bank's Experience with Land Titling", Divisional Paper number 1992-35, Policy and Research Division, Environment Department, World Bank, March, 1992.

<sup>11</sup> Article 46 of the Constitution of the Republic of Kazakhstan.

decrees on land that lay the foundation for dynamic implementation of economic and land reforms, as well as further developing land relations. The two decrees are: Decree of the President date 24 January 1994 "Concerning Issues on Regulation of Land Relations;" and Decree of the President dated 5 April 1994 "On Further Improvement of Land relations." The Cabinet of Ministers has issued two Regulations to elaborate on the Presidential Decrees: Regulation of the Cabinet of Ministers dated 9 March 1994 establishing "Procedures for Acquisition of Right to Use or Lease Land for Non-Agricultural Purposes;" and Regulation of the Cabinet of Ministers dated 14 June 1994 establishing "Procedures for the Purchase and Sale by Natural and Judicial Persons of the Republic of Kazakhstan or the Right to Hereditary Life Tenure, and the Right to Use or Lease Land Parcels." These decrees and regulations make it possible to introduce for the first time the institutions of purchase, donation, lease, and mortgage of hereditary life tenure, and the right to possess and use land. By permitting transactions in land rights, land will enter the market, without violating the constitutional mandate of the state to own all the land in the Republic. Even during the Soviet period, Kazakhstan and the other Republics of the former Soviet Union had highly developed systems for granting and registering private rights to apartments, land plots and other forms of real estate, but not to the full extent that these new decrees and regulations allow.

As a result, Kazakhstan currently has a very comprehensive and highly developed information base on all land and improvements throughout the Republic. Many of the institutions and much of the expertise and data needed to create workable legal, fiscal, and multipurpose cadastres are in principle already in place, but need some additional organization and coordination into a single real estate registration system covering all of Kazakhstan including land, apartments, and commercial offices. The real estate registration system must be designed to cope with large volumes of transactions generated by the real estate market. The system must be open to the public and responsive to the public's needs for accurate real estate information.

## 2.2 The Existing System for Storing Real Estate Information in Kazakhstan

Existing real estate records and land information and registration systems in different agencies in Kazakhstan could best be described as the components of a multipurpose cadastre. There are very extensive records that include all information and documents relating to the land user, the land category, the distribution of arable lands, land use and planning, geographical, geological and other information about land plots. However, the existing records do not sufficiently account for the legal and fiscal aspects of real estate. The existing systems also fail to function as legal and fiscal cadastres because they are not open to the public.

## 2.3 Registration of Buildings and Apartments

The Bureau of Technical Inventory (BTI) currently keeps a reasonably complete registry for all buildings and apartments in Kazakhstan. BTI is responsible for keeping records of owners or occupiers, physical characteristics and value of all residential and public buildings and apartments. It is also responsible for keeping inventories and values of other types of buildings such as factories and enterprise buildings.

## 2.4 Registration of Land Rights

Allocation of land rights and land leases in Kazakhstan occurs according to a detailed administrative procedure involving City or Oblast administrations, city architects and planners, and mapping agencies. Once a land allocation decision is final, the State Committee on Land Relations and Land Planning (Goskomzem) or its local branch issues a state deed (Akt) or lease agreement to the land user or renter. The local branches of Goskomzem and city architects and planners have reasonably comprehensive registries of all land users and land renters throughout Kazakhstan. Goskomzem has a network of offices throughout Kazakhstan and is processing a large volume of applications for real estate rights.

## 2.5 Positive Aspects of the Existing System

As already mentioned, BTI, city architects and planners, Goskomzem, and its branches have reasonably

developed registries of apartments, homes and other buildings and land rights. The registries (at least in large cities such as Almaty) appear to be well organized and in good condition.

In addition, detailed maps and other data needed for a cadastre already exist in various agencies. For example, Goskomzem, its scientific center, planning and design institutes, and local branches have access to maps produced using photogrammetric techniques at a variety of scales ranging from 1:500 in cities to 1:100,000 in rural agricultural areas. Many of these maps already show parcel boundaries which have been surveyed based on existing monuments. Detailed maps (at scales of 1:10,000 and 1:100,000) are also available showing a wide variety of physical characteristics including soils, vegetation, topography, land surface, seismic, and physical and chemical properties.

City and Oblast architect's offices possess detailed maps (1:5,000) showing topography, seismic areas, roads and buildings. Maps at 1:2,000 show details of buildings in relation to survey control and street boundaries. In Almaty (and maybe other cities), city blocks are indexed along a grid index to a series of 1:500 scale maps showing land parcel boundaries and references to individual files on buildings and parcels. These maps are more than adequate for purposes of land parcel and building location for a legal cadastre. All maps are based on a national coordinate system established in 1942. This standard coordinate system will greatly facilitate the automation of Kazakhstan's base mapping.

Some agencies like BTI, the Almaty City Architect's office, Goskomzem, and its local branches have begun automation of maps and data using personnel computer equipment and software. Goskomzem has plans for the purchase of 20 Sun Sparc 10 RISC Graphics computer workstations to be installed at Oblast offices. These workstations will act as network servers (Ethernet) to 217 Apple Macintosh LC-457 computers to be installed in district offices. Purchase of these powerful UNIX based computers, additional equipment, and software is under consideration, however, funding for both equipment and training is scarce.

## 2.6 Shortcomings of Existing System

2.6.1 Accessibility of System. Registration systems and information storage in Kazakhstan were designed in the Soviet era to provide information to ministries, agencies, and individuals for statistical and planning purposes. The system needs to be re-oriented so that the registration and information systems are readily accessible to the public. As a market economy emerges in Kazakhstan, it will become increasingly important for the government to view the public as the "client" or end user of the registration and information systems. The systems must be open to public use. The more the public use the system, the more value both government and private sector extract from the system.

2.6.2 Unification of Registration Function. The registration functions for buildings and land rights which are currently performed by different agencies like BTI and Goskomzem must be unified in one agency. Under the existing system, a buyer of real estate or a lender who intends to take a mortgage on real estate does not know with certainty where to verify the seller's or borrower's rights in the property. For the market to work efficiently and effectively, buyers, lenders and investors must be able to obtain all information about legal rights to real estate in one office and within a short period of time (preferably instantaneously).

2.6.3 Registration Law. Kazakhstan does not have a law which clearly and specifically describes how and where real estate rights (such as ownership, use, leases, easements and mortgages) are registered. The public is often confused about how to register. The law must also describe the advantages of registration, like priority of rights over others who have not registered.

2.6.4 Consistent Indexing System and Sharing of Information. Real estate information is housed in many different agencies which do not have consistent indexing systems. This results in difficulties in sharing information. Moreover, agencies seem to take a proprietary interest in information and are extremely reluctant to make it available even when other agencies need the information. The value of

this information comes from its accuracy, reliability, currency, and above all its use.

2.6.5 Classified Information. Many of the maps and much of the data that will be most useful for establishment of the cadastre is currently classified as secret. If the maps and information are declassified and made available for the cadastre project, the cost and timing of the project will be reduced dramatically.

2.6.6 Discretionary Authority. In some cities in Kazakhstan, executive bodies exercise a high degree of discretion regarding whether or not to register real estate rights when real estate is bought and sold. In Almaty for example, citizens wanting to register real estate rights are often denied the ability to do so based on the arbitrary discretion of government employees who technically do not have the right to deny registration. Citizens and juridical entities should have the right to register their real estate rights without approval of government officials as long as they pay the required fees and submit documents in the required form.

2.6.7 Large Number of Land-Related Laws and Regulations. There are a large number of land-related laws, regulations, and decrees which make transactions involving land rights and registration of land rights more complex and less transparent than necessary.

## 2.7 Documents Required to Purchase an Apartment in Almaty

Table 2 below describes the documents and approvals required for the purchase and sale of an apartment in Almaty.

**Table 2. Requirements for the Purchase of an Apartment in Almaty**

Document	Agency	Required by Purchaser	Required by Seller
Certificate stating lack of residence	Bureau of Technical Information (BTI)	Yes	
"Form number three" about existing accommodation. Stating: 1. Number of persons occupying present housing. 2. Principal owner. 3. Total area. 4. Living area.	Local Housing Management Office	Yes	
Plan of the apartment being sold.	Bureau of Technical Information (BTI)		Yes
Permission to sell and buy property	City Department of Housing	Yes	Yes
Statement showing seller is free from debts related to the apartment	District Tax Inspectorate		Yes
Purchase-sale agreement	Notary of the District	Yes	Yes
1.5% Transfer tax receipt	Government Savings Bank	Yes	

The procedure described in Table 2 is cumbersome and time consuming. Documented information is required from five agencies and a notary. Some of the information required is in conflict with recent Presidential Decrees allowing citizens to have private use or ownership of more than one apartment. The system

is not coordinated with the government's policy on privatization of use rights and is awkward for the public to understand. Ambiguities in the system also permit government employees to exercise arbitrary authority and, in some cases, to disapprove transactions which no longer require approval under Kazakhstani law.

### 3. Objectives

#### 3.1 Main Objective

The main objective of a real estate registration system and valuation system is to foster efficient and equitable real estate markets and alleviate potential conflicts over land rights. A secondary objective is to support the government of Kazakhstan's efforts to develop long-term land management policies.

#### 3.2 Private Sector Objective

An objective of a real estate registration system and valuation system is to provide secure documented rights to rural and urban real estate users, thereby facilitating access to institutional credit, encouraging investments in real estate, and increasing agricultural productivity and family incomes. This will improve standards of living in rural areas and allow for increased employment opportunities in both rural and urban areas.

As more real estate enters the market, an accurate real estate registration system will prevent boundary disputes arising between adjoining real estate users and disputes among users, leasees, and mortgagees who may have interests in the same land plots. An objective of a real estate registration system is to adjudicate adjoining real estate rights and provide accurate records of rights in real estate and an unambiguous description of each real estate property. These records are available for public access which reduces the incidence of disputes over real estate.

#### 3.3 Government Sector Objective

The completion of an improved and automated legal and fiscal cadastre would greatly assist various Kazakhstan Government agencies responsible for development planning and land administration. More accurate real estate valuation and tax assessments would strengthen the fiscal system and increase government revenues, particularly in urban areas. The implementation of a real estate registration system and valuation system would greatly strengthen the government's institutional capacity in areas of automated record keeping, real estate valuation and tax collection, control over use of real estate, environmental management, education in land administration, and management of state lands.

### 4. Economic Justification

A real estate registration system and valuation system will have substantial economic and financial benefits. The most significant benefits will accrue to private users of real estate. In rural areas private farmers will obtain documented secure legal title to their use rights. These documents will allow farmers access to institutional commercial credit for on-farm investment. These investments will lead to more intensive agricultural production techniques resulting in increased production and income. At the same time, these improvements brought about by investment will increase real estate values.

In urban areas the same access to institutional credit will stem from legal documentation of use rights for apartments and residential housing. Investment in housing construction and renovation will increase real estate values and allow for real estate to be used as a store of value. Secure real estate rights will stimulate a real estate market allowing investors to maximize the economic use of real estate.

The Government of Kazakhstan will benefit from increases in automation and expertise in land administration. Economic benefits will stem from the implementation of a comprehensive valuation system which will track increases in land values brought about by private investment. Long-term increases in value and

gradual increases in the land tax will provide substantial revenues to the government<sup>12</sup>. While long-term benefits cannot be fully quantified the contribution to reform and to economic recovery is expected to be substantial.

Substantial cost savings can be achieved from the introduction of a planning information policy and a strategy to develop an electronic meta data base (data about data) showing planning information collected by all government agencies. Such a strategy will encourage agencies to share information in order to increase the value of planning information.

## 5. Institutional Structure

### 5.1. Real Estate Registration/Legal Cadastre

The institutional functions of a real estate registration system include legal definition of rights in real estate, real estate adjudication, surveying and mapping for unambiguous definition of real estate parcels, efficient storage and retrieval of mapping information along with computer data bases of textual information describing all interests in each land parcel or building. All these functions should lie within a single professional agency with a network of regional offices covering the major population centers of Kazakhstan.

The authors of this paper have considered several options for location of the legal and fiscal cadastres. For the legal cadastre, the options include BTI, the State Committee on Land Relations and Land Planning (Goskomzem) and establishment of a new agency. The Ministry of Finance, BTI and Goskomzem were considered for the fiscal cadastre. The authors have concluded that the logical institutional location of a real estate registration system for Kazakhstan is Goskomzem. This agency is presently responsible for the allocation and initial recording of applications for private rights in land. Goskomzem presently has offices in all 19 Oblasts and 217 district offices including two cities (Almaty and Leninsk) throughout Kazakhstan. This network of offices is ideally suited to service the public's needs in real estate registration throughout the country. The agency has strong capabilities in surveying and mapping. These capabilities need to be upgraded to allow for automation and computerization.

It is estimated that there are currently 4.5 - 5.0 million real estate units in Kazakhstan (land parcels, apartments, dachas, and commercial offices). Each and every real estate unit should eventually be recorded within the real estate registration system. Each unit should be unambiguously defined with the definition allowing the retracement of the extent of the real estate on the ground. All interests or rights to each real estate unit must be defined under the land code and be recorded as textual information in the registration system. Each real estate unit must have a unique identification number. The existing numbering system used by Goskomzem in the allocation of land can be easily expanded to allow for registration of apartments and commercial offices.

The real estate registration system should be implemented using a systematic approach based on priorities of real estate activity and the needs of the government while at the same time allowing for sporadic registration of rights as they are requested by individuals and legal entities.

### 5.2. Fiscal Cadastre and Valuation of Real Estate

Valuation of real estate is a separate professional function that requires sophisticated understanding of real estate market tracking and real estate appraisal. While registration information and mapping are used for real estate valuation, records of the physical improvements to real estate are also needed to assess improved value. The expertise required for valuation and appraisal include the understanding of advanced statistics and

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<sup>12</sup> It is critical to set fees and tax rates at levels that will provide revenue to the government but not stifle market activity or force buyers and sellers to falsify information.

computer modeling to allow for mass appraisal based on current market trends. The Bureau of Technical Inventory (BTI) has historically undertaken the recording of physical descriptions of buildings and real estate improvements. This information is passed to the State Scientific and Production Center for Land Resources and Land Planning (Gosnpczem) as an input to the valuation of land for purposes of recording initial private land registration. Gosnpczem is the agency most suited to expand its existing operations to include real estate valuation.

A real estate valuation system provides the base for real estate taxation, therefore Gosnpczem will develop close ties to the government's taxation agency, the Ministry of Finance. While Gosnpczem can readily adopt its procedures to include valuation, real estate taxation policy will need to be developed in conjunction with the Ministry of Finance and City Governments.

### 5.3 Multipurpose Cadastre

The Ministry of Construction, Housing and Land Development is best suited to initiate the policy and strategy required to encourage the sharing of planning information between government agencies.

## 6. Technical Issues for Implementation

### 6.1 Legal Issues

A real estate registration system records rights in real estate as prescribed by the legal system. In Kazakhstan, rights pertaining to the use and interests in land are defined in the land code and the use and interests in apartments are defined in the housing code. A proposed revised housing code is being submitted to Parliament this coming fall. The land code needs revision to define in absolute terms the types and extent of real estate rights. Legal issues and regulations to define real estate rights are discussed in more detail in section 7.

### 6.2 Technical Aspects of Real Estate Registration

6.2.1 Real Estate Indexing. Each land parcel and each distinct unit of a building which may be owned separately (such as an apartment or office) should be referenced by a unique identification number. The numbering system already used by Goskomzem for land parcel identification should be maintained and expanded to include apartments and commercial offices. The existing numbering system has an alphabetical code for Oblast or City with a numeric extension for each individual parcel. Number series can be coded to allow for breakdown of oblast into rayons, and cities into districts. The coding system can be easily modified to identify apartments and commercial offices.

6.2.2 Description of Physical Real Estate. Each real estate unit must have an unambiguous description. The description should refer to an official map, aerial photograph, or plan providing a unique definition which will allow the retracement of the extent of the real estate on the ground. Maps, aerial photographic descriptions, and plans should have a unique numbering system and should be referenced to the national coordinate system. Maps, aerial photographs, and plan numbers should appear in the description of the real estate unit being described along with the numbering of the real estate unit referenced.

Accuracy requirements for maps, aerial photographs, and plans will vary with the location of the real estate. Regulations establishing the required scale of maps, aerial photographs and plans should be developed as part of the design of the real estate registration system. Existing maps, aerial photographs, and plans will suffice for the initial registration of real estate. These maps and plans will aid the unambiguous definition of land parcels. As land parcel boundaries are generally known and are undisputed, the adoption of a general boundary description of land parcels will be adequate for the initial registration of real estate.

In the event of boundary disputes, adjudication on the ground should be undertaken by Goskomzem and the parties involved. The adjudication process must be established, documented, and given legal standing. Disputes that cannot be addressed in the field under this adjudication process should be settled in the courts.

The description should include a field to describe the current postal address of the real estate unit.

6.2.3 Description of Real Estate Rights. The rights to the real estate should also be described in the registration system. The type of right, name(s) of the holder, and of those rights and any secondary rights must be indicated. The registration document and automated data base should include sections describing the following:

Type of Right

Hereditary life tenure (pazjizninnaya nasleduyemuye vladenya)

Permanent use (postayanaya pol'zovaniye)

Temporary use (vremenaya pol'zovaniye)

Lease (arenda)

Proprietor's name(s) and nature of tenure

Common joint ownership (obshchaya sovmestnaya sobstvenost)

Common shared ownership (obshchaya dolevaya sobstvenost)

Secondary interests

Mortgages

Liens

Encumbrances (easements, right-of-ways, etc.)

Covenants (such as specific use restrictions)

The textual information on tenure will be organized on a computer data base. The data base will be printed on an official title document for the real estate unit. The title document will remain in the hands of the proprietor or the mortgagee. Changes to the title information can only be initiated by Goskomzem staff and only with the original title document returned for modification in the event of a sale or other change in tenure.

### 6.3 Real Estate Valuation System

In Kazakhstan, there are currently two laws imposing taxes on real estate:

- 1) the Act of the Republic of Kazakhstan on the Land Tax dated 17 December 1991;
- 2) the Act of the Republic of Kazakhstan on the Physical Person Property Tax, dated 24

December 1991.

The Physical-Person property tax is equal to 0.1% of the "inventory value" of buildings, premises, and improvements. The revenue generated by this tax is low for several reasons. First, the "inventory value" of most property is much lower than the real market value. Second, very few people actually pay the property tax. Third, the property tax does not apply to Juridical Persons<sup>13</sup> which own the most valuable property in Kazakhstan.

The Land Tax is levied on a set rate per square meter which is revised from time to time by the government. The land tax does not generate as much revenue as it could because of its fixed rate per unit area. Again, the rate per unit area bears little relation to the actual market value of the land.

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<sup>13</sup> Physical Persons are human beings, whereas Juridical Persons are legal entities such as companies, corporations, institutes, etc.

Most countries with market economies have found that real estate taxes based on the market value of the real estate are the fairest and among the easiest to administer. The Government of Kazakhstan (in its program dated 15 July 1994) has announced its decision to design a system for equitable taxation of real estate based on value. For Kazakhstan to develop a valuation system and fiscal cadastre to support market value-based property taxes, the following must be considered:

- a) adopt the same real estate indexing system to be used for the real estate registration system;
- b) adopt a standard data format that is compatible with the real estate registration system;
- c) use standard base mapping provided by Goskomzem;
- d) create a computer data base of immovable property attached to each land plot by indexing number;
- e) implement a real estate market value tracking system which tracks sale price and actual value;
- f) implement a mass appraisal system based on property inventory and observed market values;
- g) establish automated information exchange with the real estate registration system at Goskomzem, the Ministry of Finance, City and Oblast administrations (including architects and planners) and other agencies processing real estate information.

## 7. Laws and Regulations

The successful creation and operation of a real estate registration system, and fiscal cadastre and taxation system are only possible if there is a clear and comprehensive legislative foundation in place. Kazakhstan has adopted many recent laws and decrees which provide the beginnings of such a foundation and indicate an intent to take the next steps necessary. In some cases, the new laws and decrees are inconsistent with, but do not expressly supersede other laws and decrees. Following is a list of laws and regulations which will need to be adopted or amended to support a real estate market, including some of their principal provisions:

### 7.1 Revised Land Code.

The existing Land Code was adopted in November, 1990 and is now out of date in many respects. For example, Article 2, paragraph 5 of the Code prohibits the purchase or sale, free transfer, pledge or exchange of land plots. Technically this provision is correct because the land remains in the exclusive ownership of the Republic. However, recent decrees of the President and the Cabinet of Ministers have authorized the purchase and sale, gift, bequeath, and mortgage of land use and lease rights. The Land Code should be updated to recognize these changes. More importantly, the Land Code needs to be reoriented from a law which establishes administrative procedures relating to land, to a law which defines basic rights and obligations of holders of land rights and land leases.

### 7.2 Adoption of Law on Registration of Real Estate.

A new law needs to be adopted which defines in detail the procedures for registration of all interests in real estate, including use rights, hereditary life tenure, leases, mortgages, liens, and easements. This law can be an independent law or can be adopted as part of the new Land Code, but a registration system cannot function without it. Regardless of whether it takes the form of an independent law or a part of the land Code, it must cover the following issues:

- (a) registration procedures for all types of real estate, including rights to apartments or other spaces in commonly owned buildings;
- (b) the interests which may be registered and the interests which must be registered;
- (c) the form in which the real estate register will be kept;

(d) the legal effects of registration or failure to register; and

(e) the procedures for adjudication of real estate rights.

### 7.3 Law on Taxation of Real Estate.

The existing laws regulating taxation of land and other real estate need to be replaced with tax laws which establish taxes based on the value of the real estate. The laws also must be supported by detailed regulations establishing the procedures and methods for valuation of real estate for tax purposes. Procedures must also be established to allow taxpayers to contest real estate values if they believe them to be too high.

## 8. Rationalization of Land Information

Information has value only when it is used in the decision making process. Information is required for decision making at the policy, management, and operational levels in both government and private enterprise. The fundamental value of information is derived from its ability to lower risk. It follows that information increases in value the more the information is used. Making information available to more users, therefore, increases the value of the information and allows all levels of management to make better decisions by lowering the risk of making the wrong decision.

In a market economy, information allows decision makers to make efficient use of scarce resources. Information collected by the government can become a useful resource for stimulating investment and lowering the cost of information. This applies only if information is made accessible to all government agencies and the public<sup>14</sup>.

Under the USSR planned economy, government information was not made available to the public nor was it shared between government agencies. As Kazakhstan moves towards a market economy and the government seeks ways of lowering costs, information held by government agencies should be made available to other agencies and the public. Automation of information will allow government agencies to share information between agencies as well as make information more accessible to the public.

Complex land information is collected by many government agencies for many different purposes. Traditionally, land information is kept on maps, plans, aerial photographs, and files of textual data. Land information in the form of maps and paper files have been difficult and costly to share. With the implementation of automated computer technology to store land information, the sharing of this information will be simplified and the information will become readily accessible to all.

With automation, government agencies can get fast access to information from all agencies collecting real estate related information. With this automation comes the need to know which agency is collecting what information at which location and at what scale. Creating a consistent policy on real estate information sharing will allow the government to reduce the duplication of land information collection and will allow agencies access to information that in the past would require independent information collection.

For each government agency to gain access to all land information, a coordinated effort is needed to set policy and standards for automated land information, and a data dictionary of all land information collected within the government. In order to achieve this goal, a lead agency, the Ministry of Construction, Housing, and Land Development (Ministroi) should form committees made up from all agencies responsible for real estate information. These committees should study and make recommendations on government policy, recommendations for land information data standards, and the format of the real estate information data

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<sup>14</sup> This does not apply to classified information related to national security, public safety, and financial speculation.

dictionary.

Experience has shown that the formulation of committees, the research and studies required, draft reporting, acceptance of critiques and final editing will take up to two years. The formulation of the committees should be requested by the highest level of government. While the independence of each government agency should be maintained, the committees should derive recommendations on the standards of data collection and system of indexing all real estate information collected by all levels of government. Each agency should be encouraged but not forced to adopt the recommendations of the committees.

## 9. Development of Tertiary Education

With the implementation of two new professional functions within the government (i.e. real estate registration and valuation) comes the need for retraining of staff and the development of a tertiary educational program that will provide future professionals to staff these government functions. One of the major factors contributing to the success of the Thailand real estate registration project was the early technical assistance provided to Chulalongkorn University and the Bangkok Technical Institute to develop programs and courses in real estate registration, surveying, mapping, and valuation. By the time the technical assistance phase of the project was completed (five years) the university and technical college were graduating young professionals that were educated in the expertise required to continue the land registration program. A similar approach to land administration tertiary education in Kazakhstan should be implemented along with the development of the real estate registration system and the valuation system.

At present, the majority of senior managers of real estate-related information in Kazakhstan received their education, in the main, from institutions in Russia or Belarus. Currently in Kazakhstan there is one tertiary educational institution, the Academy of Agriculture in Akmola, which has a Department of Rural Land Planning that teaches some courses in rural land administration, geodesy, surveying, and mapping. Real estate valuation based on market activity is not taught in Kazakhstan. Urban land planning and geodesy is also taught at the Kazak State Academy of Architecture and Construction. Both institutions have high academic standards and appear to be a suitable tertiary institutions to embrace the professional education of land administrators, land surveyors, and real estate appraisers.

As part of the technical assistance for a proposed real estate registration and valuation system, it is strongly recommended that the Academy of Agriculture and/or the Kazak State Academy of Architecture and Construction receive support for technology transfer to set up programs in land administration, surveying and mapping, and real estate appraisal.

## 10. Conclusions

The Government of the Republic of Kazakhstan has expressed a desire to transform its economy to a fully operational market economy. As part of this restructuring, the government has seen the need for, and has made significant strides towards, the privatization of rights in real estate and the establishment of a real estate market. In order to encourage investment in real estate, rights for exclusive use of real estate need to be established under law and fully documented within a legal cadastre or real estate registration system that is freely accessible to the public. The real estate registration system should record all primary and secondary rights in each and every land plot, and be capable of registering changes to real estate rights brought about by sale/purchase or secondary instruments such as mortgages or liens. The real estate registration system must be sensitive to the needs of the public and must strive to make information registration complete within 24 hours of lodgment.

A complete and up-to-date real estate registration system will lay the foundation for the implementation of a fiscal cadastre or real estate valuation system that will allow the introduction of fair and equitable land tax based on true market value of land plots.

The automation of both legal and fiscal cadastres will enable the government to effectively share real estate information with all agencies responsible for land planning, land use, environmental, agriculture, and land administration.

TECHNICAL ISSUES PAPER

REPUBLIC OF KAZAKHSTAN  
NATIONAL REAL ESTATE REGISTRATION AND  
LAND VALUATION PROGRAM

Gary A. Jeffress and Richard Gaynor

19 August 1994

1. Introduction

With Kazakhstan's independence and its move to an open market economy, there is an ongoing shift towards private use rights in land, privatization of apartments, and privatization of state owned enterprises which occupy land. These land use rights and ownership rights may be bought and sold on the open real estate market. A real estate registration system is necessary to allow the people of Kazakhstan to keep official records of the rights to all real estate in Kazakhstan which are recognized by all real estate users, the courts, and the government.

With the development of a real estate market and real estate registration system, information will become available to allow the introduction of a real estate tax based on the market value. This paper describes the technical issues that need to be addressed for the implementation of a real estate registration and valuation program. Conceptual and cost issues are addressed in separate companion papers.

2. Organizational Structure

2.1. Real Estate Registration/Legal Cadastre

The institutional functions of a real estate registration system include legal definition of rights in real estate, real estate adjudication, surveying and mapping for unambiguous definition of real estate parcels, efficient storage and retrieval of mapping information along with computer data bases of textual information describing all interests in each land parcel or building. All these functions should lie within a single professional agency with a network of regional offices covering the major population centers of Kazakhstan.

The authors of this paper have considered several options for location of the legal and fiscal cadastres. For the legal cadastre, the options include BTI, the State Committee on Land Relations and Land Planning (Goskomzem) and establishment of a new agency. The Ministry of Finance, BTI and Goskomzem were considered for the fiscal cadastre. The authors have concluded that the logical institutional location of a real estate registration system for Kazakhstan is Goskomzem. This agency is presently responsible for the allocation and initial recording of applications for private rights in land. Goskomzem presently has offices in all 19 Oblasts and 217 district offices including two cities (Almaty and Leninsk) throughout Kazakhstan. This network of offices is ideally suited to service the public's needs in real estate registration throughout the country. The agency and its affiliate the State Scientific and Production Center for Land Resources and Land Planning (Goskomzem) have strong capabilities in surveying and mapping. These capabilities need to be upgraded to allow for automation, computerization, and to increase capacity of information handling.

It is estimated that there are currently 4.5 - 5.0 million real estate units in Kazakhstan (land parcels, homes, apartments, dachas, and commercial offices). Each and every real estate unit should eventually be registered within the real estate registration system. Each unit should be unambiguously defined with the

definition allowing the retracement of the extent of the real estate on the ground. All interests or rights to each real estate unit must be defined under the land code and be recorded as textual information in the registration system. Each real estate unit must have a unique identification number. The existing numbering system used by Goskomzem in the allocation of land can be easily expanded to allow for registration of apartments and commercial offices.

The real estate registration system should be implemented using a systematic approach based on priorities of real estate activity and the needs of the government while at the same time allowing for registration of rights as they are requested by individuals and legal entities. Areas showing signs of strong real estate activity should receive priority in the implementation of systematic registration.

## 2.2. Fiscal Cadastre and Valuation of Real Estate

Valuation of real estate is a separate professional function that requires sophisticated understanding of real estate market tracking and real estate appraisal. While registration information and mapping are used for real estate valuation, records of the physical improvements to real estate are also needed to assess improved value. The expertise required for valuation and appraisal include the understanding of advanced statistics and computer modeling to allow for mass appraisal based on current market trends. The Bureau of Technical Inventory (BTI) has historically undertaken the recording of physical descriptions of buildings and real estate improvements. This information is passed to the State Scientific and Production Center for Land Resources and Land Planning (Gosnnczem) as an input to the valuation of land for purposes of initial registration of private land rights. Gosnnczem is the agency most suited to expand its existing operations to include real estate valuation.

A real estate valuation system provides the base for real estate taxation, therefore Gosnnczem will develop close ties to the government's taxation agency, the Ministry of Finance. While Gosnnczem can readily adopt its procedures to include valuation, real estate taxation policy will need to be developed in conjunction with the Ministry of Finance and City and Oblast Administrations.

The proposed new functions of real estate registration and valuation within Goskomzem will result in a large increase in the volume of real estate information storage and retrieval based on activity in the privatization of land use rights and increased activity in the real estate market. The flow of information is shown in Figure 1.

## 3. Real Estate Registration Technical Issues

### 3.1 Legal Issues

Legal aspects of real estate in Kazakhstan are defined within the land code and the housing code. These codes are also supplemented by decrees by the President, Vice President, Parliament, and the Cabinet of Ministers. Historically land and buildings have been treated separately in Kazakhstan with ownership of land being exclusively exercised by the state and rights to use buildings, apartments, or dachas being granted to individuals. With the right to private use of land and buildings, the land code and housing code need to reflect the changes being initiated to allow for these private use rights and the ability to buy and sell these rights on the open market.

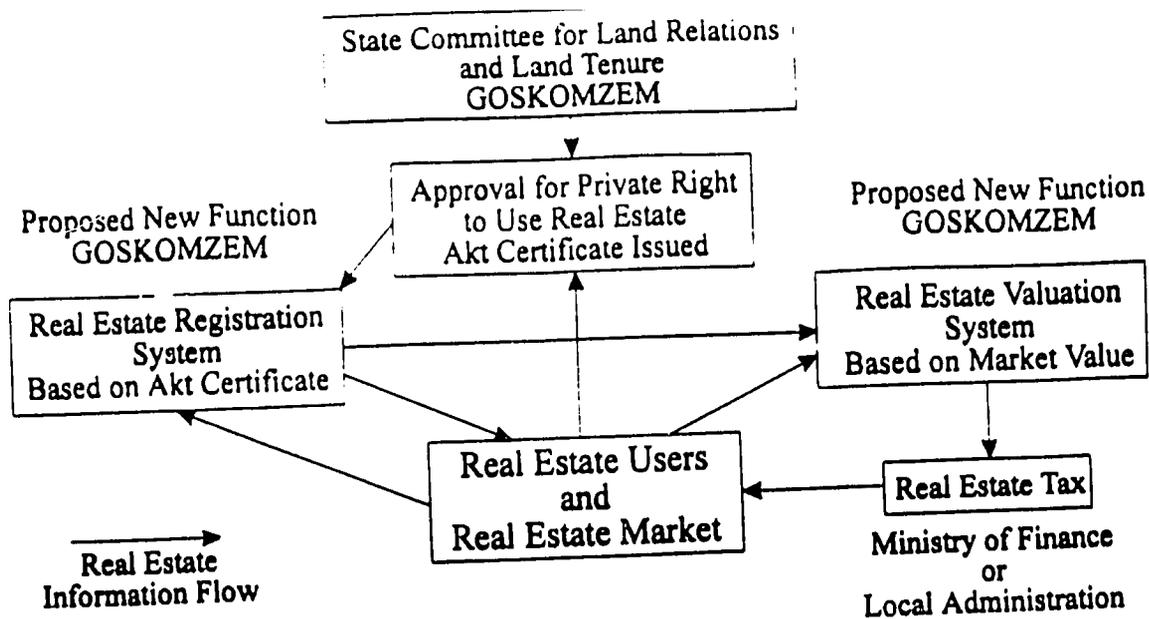


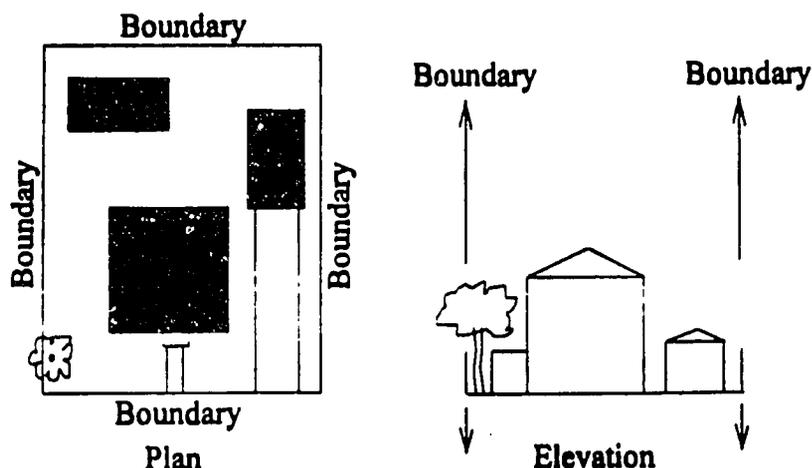
Figure 1. The Flow of Real Estate Information

3.1.1 Legal Definition of Land. A real estate registration system is based on legal foundations that establish a societies priorities and requirements for public and private rights to land. An initial requirement for the development of the legal foundations for land rights is to establish a legal definition of land itself. In the past, Kazakhstan and the other member countries of the Commonwealth of Independent States (CIS) have had no reason to differentiate rights to land, nor to legally define land. With the transformation to market economies and the establishment of a land market, the issue of a legal definition of land becomes critical.

The standard definition of land used for international boundaries and internal subdivision of land within most countries defines land as the space created by projecting planes, starting at the center of the earth, upwards through the intersection of land plot boundaries on a plane or ellipsoidal surface of the earth, and continuing upwards into the sky. Because this definition defines a volume of space, it follows that all objects fixed or attached to land, be they natural (e.g. trees) or constructed (e.g. buildings), are included as part of the land. See Figure 2.

Land laws allow the subdivision of land parcels into smaller parcels (vertical subdivision) as well as the consolidation of small parcels into larger land parcels. Condominium laws allow the subdivision of a land parcel's air space (horizontal subdivision) into multiple housing units or commercial offices. Rights to that part of "land" (air space) created by a condominium subdivision can be defined by building floor plans and monumented by the walls that make up the building and contain the living space or office space. The building itself and the land on which the building stands are owned in common by each individual apartment or office owner according to a predetermined share distribution scheme.

Figure 2. Boundaries Defining a Land Parcel



The international definition of land, therefore, takes into account all possible aspects of rights that can be created in real estate from rights in the land surface to rights in the space created in a multiple housing or office building complex. Such a definition should be established as the basis of land law for Kazakhstan.

3.1.2 Extent of Land Tenure. The various rights allowable in real estate should be described within the land code. Each type of right and any secondary rights must be defined and documented. Specifically, descriptions of the following need to be provided in the land code or law on ownership.

Type of Right

- Hereditary life tenure (pazjizninnaya nasleduyemuye vladenya)
- Permanent use (postayanaya pol'zovaniye)
- Temporary use (vremenaya pol'zovaniye)
- Lease (arenda)
- Real Estate Users name(s) and nature of tenure
- Common joint ownership (obshchaya sovmestnaya sobstvenost)
- Common shared ownership (obshchaya dolevaya sobstvenost)
- Secondary interests
- Mortgages
- Liens
- Encumbrances (easements, right-of-ways, etc.)
- Covenants (such as specific use restrictions)

3.1.3 Physical Description of Real Estate. As land parcels, apartments, and commercial offices are in existence in Kazakhstan and their boundaries and location are known to users and government officials, it is recommended that the general boundary system<sup>15</sup> along with an adequate physical description be used to describe real estate. Part of the documentation of rights in real estate includes the physical description of the real estate in question. Accurate physical descriptions which allow for unambiguous location of the real estate without conflicts with adjoining lands are required. The most efficient method to physically describe the location of real estate is to refer to a map, rectified aerial photograph or plan showing mathematical descriptions of land boundaries using bearings and distances and/or coordinates tied to the 1942 coordinate system introduced by the former Soviet union. The scales, format, accuracies, indexing, and technical components of maps, rectified aerial photographs, and plans should also be described or referenced to a set of regulations. The legal status of the maps, rectified aerial photographs, and plans and who has the authority to produce them must also be defined.

Provision should be made in the land code or supporting regulations to include as part of the registered records for each land parcel or condominium unit the postal address of the land parcel or condominium unit.

3.1.4 Real Estate Adjudication. Inevitably boundary disputes arise among adjoining owners. These disputes can arise at the time of first registration of real estate or after many years of peaceful neighborly cohabitation. The law must provide for adjudication of boundary disputes during the initial registration process. This function could be performed by Goskomzem staff. A similar adjudication process may be implemented after initial registration with costs being borne by the disputing parties. Provision should also be made for

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<sup>15</sup>The general boundary system was introduced in England when the Ordnance Survey completed topographic maps of the country in 1893. The maps were on a scale of 1:2500 in rural areas and 1:1250 for urban areas. The maps showed all physical evidence of boundaries in the form of fences, hedges, walls, ditches, roads, etc. that generally conformed to land parcel boundaries. These Ordnance Survey Maps became the basis of all registered descriptions of land. The maps are supplemented by sporadic ground surveys by Ordnance Survey to resolve boundaries not distinguishable on the maps.

disputes that cannot be resolved by adjudication to be pursued in the courts at the expense of the disputing parties.

### 3.2 Real Estate Registration Information System

3.2.1 Existing Registration System. The present system for the registration of real estate lies within the jurisdiction of Goskomzem and is brought about by their government mandate to issue "Akt" certificates which establishes the initial issue and registration of private land use rights. These rights pertain to land parcels only (there is no condominium-type law within the housing code at this point in time), whereas the Bureau of Technical Inventory (BTI) keeps records of buildings and their occupants.

Goskomzem has an automated data base of Akt certificates issued so far. The data base as of July 1994 contained some 400,000 registrations nation wide. These registrations are performed in 19 Oblast and two City (Almaty and Leninsk) offices. It is planned that the number of Akts will grow to 850,000 by the end of the 1994 calendar year. The data base resides on files generated on IBM 386 personal computer clones with 120 Mega Byte hard drives on locally developed software. There are 25 of these IBM 386 clone computers used by Goskomzem nationwide. This system will need substantial upgrading to accommodate the estimated 4.5 to 5 million land parcels and apartments in Kazakhstan and to handle the anticipated inquiries and updating required when the real estate market is fully operational. It is recommended that the upgrading be designed and implemented as soon as possible in anticipation of the expanding real estate market activity and not in reaction to this expanding activity. The system should stimulate market activity, not inhibit it.

Goskomzem has a plan for the expansion and networking of the data base now being generated on its personal computers. The plan is shown in Attachment 1. The objectives and details of this scheme need to be assessed and if required, modified to conform with the overall objectives and needs of a real estate registration system.

3.2.2 Real Estate Registration System Project Objectives. Establishment of a registration system would support the Government's move towards a market economy and the privatization of use rights to land, and would the real estate market. The principal objective of the project would be to grant secure, documented tenure to land users (including apartments and offices) and to create a system for recording secondary interests in real estate such as mortgages. This objective will facilitate access to institutional credit, improving investments in the land, increasing private land development, increasing agricultural productivity, and increasing real estate values. Secondly the real estate registration system will greatly assist other government agencies responsible for land planning and will form the foundation to strengthen the land valuation and taxing system and increase government revenues, particularly in urban areas. The major components of the project will be:

- 1) accelerate the issuance of private land use rights and the development of a geographic information system based on land parcels;
- 2) improve surveying and mapping technologies;
- 3) strengthen Goskomzem's real estate registration department;
- 4) strengthening tertiary education in surveying and mapping, land administration, and land registration;
- 5) provide project-related technical assistance, training, and studies.

It is proposed that the project would initially cover real estate registration in the City of Almaty with rapid transfer of implemented systems to all 19 Oblast offices of Goskomzem. Other priority areas identified by the Government may be included in the initial phase of project implementation.

**3.2.2 Real Estate Identification Requirements.** Each and every real estate unit must have a unique identification number. This includes all land parcels and apartments or commercial offices. Goskomzem has already instituted a unique land parcel identification numbering system based on Oblasts. The identification number consists of two alphabetical characters which define the Oblast followed by a seven digit number. This allows for ten million real estate units in each of the 19 Oblasts and two City offices of Goskomzem. The numeric number can be expanded to allow for extra digits if required in the future. The numeric part of the identifier can be coded by the leading digit (or first two digits) to allow for the subdivision of an Oblast or City into districts. An extra code will be needed to distinguish land title from title to apartments or commercial offices. This extra code need only be added to apartment or office titles.

Each and every real estate parcel must be unambiguously identified in terms of its size, shape, and location with this information recorded on a map, aerial photograph, plan, or building plan in the case of apartments or commercial offices. These mapping or graphic records must be systematically indexed and cross referenced to title records. The accuracy of maps, aerial photographs, plans, and condominium plans must be regulated to reflect the need to define parcel boundaries to an accuracy that will minimize disputes among adjoining land users while at the same time be economically feasible. Much of the existing mapping available at the City Architects office and Goskomzem will be suitable for registration if copies can be made accessible to the public. For example, Goskomzem or its local branches have access to maps produced using photogrammetric techniques at a variety of scales ranging from 1:500 in cities to 1:100,000 in rural agricultural areas. Many of these maps already show parcel boundaries which have been surveyed based on existing monuments.

City and Oblast architect's offices possess detailed maps (1:5,000) showing topography, seismic areas, roads and buildings. Maps at 1:2,000 show details of buildings in relation to survey control and street boundaries. In Almaty (and maybe other cities), city blocks are indexed along a grid index to a series of 1:500 scale maps showing land parcel boundaries and references to individual files on buildings and parcels. These maps are more than adequate for purposes of land parcel and building location for a real estate registration system.

**3.2.3 Requirements for Identification of Rights in Real Estate.** The primary function of real estate registration is the identification and official recording of the bundle of rights associated with each and every real estate unit. For every title issued there should appear:

- 1) the seal of the Republic of Kazakhstan
- 2) the unique land plot, apartment or office identification number
- 3) the date and time the title was issued
- 4) edition number for the current title<sup>16</sup>
- 5) description of type of tenure
- 6) description of land, apartment or office:  
e.g. parcel xxxxx in (map, aerial photo, plan, condominium plan) xxxxx in the (District or Rayon) of xxxxx in the (City, Settlement, Village) of xxxxx in the Oblast of xxxxx
- 7) postal address of the land, apartment or office
- 8) Real Estate Users name(s) or Owners name(s) for apartments of commercial offices
- 9) Nature of tenure:  
**Individual**  
Common joint ownership (obshchaya sovместnaya sobstvenost);  
Common shared ownership (obshchaya dolevaya sobstvenost).

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<sup>16</sup> First edition occurs upon title creation, each subsequent change in title will create an additional edition of the title.

- 10) Encumbrances:
  - 10.1 All reservations and conditions imposed by the Republic of Kazakhstan;
  - 10.2 Easements, right-of-ways, etc. that burden the land plot;
  - 10.3 Easements, right-of-ways, etc. that benefit the land plot;
  - 10.4 Mortgages
  - 10.5 Liens
  - 10.6 Covenants
- 11) Notations:
  - Miscellaneous notes, e.g. notice of any unregistered dealings that may be pending.

**NOTE:**

- Items 1) to 6) are unchangeable and unique to each title.
- Items 7) to 10) may change with various dealings related to the title.
- Current date and time should appear on copies of title issued.
- A typical title document may take the form shown in Attachment 2.

Separate from the official title document, the real estate register should keep historical records for each real estate unit. Every change of information registered should be logged in chronological order showing the type of transaction registered and a reference number to the document that initiated the change. An example of a search of the historical record for the above title is shown in Attachment 3.

#### 4. Real Estate Valuation Technical Issues

##### 4.1 Legal Issues

Taxes on real estate in Kazakhstan are presently imposed under two laws:

- 1) the Act of the Republic of Kazakhstan on the Land Tax dated 17 December 1991;
- 2) the Act of the Republic of Kazakhstan on the Physical Person Property Tax, dated 24 December 1991.

The legal bases for land tax in Kazakhstan needs a major revision to implement the concept of ad valorem (based on value) taxation. A formal agency needs to take on the responsibilities of real estate evaluation using mass appraisal techniques based on current real estate market trends. This function could be maintained by Goskomzem by expanding their existing land evaluation functions which presently assess land values using a complex formula that assesses the physical properties of land. To formalize this process, a comprehensive Land Tax Code needs to be adopted. Typically these ad valorem tax systems are self financing.

##### 4.2 Real Estate Valuation Information System

4.2.1 Existing Valuation System. The Physical-Person property tax is equal to 0.1% of the "inventory value" of buildings, premises, and improvements. The revenue generated by this tax is low for several reasons. First, the "inventory value" of most property is much lower than the real market value. Second, very few people actually pay the property tax. Third, the property tax does not apply to juridical persons<sup>17</sup> which own the most valuable property in Kazakhstan.

The Land Tax is levied on a set rate per square meter which is revised from time to time by the government. The land tax does not generate as much revenue as it could because of its fixed rate per unit area. Again, the rate per unit area bears little relation to the actual market value of the land.

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<sup>17</sup> Physical Persons are human beings, whereas Juridical Persons are legal entities such as companies, corporations, institutes, etc.

To our knowledge, an analysis of the existing land tax system has not been undertaken. Revenues and implementation costs have not been assessed. It is known that land values and inflation have far outpaced the published rates for land taxes.

4.2.2 Real Estate Valuation System Project Objectives. The project would support the Government's need for revenue based on the increased activity in the real estate market. The major components of the project will be:

- 1) improve the tax collection base for real estate-related purposes through updated market values and mass appraisal techniques based on the proposed real estate registration indexing system;
- 2) provide market-based real estate valuations for purposes of expropriation of land required for government needs;
- 3) strengthening of Goskomzem's real estate valuation department;
- 4) strengthen tertiary education in land valuation;
- 5) provide project-related technical assistance, training, and studies.

The project would initially cover real estate valuation in the City of Almaty with rapid transfer of implemented systems to all 19 Oblast offices of Goskomzem. Other areas identified by the Government may be included in the initial phase of project implementation.

4.2.3 Real Estate Valuation Issues<sup>18</sup>. Market comparison approaches that use mass valuation techniques will probably be preferred at least in the short run. This is because resource markets are not efficient as yet and land markets do not exist, so that cost approaches are not feasible, but market prices for various types of improved land are becoming available. It is estimated that current valuation techniques in Kazakhstan result in values that are 100 times less on a per square meter basis than actual market prices.

As the sources of market data are developed, mass approaches can efficiently generalize this limited market information across a whole population of properties. At the most fundamental level of analysis, three-dimensional graphics and contour mapping techniques can provide a visual representation of the markets operating across a geographic area. As the data get richer, models of value using econometric model techniques can be used to produce point estimates of value for properties where only the characteristics are known.

Mass appraisal techniques are also useful in the determination of land (or land use right) values even where there are no land sales. In the United States econometric techniques have been developed to model prices that include the improvement and the land such that the contributory value of each can be allocated and in many states separately taxed. These techniques would be well suited to Kazakhstan where there is not yet a developed market in land use rights or land leases, but where there is a market in buildings and apartments. The prices still contain the capitalized value of the land. The situation is no different than in many western cities where there is little or no vacant land and consequently most parcel prices must be decomposed into land and building components using econometric techniques. Such techniques are being used in Moscow to create a land price index that can be used to adjust the base rate for the Russian land tax, for location differential from the center of the city. This technique can be used in Kazakhstan as well.

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<sup>18</sup> From Eckert, J. K. and N. Kalinina, "Recommendations for Creating Property Titling and Real Estate Information Systems to Support Property Tax Systems and the Privatization Process in Kazakhstan", ICMA Report, May, 1993

## 5. Project Implementation

### 5.1 Project Implementation Management

Within the Government of Kazakhstan there are some highly trained individuals, but there is an overall lack of experience in matters of providing government information to the public, expertise on real estate registration, and expertise in the valuation of real estate. The proposed project requires management with all these skills and who can effectively use the principles of market economics in project preparation and decision making. It is proposed to establish a Project Management Unit (PMU) to oversee the project. This unit should be staffed with both foreign experts and Kazakhstanis.

The PMU will be a government organization located within Goskomzem. It will function for the entire length of the project with the initial four years having technical assistance by foreign experts in project management, accounting, and equipment procurement to guide the initial decision making for project start-up.

### 5.2 Real Estate Registration System

The design and initial implementation of the real estate registration system would first be implemented in the City of Almaty and Almaty Oblast by a project group and new Real Estate Registration Division (RERD) of Goskomzem with the cooperation of the Almaty City Land Committee. RERD will recruit personnel from Goskomzem, the Research and Development Division of Goskomzem. RERD will be responsible for the implementation of digital data bases of existing privatized land already having Akt certificates (400,000 parcels) as well as implementing the recording of new Akt certificates generated by Goskomzem. The design will include the capabilities to register all aspects of interests in real estate listed in section 3.2.3 above. RERD will test system design and carry out technical training with the operational staff in conjunction with foreign experts to be provided under the technical assistance.

The surveying and mapping component of the registration system will be coordinated by RERD with the Administration of Geodesy and Cartography (Kazgeodesy, rural surveying and mapping) and the Ministry of Housing, Construction, and Land Planning (Ministroi), urban surveying and mapping). Existing maps will be used for initial real estate registration with conversion and implementation of digital mapping technology being implemented under the project. The head of RERD will report directly to the head of the PMU and be responsible for overall implementation of the real estate registration system.

As part of the project, digital mapping technology transfer, to both Kazgeodesy and Ministroi will develop expertise in digital surveying using Global Positioning System (GPS) and digital terrestrial surveying equipment. This technology will provide upgrading of the national coordinate system from the 1942 Krasovsky Ellipsoid to the 1984 World Geodetic System which is used by GPS receivers. This mapping base will allow all other mapping projects including geology, mineral exploration, seismic research, pipeline construction, etc. to connect to the same coordinate system.

### 5.3 Real Estate Valuation

The design and implementation of the real estate valuation system would follow the implementation of the registration system and be implemented by a separate project group and new division of Goskomzem. The Division of Valuation (DV) will recruit personnel with a background in real estate appraisal or statistics to set up a system for tracking market values and a mass appraisal system. DV will work with technical advisors with expertise in appraisal for real estate taxation. DV will interact closely with the Ministry of Finance and local administrations to establish suitable data transfer formats to share real estate valuation and ownership information for tax assessment and billing.

The Division of Valuation will first need to assess the current status and procedures for the existing land tax system. The development of ad valorem land tax system based on real estate market values will then be

modeled and implemented. The use of real estate valuation information will be needed by all aspects of government whenever there is a need to expropriate real estate under eminent domain. Development of valuation information sharing with other government agencies will be implemented under the project.

#### 5.4 Tertiary Education Strengthening

The project will require extensive education and training of professionals in aspects of the legal cadastre and fiscal cadastre. The project will provide technical assistance to tertiary institutions for the implementation of academic programs to educate professionals to provide the staff to maintain the long term viability of the RERD and DV. These academic programs will also provide the professionals for newly emerging private demands for land administration, land survey, and valuation.

Technical assistance from academics with expertise in the design and introduction of courses in surveying, mapping, computing, photogrammetry, digital mapping, geographic information systems, land administration, land appraisal and valuation, satellite positioning, and geodetic adjustment. These courses will be established at the Academy of Agriculture in Akmola and the Kazak State Academy of Architecture and Construction in Almaty.

#### 6. Project Technical Assistance

To assist the Government of the Republic of Kazakhstan to initiate and complete the long term project for real estate registration and valuation, technical assistance needs to be implemented in the following aspects of the project.

1. **Project Administration.** Assistance is required to manage and coordinate technical assistance activities, assist Goskomzem in project management, including planning, budgeting, coordination, training, and project evaluation and monitoring.
2. **Management and Administration.** Assistance is required to restructure Goskomzem to absorb the two new professional functions of real estate registration and valuation, to assist Goskomzem in developing new civil service classifications and career paths that will be competitive with newly developing professional services in the private sector.
3. **Computing assistance** in the introduction of UNIX based RISC workstations which will act as servers to a network of personnel computers used to capture and retrieve real estate information from a powerful relational data base.
4. **Legal assistance** to formulate the changes to the land code to allow for the introduction of the real estate registration system, changes to the housing code for the introduction of condominium laws, and development of a land tax code for the introduction of ad valorem based real estate tax. Also, to assist in the formulation of adjudication processes to enable the settlement of boundary disputes in the field and in the courts.
5. **Legal cadastre expertise** to provide assistance in the establishment of the systems required to register real estate and to insure its proper function to handle the many requests for information demanded by the real estate market as well as banks, real estate brokers, real estate users, and real estate developers.
6. **Fiscal cadastre expertise** to provide assistance in the establishment of real estate market tracking, econometric modeling, and mass appraisal modeling based on statistical theory.
7. **Tertiary education expertise** to assist in development of academic programs in land administration, geographic information systems, cadastral surveying, mapping, photogrammetry,

real estate valuation and to assist Goskomzem in the selection of candidates and programs for specialized study.

8. Geodetic, Surveying, Mapping, and Photogrammetric expertise to assist in the introduction of digital techniques of acquiring the mapping of land parcels for real estate registration.
9. Social and economic expertise in the evaluation of the impact of the project on Kazakhstani society.
10. Short term (four weeks) and long term (two-four years) training programs are necessary for Kazakhstani nationals working on the project and academics teaching undergraduates pursuing careers in land administration, surveying, and valuation.
11. In country training for staff directly associated with the project.
12. Group tours of working real estate registration and valuation systems in western countries by Kazakhstani officials working on the project.

## 7. Implementation Schedule

The project to establish the real estate registration and valuation systems for the Republic of Kazakhstan will take ten years (approximately 500,000 real estate units per year). The proposed project will support the first phase (four years) which includes technical assistance to develop the legal framework, technical systems, and tertiary education programs. This assistance will put in place the systems and knowledge for the completion of registration of all lands in Kazakhstan by the end of phase two (six years) and to ensure the continued operations of the registration system and valuation system into the future.

The initial phase of the project will require substantial investment in human resources, equipment, and technical assistance. The first phase will consist of establishing the initial technical assistance and setting up the project management unit, initiate foreign training, initiate legal aspects of land code and housing code, initiating technical assistance in real estate registration, valuation, and academic programs, initiate digital mapping, and in-country training. By the end of the first phase it is expected that all 19 Oblasts will have real estate registration systems up and running and that a real estate valuation system will be in place in all areas of the country where the real estate market is active.

УТВЕРЖДАЮ  
 Председатель  
 Государственного комитета  
 Республики Казахстан  
 по земельным отношениям  
 и землеустройству  
 \_\_\_\_\_ Б.Оспанов

Attachment 1

**ГОСКОМЗЕМ**  
**"ЖЕР"**

**BEST AVAILABLE DOCUMENT**

1993-  
1994г.



Сервер - 1 шт. Создание и хранение национальной базы данных по земле Республики Казахстан, информационное обслуживание аппарата Госкомземаг.



Рабочая станция - 12 шт. Автоматизированные рабочие места Председателя, заместителей, руководителей отделов.



Рабочая станция -4 шт. Администрирование автоматизированной базы данных.

**АЛМАТИНСКИЙ  
 ОБЛКОМЗЕМ**  
**"АЛМАТЫ ЖЕР-2"**

**АКТЮБИНСКИЙ  
 ОБЛКОМЗЕМ**  
**"АКТОБЕ ЖЕР"**

1993-  
1994г.



Сервер - 1 шт. Создание и хранение областной базы данных по земле.



Сервер - 1 шт. Создание и хранение областной базы данных по земле.



Рабочая станция - 3 шт. Автоматизированные рабочие места Председателя, заместителей.



Рабочая станция - 3 шт. Автоматизированные рабочие места Председателя, заместителей.



Рабочая станция -9 шт. Выпуск госактов.



Рабочая станция -9 шт. Выпуск госактов.

1994-  
1995г.

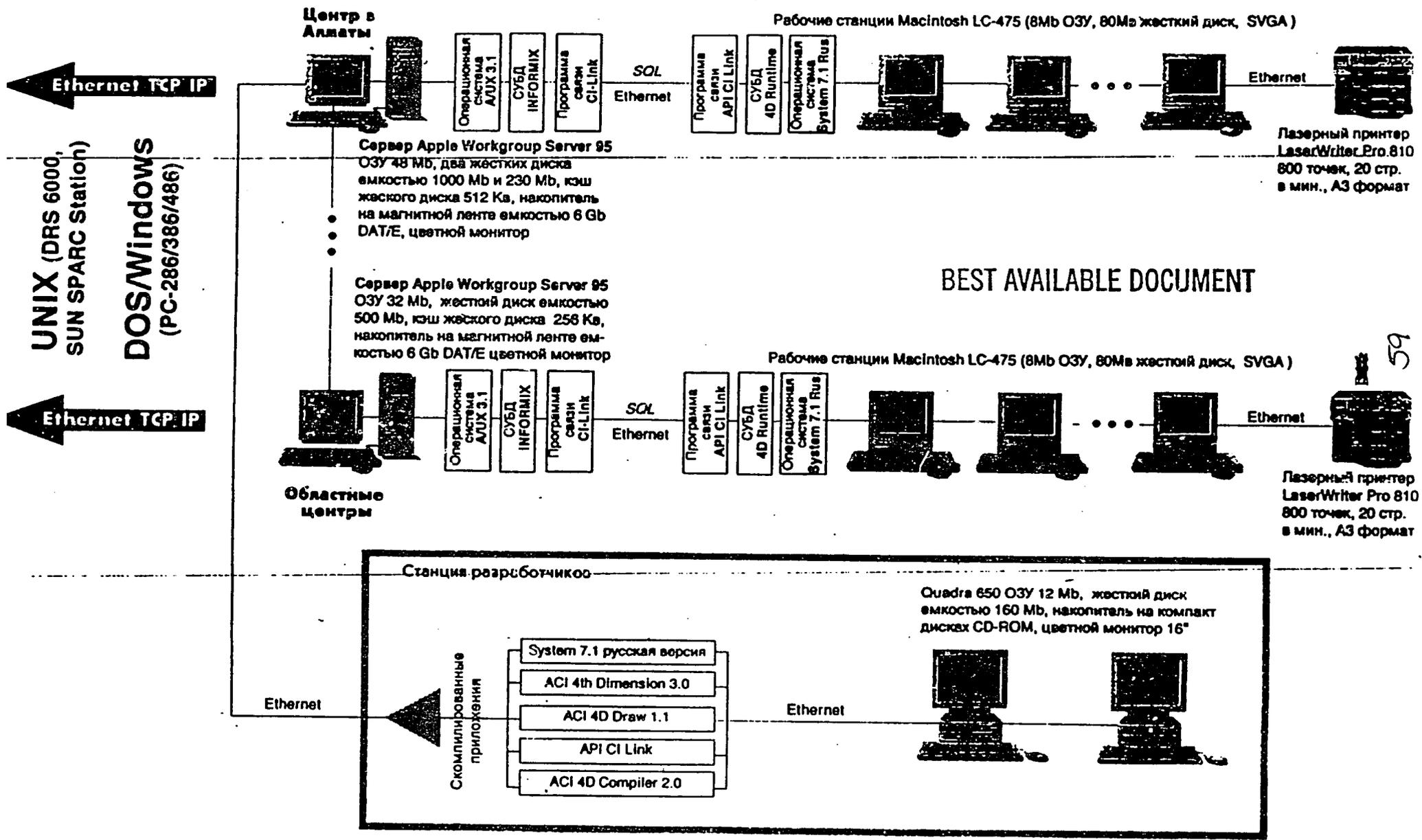


Рабочии станции-  
райкомземов 15



Рабочии станции-  
райкомземов

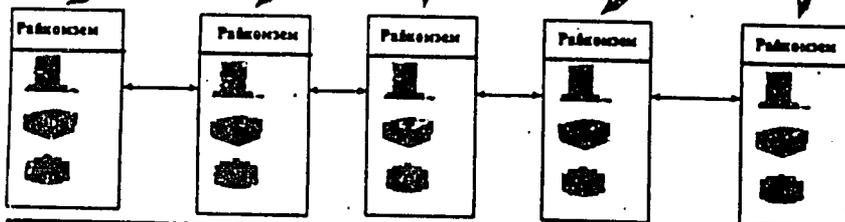
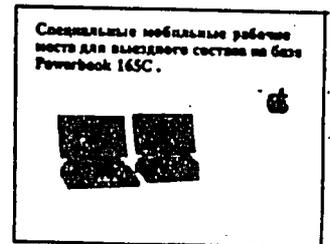
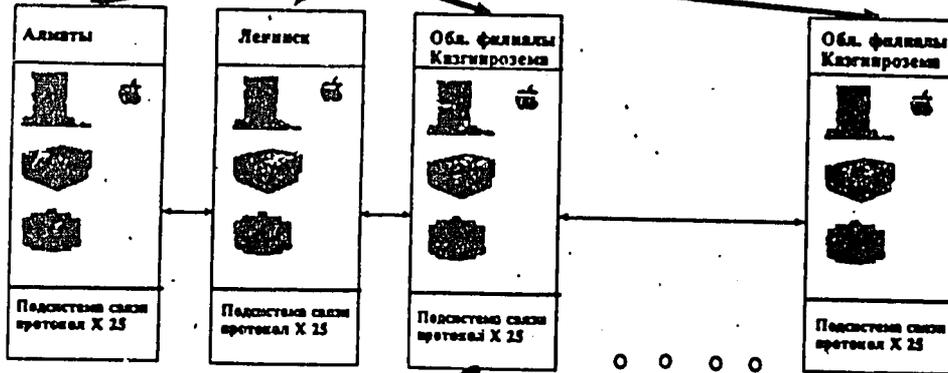
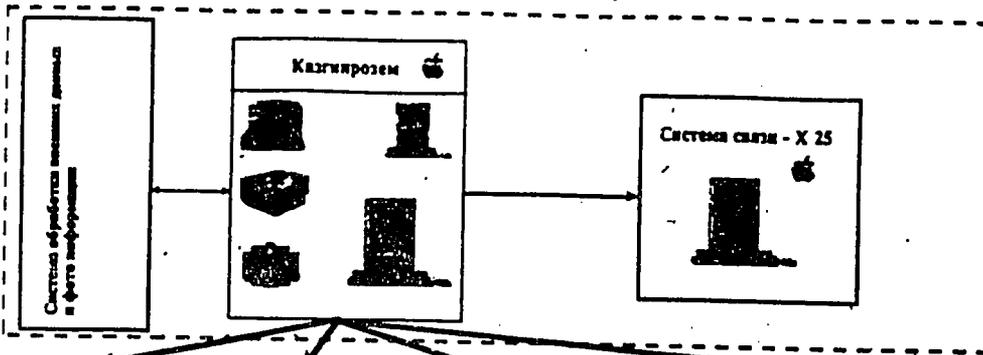
# Аппаратно-программный комплекс информационно-вычислительной системы управления земельными ресурсами (I этап)



BEST AVAILABLE DOCUMENT

59

# Аппаратно-программный комплекс управления земельными ресурсами Республики Казахстан



Система связи с центром, областью и районом - безымянный протокол X 25, MNP 5-7, Apple модем

Основная техника представлена в приложениях и системному графу и обеспечивается полным спектром продукции Apple Computer. Сетевое взаимодействие имеет возможность работать с IBM совместимой машиной и любой другой техникой. Периферийные устройства позволяют обрабатывать цифровые данные, сканировать документы в стандартах IPL, CCT, Map Making.

- Техническое сопровождение предлагаемой техники и программного обеспечения осуществляется фирмой Apple Computer через дилерскую контору в г. Алматы.
- Мат. обеспечение поставляется в среде Sunet 7.0.1 и включает в себя:
1. Сетевой набор для связи с машиной IBM совместимой машиной или другой вычислительной техникой
  2. Мак TCP/IP, TCP компрессор II, NFS
  3. Information On Line (для сервера и рабочих станции-серверов)
  4. Мат. обеспечение для решения задач обработки граф изображений
  5. Мат. обеспечение для решения рутинных задач пользователя
  6. Мат. обеспечение для сервисного оформления соответствующих задач пользователя

Attachment 2

An Example of a Title from the Real Estate Registration System

REPUBLIC OF KAZAKHSTAN

TITLE NUMBER: AA 0023467

EDITION 3 ISSUED 3/2/1989

TITLE FOR:

HEREDITARY LIFE TENURE

LAND:

PLOT NUMBER 235 IN AERIAL PHOTO 23421  
IN THE DISTRICT OF FRUNZENSKY  
CITY OF AMATY  
OBLAST OF ALMATY  
TITLE DIAGRAM: AP23421

ADDRESS:

480023 ALMATY, 47 BAIR STREET

REAL ESTATE USER:

ALTAI ESBERGENOV  
NATASHA ESBERGENOVA  
IN COMMON JOINT OWNERSHIP

ENCUMBRANCES:

- 1) ALL RIGHTS RESERVED BY THE REPUBLIC OF KAZAKHSTAN
- 2) 487006 EASEMENT TO DRAIN WATER ON THE LAND ABOVE DESCRIBED AFFECTING THE LAND SHOWN SO BURDENED IN AP23421
- 3) M 006547 MORTGAGE TO KAZKOMMERTSBANK

Attachment 3.

Example of an Historical Title Record Search

REPUBLIC OF KAZAKHSTAN  
SEARCH OF HISTORICAL RECORD

DATE OF ENQUIRY: 15/10/1990

TIME: 15:32

TITLE NUMBER: AA 0023467

PRIOR TITLE(S): REPUBLIC OF KAZAKHSTAN

<u>RECORDED</u>	<u>NUMBER</u>	<u>TYPE OF DEALING</u>	<u>TITLE ISSUE</u>
21/6/1985	AP23421	AERIAL PHOTO	TITLE CREATED EDITION 1
18/7/1987	X67864	TRANSFER	EDITION 2
18/7/1987	M247890	MORTGAGE	EDITION 2
3/2/1989	D003456	MORTGAGE DISCHARGE	EDITION 3
3/2/1989	X005673	TRANSFER	EDITION 3
3/2/1989	M006547	MORTGAGE	EDITION 3

E. COSTS PAPER

COSTS PAPER

REPUBLIC OF KAZAKHSTAN  
NATIONAL REAL ESTATE REGISTRATION AND  
LAND VALUATION PROGRAM

Gary A. Jeffress and Richard Gaynor

19 August 1994

1. Introduction

With Kazakhstan's independence and its move to an open market economy, there is an ongoing shift towards private use rights in land, apartments, and the privatization of state owned enterprises which occupy land. With these use rights, comes the ability to buy and sell these rights on the open real estate market. A real estate registration system allows the people of Kazakhstan to keep official records of the rights to all real estate in Kazakhstan which are recognized by all real estate users, the courts, and the government.

With the development of a real estate market and real estate registration system, information will become available to allow the introduction of a real estate tax based on the market value. This paper describes the approximate costs of a four year project for the implementation of a real estate registration and valuation program. The cost estimates are based on figures established for a similar project in Russia by the World Bank<sup>19</sup> and under the assumption that costs, technical assistance needs, technologies, and existing information are similar for Kazakhstan.

**Note that these figures are very preliminary and will need to be revised and field checked before they can be used with any certainty.**

2. Project Costs

Total project costs excluding physical and price contingencies are expected to be approximately US\$ 50 million. The percentage of this amount in foreign exchange has yet to be determined, but is expected to be 60-80% due to the large investment in foreign digital surveying, mapping, and information systems technology and technical assistance. The detailed costs for project components are provided in Tables 1 - 5. Project costs include all capital expenditures in economic terms, including costs involved in creating an asset in the form of new real estate registration and valuation systems, which are projected to produce a flow of benefits over many years.

No civil works are anticipated for the project. The State Committee for Land Relations and Land Tenure (Goskomzem), the lead agency for the project, has an established network of local offices located in each Oblast and the cities of Almaty and Leninsk. Equipment and machinery includes all capital and consumables goods required for the project including office equipment, computers, software, digital surveying and mapping technology, automobiles, and miscellaneous hardware. Import duty has been estimated at 15% though this value may fluctuate with the goods imported and with time. Operating costs include local salaries and are based on civil service salaries at the time of writing and an exchange rate of US\$ 1 = Tenge 46. Inflation and exchange will need to be examined when detailed costs are computed. Training and technical assistance costs are based on recent USAID experience in these activities.

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<sup>19</sup> World Bank, "Staff Appraisal Report - Russian Federation - Land Reform Implementation Support (LARIS) Project", Report No. 12711-RU, May 26, 1994

**Table 1. Project Management Unit and Institutional Building**

(US\$ thousands)	Year 1	Year 2	Year 3	Year 4	Total
A. Civil Works Base costs	0	0	0	0	0
B. Equipment and Machinery Base Costs	100	10	10	10	130
C. Import Duty (15%) Base Costs	15	1.5	1.5	1.5	19.5
D. Operating Costs Base Costs	60	66	72	85	283
E. Training Base Costs	50	120	120	120	410
F. Technical Assistance Costs	650	650	650	650	2,600
<b>TOTAL</b>	<b>875</b>	<b>847.5</b>	<b>853.5</b>	<b>866.5</b>	<b>3,442.5</b>

**Table 2. Real Estate Registration and Digital Mapping**

(US\$ thousands)	Year 1	Year 2	Year 3	Year 4	Total
A. Civil Works Base costs	0	0	0	0	0
B. Equipment and Machinery Base Costs	1,000	5,500	6,500	5,500	18,500
C. Import Duty (15%) Base Costs	150	825	975	825	2,775
D. Operating Costs Base Costs	500	1,000	2,000	3,000	6,500
E. Training Base Costs	240	400	800	1,600	3,040
F. Technical Assistance Costs	600	600	600	600	2,400
<b>TOTAL</b>	<b>2,490</b>	<b>8,325</b>	<b>10,875</b>	<b>11,525</b>	<b>33,215</b>

**Table 3. Valuation System**

(US\$ thousands)	Year 1	Year 2	Year 3	Year 4	Total
A. Civil Works Base costs	0	0	0	0	0
B. Equipment and Machinery Base Costs	300	400	700	1,000	2,400
C. Import Duty (15%) Base Costs	45	60	105	150	360
D. Operating Costs Base Costs	30	50	120	300	500
E. Training Base Costs	100	150	250	400	900
F. Technical Assistance Costs	600	600	600	600	2400
<b>TOTAL</b>	<b>1,075</b>	<b>1,260</b>	<b>1,775</b>	<b>2,450</b>	<b>6,560</b>

**Table 4. Tertiary Education Strengthening**

(US\$ thousands)	Year 1	Year 2	Year 3	Year 4	Total
A. Civil Works Base costs	0	0	0	0	0
B. Equipment and Machinery Base Costs	400	500	400	400	1,700
C. Import Duty (15%) Base Costs	60	75	60	60	255
D. Operating Costs Base Costs	57	76	80	85	298
E. Training Base Costs	250	250	250	250	1,000
F. Technical Assistance Costs	400	400	400	400	1,600
<b>TOTAL</b>	<b>1,167</b>	<b>1,301</b>	<b>1,190</b>	<b>1,195</b>	<b>4,853</b>

Table 5. TOTALS

(US\$ thousands)	Year 1 0	Year 2 0	Year 3 0	Year 4 0	Total 0
A. Civil Works Base costs					
B. Equipment and Machinery Base Costs	1,800	6,410	7,610	6,910	22,730
C. Import Duty (15%) Base Costs	270	961.5	1,141.5	1,036.5	3,409.5
D. Operating Costs Base Costs	647	1,192	2,272	3,470	7,581
E. Training Base Costs	640	920	1,420	2,370	5,350
F. Technical Assistance Costs	2,250	2,250	2,250	2,250	9,000
TOTALS	5,607	11,733.5	14,693.5	16,036.5	48,070.5
Studies					500
				TOTAL	48,570.5

## BRIEF EXIT REPORT

### Real Estate Registration and Valuation System for the Republic of Kazakhstan

Gary A. Jeffress  
International City/County Management Association  
12 July 1994 - 20 August 1994

#### Background

The Government of Kazakhstan has a reasonably comprehensive systems for the registration of rights to land and other real estate (including apartments and other forms of housing), and for the collection and maintenance of real estate data. These systems provide a good foundation for a fully functioning real estate registration system and fiscal cadastre, but contain several shortcomings:

- the systems are oriented to data collection and tracking individuals and their property instead of supporting a real estate market rights to buildings/apartments and rights to land are registered in separate agencies which do not always share information registration systems are not open to public
- no system for registering encumbrances such as easements and mortgages no real estate registration law establishing the benefits of registration no fiscal cadastre (record of market-based property values to support value-based tax system)

The goal of the TDY was to assist the Government of Kazakhstan in the development of a conceptual plan for the design and implementation of a real estate registration system and fiscal cadastre.

#### Accomplishments

1. Together with working group comprised of representatives of Ministry of Housing, Construction, and Land Development, State Land Committee, and Ministry of Finance produced three papers which will provide a framework for development of a legal and fiscal cadastre for Kazakhstan:
  - a) A concept paper on the establishment of a legal cadastre, fiscal cadastre, and multipurpose cadastre.
  - b) A technical paper describing the requirements of a legal and fiscal cadastre.
  - c) An overview of the costs of implementing a legal and fiscal cadastre.
2. Established an understanding of the institutional options for implementing a legal and fiscal cadastre (presented options to working group), and facilitated tentative agreement among members of the working group that the State Land Committee be the lead agency for the development of the legal and fiscal cadastre.
3. Researched and documented Kazakhstan's surveying and mapping capabilities that would assist in the creation of a real estate registration system.
4. Provided basic elements for a Kazakhstani proposal that would set out the implementation of a real estate registration and real estate valuation systems. Concept enthusiastically received by Goskomzem, Kazgeodesy, and Ministroi.
5. Established that Real Estate Registration in Kazakhstan is not being pursued by European Union.

6. Established that Real Estate Registration in Kazakhstan is identified by the World Bank as a possible project for funding.

#### Possible Next Steps by USAID

1. Assist the Government of Kazakhstan in preparation of a proposal for World Bank consideration.
2. USAID, as the lead international organization, could provide co-financing of the technical assistance and training for the proposed program.
3. Assist the Government of Kazakhstan in negotiation of terms of World Bank financing.

#### Benefits to USAID Housing and Other Programs

1. Establish legal and institutional framework necessary for other USAID programs. e.g. mortgage financing, privatization of businesses, condominium formation, agricultural reform.
2. Direct assistance in the establishment of real estate privatization in Kazakhstan. (Quantifiable numbers of private land right certificates issued along with measured land areas.)
3. Direct assistance in expanding the real estate market in Kazakhstan. (Quantifiable in the number of registered real estate transfers recorded.)
4. Direct assistance of foreign investment in Kazakhstan. (Quantifiable as real estate associated with enterprises and real estate for private use is registered to foreign owners.)