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(Item 4 (a) of the provisional agenda)

**WORKSHOP ON SPATIAL INFORMATION MANAGEMENT FOR
A SUSTAINABLE REAL ESTATE MARKET**

Report prepared by the delegation of Greece in cooperation with the secretariat

Introduction

1. The workshop on spatial information management for a sustainable real estate market took place in Athens (Greece) from 28 to 30 May 2003. The workshop was organized by the Technical Chamber of Greece and the Greek Association of Rural and Surveying Engineers in cooperation with the United Nations Economic Commission for Europe (ECE) and the International Federation of Surveyors (FIG).
2. Representatives of the following countries participated: Armenia, Austria, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Malaysia, Netherlands, Norway, Poland, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom and United States.

3. Representatives of the ECE secretariat and the International Federation of Surveyors also took part in the workshop.
4. Ms. C. POTSIU, Department of Rural and Surveying Engineering of the National Technical University, opened the workshop and welcomed the participants.
5. Mr. G. PAPAVALASSIOLIOU, President, Organization of Urban Transport of Athens, made an introductory statement. He outlined the purpose of the workshop and the trends in land policy and real estate development in Greece and in Athens in particular. Information was also provided on infrastructure development in relation to the 2004 Olympic Games.
6. Ms. A. STAGIANNI, Vice-President, Greek Association of Rural and Surveying Engineers, welcomed the participants and highlighted the main activities of her organization.
7. Mr. G. VINOGRADOV, ECE secretariat, reported on the ECE land administration activities. He referred to the plans to update the ECE Land Administration Guidelines (ECE/HBP/96). He also stressed the usefulness of the cooperation between the ECE Working Party on Land Administration and the International Federation of Surveyors.
8. Mr. B. KJELLSON, Chairman, ECE Working Party on Land Administration, reported on its recent activities. He stressed the importance of disseminating good practices and the need for efficient land management organizations in the context of EU integration.
9. Mr. H. MAGEL, President, FIG, stated the interest of this organization in cooperating with the ECE Working Party on Land Administration. He commended the positive experience of Greece in the practical application of geodesy in infrastructure development. Information was provided on the activities of FIG on land information for sustainable city development. A need for better training in land administration was stressed, especially since good land administration was indispensable for a free, democratic and vital society and economy.
10. The following themes were discussed:

Theme I: Modern trends in sustainable land administration

Chairperson: Ms. B. LIPEJ (Slovenia); Vice-Chairpersons: Mr. D. BALODIMOS and Mr. P. AKRITIDIS (Greece)

Theme II: Legal issues

Chairperson: Mr. R. W. Foster (Honorary FIG President, United States); Vice-Chairperson: Mr. A. GEORGOPOULOS (Greece)

Theme III: Good practice in spatial information management for a sustainable real estate market in Greece (part I)

Chairperson: Mr. J. KAUFMANN (Switzerland); Vice-Chairperson: Mr. E. TZIORTIOTI (Greece)

Theme IV: Institutional arrangements and financial matters

Chairperson: Mr. H. ONSRUD (Norway); Vice-Chairperson: Mr. G. TSOUKALAS (Greece)

Theme V: Good practice in spatial information management for a sustainable real estate market in Greece (part II)

Chairperson: Mr. J. MANTHORPE (United Kingdom); Vice-Chairperson: Mr. M. KAVOURAS (Greece)

Theme VI: Spatial information management for a sustainable real estate market-technical matters

Chairperson: Chairperson: Mr. H. MAGEL (FIG President, Germany); Vice-Chairperson: Mr. A. OVERCHUK (Russian Federation)

Theme VII: Procedures for introducing a sustainable land administration system-educational issues

Chairperson: Mr. P. DALE (United Kingdom); Vice-Chairperson: Mr. A. ARVANITIS (Greece)

Closing session: Conclusions and recommendations

Chairperson: Mr. B. KJELLSON (Sweden); Vice-Chairperson: Ms. C. POTSIU (Greece)

SUMMARY OF THE DISCUSSIONS AND CONCLUSIONS

A. Modern trends in sustainable land administration

11. Land administration reforms across the world during the past decades have focused on building or rebuilding land title registration and cadastral systems. Grants or loans that supported capacity-building concentrated on providing the necessary skills to operate the new technologies. However, strategies for long-term sustainability were rarely built into these programmes. The development of business skills and a business ethic has not always been regarded as a priority. Today the beneficiaries of many of these programmes are facing difficulties since much of the technology of the 1990s is obsolete. It needs to be replaced but how can this be achieved? Who will pay for what some call a 'technology refresh'?

12. Across the world there are moves towards greater commercialization in land administration and the processing of land-related information as a commodity that can be bought and sold in the open market. Much of the debate within agencies has focused on cost recovery and on deciding what balance there should be between funding by the State and funding from other sources. Adopting a business approach does not, however, mean that organizations must only strive towards cost recovery but also make the system more sustainable.

13. Traditionally, government agencies have avoided commercialization. There are a number of practical reasons why this has happened, in particular:

(a) Land administration services are seen as a public good. They are beneficial to the community at large in one way or another. A commercial approach in which the user must pay could mean that some part of the population will be excluded;

(b) There is a need to provide services that cannot or will not be funded by the private sector. An example is the mapping of remote areas where money from the sale of maps cannot cover production cost, yet mapping is needed in the event of disaster or for social reasons;

(c) There will be a move towards cost recovery in which other government departments are billed for products or services. This only moves money from one government organization to another and is purely a bookkeeping exercise. The administration of marginal cost recovery from other agencies is an expense that adds to government overheads;

(d) The competition that is a consequence of a business approach can lead to conflict between agencies, which could give their own needs priority over those of other agencies. Rather than pay another ministry for a service for which for instance there may be no budget provision, it is often easier to duplicate what others are doing;

(e) Some activities are inconsistent with cost recovery – for instance some cadastral agencies are required by law to charge a merely nominal rate for their services, so that everyone can afford their services;

(f) By becoming more commercial, agencies such as the cadastre may in effect be introducing double taxation, since cost recovery is already built into the system if it is used for tax collection;

(g) A commercial approach can impede the development particularly of products with small sales and/or a short market life. This is especially true of survey and mapping products. Many of their benefits are intangible and not easy to identify. If the price is too high then users will be discouraged.

14. On the other hand, a business approach can improve the efficiency with which information is produced and services are provided, so long as the money raised stays within the agencies. However, this does not necessarily mean that the agencies must recover all or even some of their costs. A commercial approach is not appropriate for all information products and services but, where it is, it can ensure that those asking for information pay some if not all of the costs. The objective should not be to introduce another form of taxation but rather to create a mechanism that ensures the long-term sustainability of the service provided. The prime motivation is to achieve efficiency and accountability. To this end a general business approach is not so much about raising money but rather about delivering a quality service – fit for purpose and safe in use.

15. The number of transactions in property –selling, buying, leasing, renting, establishing user rights, mortgaging, etc.- has an impact on the national economy. The contribution of an active land market to overall economic development is increasingly recognized. The link between land administration and the general national economy could also be made more visible in countries which have established registers and related services and are in the phase of renewing them.

16. Countries have a different approach to the issue of foreign ownership of land. For those countries that encourage foreign investment, it is less important who owns the land than how the land is used and who will control land use. Consequently, infrastructure development and land-use planning are critical for local economies, employment, land values, environmental protection and quality of life for residents.

17. In 2002 the European Commission launched the Infrastructure for Spatial Information in Europe (INSPIRE) initiative. It aims at making available relevant, harmonized and quality geographic information for the purpose of formulating, implementing, monitoring and evaluating European Union policy. The initiative intends to trigger the creation of a European spatial information infrastructure that delivers integrated spatial information services to the users. These services should allow users to identify and access spatial or geographical information from a wide range of sources, from the local to the global level, in an interoperable way for a variety of uses. The target users of INSPIRE include European, national and local policy makers, planners and managers, and citizens and their organizations. Possible services are the visualization of information layers, overlay of information from different sources, spatial and temporal analysis, etc.

18. The participants also discussed the ECE Land Administration Guidelines and agreed that they were of great value and would continue to serve their purpose. Yet, there were reasons for updating them, such as the new land administration requirements and the general need for effective spatial information management for sustainable development.

B. Legal issues

19. That land is the source of all wealth has long been understood. But developing an effective system of land tenure and land transfer is a way to realize that wealth. Creating an enduring system that fosters certainty encourages investment and improvement.

20. There is a generally accepted view that the interests of citizens are best served if the administration of a land registration system is the responsibility of a government institution and a minister is responsible and accountable to the government by law for its policy. Such an institution should have clearly defined responsibilities for keeping and maintaining a register of rights and ownership in land and immovable property. The register would be guaranteed by the State and information recorded would be readily accessible to all. Such a system enables citizens, businesses, institutions and the government to make informed decisions on the use and transactions of land.

21. According to a survey in the countries of the ECE region, responsibility for land registration is administered by a public agency, usually under a specific ministry, as indicated below:

- The ministry of justice (46%)
- The council of ministers or prime minister's office (16%)
- The department of land or cadastral agency (8%)
- The ministry of finance (6%)
- The ministry of the interior (6%)
- The ministry of consumer affairs (6%)
- The ministry of agriculture (6%)
- The ministry of housing (6%)

22. Although most countries regard protecting land rights as a legal issue, with responsibility under the minister of justice, other arrangements also work well. What is important is that, whatever ministry has responsibility, accountability, impartiality and independence are clear under the law. All systems depend on a sound legal framework of land laws and specific laws on land registration and cadastre.

23. The general land laws of a country need to:

- (a) Define land and property;
- (b) Define legal forms of tenure;
- (c) Distinguish between real and personal (immovable and movable) property;
- (d) Distinguish between ownership, occupation and use of land;
- (e) Indicate what rights must be registered (including rights less than ownership);
- (f) Specify the legal entities able to own land and land rights;
- (g) Specify which professionals, if any, are qualified to draft deeds relating to rights in

land.

24. The land registration laws need to:

- (a) Create the institutional authority responsible for ensuring the impartial maintenance of land registers;
- (b) Determine the method by which a register for the whole jurisdiction is to be compiled (systematic or sporadic);
- (c) Establish systems and procedures for land transfer and registration of other interests in land;
- (d) Specify if the land titles are to be guaranteed by the State (or the registrar);
- (e) Define rules for original adjudication of registered title;
- (f) Specify if the register is to be simply an official public record of legal facts where these are expressed in notarial or other legal documents or is itself the legal record of the title created from documentation submitted to the registry (registration of deeds or of title);

(g) Create arrangements whereby subordinate rules and regulations can be made by the registrar to facilitate development and administrative change.

25. In ECE countries, the transfer of property and other real estate rights is regulated in different ways, with effects also on the value of the registration. In some countries the transfer of the right becomes enforceable only when recorded in public registries, while in others registration is unnecessary for the transfer - that comes from the stipulation of the contract.

26. For example, in Italy legal effects depend on whether a deed is registered for conveyancing or for mortgage purposes. The first kind of registration is for information, and takes a legal value only if someone fraudulently sells, with distinct deeds, the same property to several different persons. In this case, the first who registers his deed becomes the owner of the real estate. On the other hand, registration is necessary to raise mortgages, so land registrars are very careful with related duties. At the beginning of the 1990s, the structure of the real estate registration system in Italy received a strong impetus to change from the general reorganization of the ministry of finance, which caused the unification of cadastral and land registry activities under the competence of a new land department. A significant problem was to adapt the structure of the real estate registry database to the more advanced cadastral one.

27. Information on other examples can be obtained from a research activity on *Modelling Real Property Transactions*, a joint-European COST action (G-9). Research was based on evidence from Slovenia, Finland and Denmark, and provides a description of procedures prescribed when owners legally transfer their real property rights.

C. Good practice in spatial information management
for a sustainable real estate market in Greece

28. One of the fundamentals of the Greek cadastre system is that it should fully support the public sector's activities and services. The Greek cadastre acts as the main provider of reliable information related to the spatial and legal status of land dimensions (land use, value and tenure). After the cadastral reform that was launched, nationwide reforms should take place in the public sector activities. The core of the reforms must be the realignment of objectives and the enforcement of cooperation with the focus on the citizen's needs.

29. In 1994, the first significant change was made to the administrative structure of Greece. The central government's control over land administration was delegated to the regions and the local elected authorities were empowered to provide better services to their citizens. Mayors and prefects and the relevant councils are now more independent in their activities and decision-making. In 1997, a complementary administrative reform, named *Kapodistrias Project*, supported by EC, reduced the number of small municipalities and communities. The first objective of this reform was to reduce the operating and administrative cost through the reallocation of human resources. A second objective was to improve the public services of local authorities and introduce new services for the citizens at the local level.

30. This reform also influences the private sector and the citizens, and the way that they communicate and interact with the public authorities. Requests for licences, land transfer, tax

paying or funding, authentication, etc., are handled faster. The combined access to the cadastral archives and to other public archives, either locally or centrally maintained, can rapidly improve the way that authorities at all levels can inform businesses or individuals. The interconnection with the online banking system offers significant benefits for the risk management of loans and mortgages. It could also reduce the overall cost of real estate investments and enhance land market activities with reliable rules for land and construction valuation.

31. Property investment requires information and should be decided after an extensive research and survey of the property. Land valuation is considered to be essential before any serious investment is decided upon. Two methods prevail:

(a) The “objective method of valuation”, which is applied by the Greek Ministry of Finance, is mainly used for taxation purposes, e.g. calculation of the stamp duty. This method is the only method approved by law and it is used for the valuation of properties inside or outside urban areas;

(b) Methods applied by the Greek body of sworn-in valuers and the private sector (real estate companies, independent valuers).

32. Cadastral systems include a database containing spatially referenced land data. A set of procedures and techniques are applied for the systematic collection, updating, processing and distribution of data and, finally, there is also a uniform spatial reference system. Recent developments in geographical information and communication technology (Geo-ICT) have a serious impact on cadastral systems. New disciplines like telegeoprocessing, telegeomonitoring and telegeomatics can be implemented in applications including cadastral surveying and mapping as well as in the distribution of spatial cadastral data.

33. In Greece, the activity of real estate consultants has been developed only recently. The number of companies is relatively small. Most of them are subsidiaries of well-known national or foreign firms and banks. The activity of these consultants includes many different services among which real estate management, real estate valuation and real estate investment advice. Real estate consultants contribute to the selection of the real estate to be acquired within alternative choices and on their development or investment. Their aim is to present all the necessary information to their clients to help them take the best possible decision. The valuation of real estate is basic and necessary for real estate transactions, financing, etc. Therefore real estate valuers must have special qualifications, experience and a good knowledge of the techniques for real estate valuation.

D. Institutional arrangements and financial matters

34. Another example deals with the collaboration in Spain among different ministries. Every year, Spanish agriculture receives more than €5 billion worth of Common Agriculture Policy (CAP) subsidies. This money is distributed through the Integrated Administration and Control System (IACS), which is managed by the Ministry of Agriculture and the regional governments. IACS requires some technical instruments, such as suitable cartography, aerial survey, updated information on crops and control on the ground. The cadastre, maintained by the Ministry of Finance, manages all the country's parcel maps, which are 80% in digital form. Moreover, it

contains a complete textual database with data on landowners and crops. Consequently, the Spanish cadastre is used for IACS by the Ministry of Agriculture and the regional governments, which use it directly or as a basis for more specific inventories (e.g. the vineyard register or the olive tree register).

35. A land administration for Kosovo has been developed and is now being adopted. The Kosovo Cadastral Agency is only one of several participants in the land administration sector. Others have specific responsibilities for planning, land use, zoning and building management as well as rural development – all those activities that contribute to the effective administration and management of land and real property.

36. The emerging use of the Internet will impact heavily on land administration organizations. At the same time it provides opportunities for better customer satisfaction and a reduction in operating costs, for example in the submission of official documents concerning the establishment, transfer or deletion of rights to land. There is no difference whether these documents are submitted by notaries, solicitors or the parties involved in a transaction themselves. Increasing use of personal computers, text processing software and electronic signatures create a demand for the electronic submission of deeds or civil agreements. The development of systems for electronic conveyancing in, for instance, the United Kingdom, Canada and Lithuania, and the electronic submission of deeds in, for instance, the Netherlands are the result of this understanding.

E. SIM for a sustainable real estate market-technical matters

37. E-government initiatives, the integration of topographic and cadastral mapping and the setting-up of national spatial data infrastructure require new structures which also increasingly involve the private sector in land administration and cadastre issues. This includes the use of modern communication structures, networking and digital data maintenance. In particular, the wider use of data requires more coordination and the thorough application of appropriate standards for data maintenance and exchange.

38. The enhanced information system of the Cadastre of Real Estates of the Czech Republic was put into operation in the autumn of 2001. The possibility of remote access to cadastre data is one of its main features, giving clients (citizens, public administration bodies, private companies) smooth and fast access to cadastral data on a country-wide scale. The use of the Internet does not mean open access to cadastral data. However, everybody can conclude a contract with the Czech Office for Surveying, Mapping and Cadastre, in which, depending on the client, remote access rights and authorization are assigned. From the technical point of view, remote access enables users to retrieve essentially the same type of information, inclusive of digital map data, as at the desks of local cadastre offices. Data related to procedures at cadastral offices are also available and thus it is possible to get information concerning the progress of an individual case. A simple browser is enough; no special software is needed. All clients have their own accounts; the delivery of cadastral data by remote access is a paid service.

39. Customer satisfaction surveys in Finland have shown that the users of property data would like to have a more extensive information service than currently available. Map information jointly with property data are also requested. This means that cartographic information has to be included in the customer service. The customer service is also expected to have a nationwide coverage. Not only cadastral boundary data but also topographic data in cartographic data or aerial photos connected to them are expected. Land-use plans are likely to be provided in connection with map information. These requirements mean that a very complex set of data systems has to be managed. It requires joint data models and standards across borders.

F. Procedures for introducing a sustainable
land administration system- educational issues

40. There are two key aspects in setting up land administration infrastructures: first the establishment of the appropriate land administration system itself; and second ensuring that there is a sustainable capacity of educated and trained personnel to operate the system in both the public and the private sectors. In several countries in transition this aspect has still to be developed further together with sustainable institutional infrastructures with clear responsibilities. It is generally understood that security of land tenure, the efficiency of land markets and the effectiveness of land-use planning are crucial components in any land policy.

41. Capacity-building should be viewed in a wider context to include the ways and means by which the overall goals such as the development of institutional infrastructures, including issues such as good governance, decentralization and public participation, are achieved.