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Ministry of Public Works, Transport and Communications

LAND ADMINISTRATION AND MANAGEMENT PROJECT
Component B: Urban Land Management

Consultancy Services of the:
International Urban Planning Technical Advisor

ACTIVITY A.2

APPROACH TO COMPLETING THE FORMULATION OF CITY INVENTORY

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ACRONYMS

ALUIZNI	Agency for the Legalization, Urbanization, and Integration of the Informal Zones/Buildings
APAWA	Association for Protection of the Aquatic Wildlife of Albania
Co-PLAN	Institute for Habitat Development
DELTA	Developing Economics Locally through Techniques and Alliances"
FLAG	Foundation for Local Autonomy and Governance
GEF	Global Environmental Facility (of the World Bank)
GoA	Government of Albania
INSTAT	Institute of Statistics of Albania
IPRO	Immovable Property Registration Office
IPRS	Immovable Property Registration System
ITS	Institute for Transport Studies (Ministry of Public Works, Transport and Telecommunications)
LAMP	Land Administration & Management Project
LAN	Local Area Network
LED	Local Economic Development
MPWTT	Ministry of Public Works, Transport & Telecommunication
PRCA	Property Restitution and Compensation Agency
REA	Regional Environmental Agency
REC	Regional Environmental Center
TAC	Territory Adjustment Council (local level)
TACRA	Territory Adjustment Council of the Republic of Albania
WB	World Bank

1. TOR

1.1 Terms of Reference

The primary objectives of the Consultant's assignment are:

1. Lead and supervise city-level inventory activities of the eight Municipalities;
2. To strengthen the spatial planning capacity at the local level by supporting the preparation of eight regulatory plans;
3. Conduct a training needs assessment of local government urban planning and land management; and;
4. Advise on central-local institutional arrangements for implementing the new spatial planning law.

The assignment has to be accomplished by the Consultant by carrying out various tasks as follow:

a. Lead and supervise inventory activities of eight Municipalities, including

a.1. Assess the current situation of eight participating Municipalities and their actual database.
a.2. Develop an approach to completing the formulation of city inventory.
a.3. Develop methodology and template for Municipalities to use to complete city inventory, which will be done in close collaboration with GIS and Environmentalist Expert
a.4. Organize and deliver a workshop for municipal planners on how to conduct inventories and establish work programs, timelines, and assignment of responsibilities for each Municipality.
a.5. Supervise inventory activities of 8 Municipalities
a.6. Identify key issues and challenges to guide regulatory planning in 8 Municipalities

b. Design and carry out capacity building for planning staff at the central level

b.1. Develop an approach for central-local institutional arrangements for implementing the new spatial planning law
b.2. Assess training needs for planning officials in the eight Municipalities as well as interested and relevant staff from other Ministries (MPWTT, Agriculture, Environment, and Tourism).
b.3. Prepare and submit the TORs for the training program

c. Supervise regulatory plan activities in 8 Municipalities, including

c.1. Review and advise on outputs (interim and final) prepared by international and local consultants/planning firms
c.2 Synthesize guidance manuals developed by the two planning teams
c.3 Summarize experience from the 8 Municipalities

This subject of the present report is **Task a.2** "**Develop an approach to completing the formulation of city inventory ".**

1.2 Summary of time spent on Task a.2

The Consultant spent 3 (three) working days for the Task (as per TOR).

2. BACKGROUND

Information is a fundamental ingredient in all decisions. Deeper knowledge of an issue allows one to better ponder the options and select what seems to be the wisest path to a decision. Decisions based on instinct can turn out to be just as wise, but one would generally prefer to deliberate from an "informed" position, especially when major policies or planning decisions have to be made, which may entail considerable expenditure of human and financial resources. Every single day, Municipal governments make maintenance, management, planning and policy decisions that affect the inhabitants of their cities. Invariably, to support these decisions, a great deal of time is spent gathering information by scouring the archives of the various departments and by leveraging personal contacts with those who are the "institutional memory" of the departments. Meanwhile, administrative data are gathered by city offices incessantly for specific purposes, most often connected with revenue-generation (taxes, fees, etc.) or regulatory compliance (permits, licenses, etc.). Yet these data are more often treated as "documentation" supporting a specific municipal act or deliberation rather than as "information" that can be reused over and over in other contexts to support other municipal tasks (such as urban planning).

People who are engaged in urban maintenance, management or planning use information daily, thus they are rather receptive toward the adoption of computers to organize municipal information ever since the early days of personal computers. After the first commercial Geographic Information Systems (GIS) appeared in the mid-eighties, through the nineties and until today, there has been a steady increase in the use of GIS in various city departments. Despite all this technological developments, the process of creating local City Inventories as planning support systems has been slow, perhaps because of planners' own inability to take full advantage of the technology, due to financial, organizational, institutional, socio-cultural issues, or perhaps simply because planners are too preoccupied with gathering useful data for the plan and have no time to dedicate to the development of inventories. So the problem is not the availability or capability of technology for planning, but rather the lack of "good" updated data and their systematic inventory in structured databases. The solution is to convince the planning community, and the municipal administration in general, on the value and importance of creating city inventories needed for urban planning, maintenance and management.

The general situation described above is similar to that found in the Municipalities participating to the LAMP project. In fact, the assessment carried out under **task a.1** revealed the following situation:

- None of the Municipalities has got an organized city level inventory;
- There is a general lack a comprehensive and systematic "knowledge infrastructure" on which to base planning decisions (from the urban design projects to the municipal maintenance tasks);
- The existing data (either in paper or in digital format) are not organized in a systematic database neither in analogue or in computerized form;
- In most cases the information is not readily available at local level;
- There is no specific staff dedicated to create and maintain the inventories;
- Most of the information available has been prepared in the context of specific studies financed by international donors, ONG but no systematic inventories of these studies are maintained locally;
- There is a prevalent "ad hoc" approach in the various Departments whereby the data are collected for specific purposes and then forgotten or stored in inaccessible places, unknown to any other;
- Although some data collection takes place in the Municipalities, mostly for regulatory or revenue-generating purposes (such as for permits, licenses, property assessments, and the like), even these data are often hard to obtain or utilize, both internally (by the rest of the municipality departments) and even less so externally;
- Where available, the information (documents, data and maps) is dispersed among the various sectors of the Urban Planning Departments or among other Departments like: Service Department; Economic Assistance Department; Public Heath Department, etc,);
- In many cases the information is limited to specific parts of the town (i.e. city centre) and there are no data for the whole Municipality;
- In most cases the Municipal boundaries are not known.

Given the above situation there is need to develop an approach for completing the city inventories which is the scope of task a.1 of the Consultant and of the present report.

3. THE APPROACH

A **City Inventory** is an organised and structured collection of documentation, data and maps on public devices, natural features, land uses, infrastructures, communication, people, socio-economic conditions and development issues of a specific Municipality. It is creation is necessary to assist in planning the future with urban plans, control their implementation and manage each aspect of the municipal operation.

Taking advantage of the opportunity given by the LAMP Project, it is now possible to finance and implement an organised inventory for the Municipalities participating to the Project that will allow to:

1. Prepare Regulatory Plans;
2. Manage the implementation of the same plans and the preparation and implementation of detailed urban plans;
3. Manage each aspect of a municipal operation (i.e:: licensing; permitting; construction of infrastructures, services and their management, etc)

Until now, the apparent complexity of the task of collecting and organizing such a multidimensional body of information has discouraged the Municipalities to the creation of city inventories. Today, however, technical tools (such as GIS) that can facilitate the recording and archiving of most, if not all, of the features of the urban aspects have finally become widely available and affordable, making it possible to realistically envision how the Municipalities could accumulate and maintain this wealth of information about themselves.

Taking into account the above assumptions, the approach is based on 3 implementation phases and four questions to be fulfilled.

The implementation phases are:

- **Phase 1: Preliminary Inventory** (short term-implementation): This phase will pertain to the information readily available at local level (mainly the Urban Planning Departments snd the Sevices Departments in the Municipalities) and will serve as a preliminary basis for the preparation of the 8 Regulatory Plans. The inventory will be provided to the companies which will be awarded with the contract of the two packages (*Package 1* which includes: Durres, Shkodra, Vlore, Kamza; and *Package 2* which includes Berat, Korca, Lushnje and Gjirokaster). This Preliminary inventory will allow to start the preparation of the Regulatory Plans through the understanding of current conditions as well as the community's issues.

- **Phase 2. Detailed Inventory** (during LAMP Project Implementation): This phase will pertain to the collection, collation, integration and storage of all existing datasets at local, regional, national and international level (well organized and up-to-date) and relevant storage into the GIS system which will be designed and implemented during LAMP project implementation. This will allow a thorough verification of the planning assumptions being made during the preparation of the Regulatory Plans and, especially, during the public disclosure stage;

- P**hase 3: Inventory Maintenance** (ever lasting): This phase will pertain to the maintenance of the City Inventories through periodic updates (including surveys, questionnaires, studies, inclusion of administrative data, etc.) which will take advantage of the ever-improving GIS applications which help in managing the implementation of Regulatory Plans, the preparation and implementation of detailed Urban Plans and run each and every aspect of the municipal operations in an efficient and cost-effective manner. that can be maintained over time, migrated across all of the foreseeable technological advances and in the face of all of the changes that the cities will undergo in the future.

The proposed approach will take advantage of the opportunities created by recent advances in Geographic Information Systems (GIS) , the World Wide Web (WWW) and other information and communication

technologies (ICTs) enabling the cities to gradually and non-traumatically accrue and maintain an exhaustive, comprehensive, flexible, reliable, multipurpose and sharable inventories.

The 4 main questions to be fulfilled are:

1. What to search and collect?
2. Where to search and collect?
3. How to search and collect?
4. Where to store the collected data? (this is the Task of the GIS expert).

The specific answers to the above questions are the following:

1. **WHAT TO SEARCH AND COLLECT**: the information to be collected will mainly consist in:

   - Documents (studies, reports, policy and planning documents, etc.)
   - Data (either in textual, graphic and/or tabular form);
   - Imagery (aerial photography, orthophotos, etc) ;
   - Maps (at various scales)

   Which can be in printed and/or digital form for the following items:

   - *Public devices* : political, administrative and electoral borders;
   - *Natural features*: climate; hydrographic features; soils; geology; hydro-geology; geomorphology; geological/seismic risk, flood and wet zones ; slopes, etc,
   - *Land use*: agriculture, forests; parks (city, national and regional parks) ; built up area by category: residential; commercial, industrial; public service buildings (schools, kindergartens, hospitals, clinics, libraries, museums, theatres, public offices, etc) ;
   - *Environment*: a-biotic and biotic environment; sensitive environmental assets; bio-diversity; protected areas; source of pollution; EIA etc.
   - *Infrastructure and services*: water supply system; sewerage system (incl. sewage treatment plants); solid waste collection (incl. landfill sites); electricity supply and street lighting;
   - *Communication*: Road and street network (including intersections and road centre-lines); Traffic data (traffic counting, O&D surveys), etc; telephone network; optic-fibre cables, etc;
   - *Socio-economy*: statistical enumeration zones, demography; age set; migration patterns, education; housing and living conditions; economic activities; employment; welfare, poverty mapping; municipal revenues and expenditures; etc;
   - *Cadastre and property* (cadastral data; property data; legal situation of the buildings; etc);
   - *Cultural heritage* (historical buildings; archaeological sites, etc.)
   - *Development issues:* : planning studies; strategic plans; action plans, etc.

   These thematic categories will be valid for all 3 implementation stages of the Inventory (although to a different extent).

   Further breakdown and details on of the above categories will be given in the report on **Task a. 3** *"Methodology and template for Municipalities to use to complete city inventory"*.

2. **WHERE TO SEARCH AND COLLECT:** As already mentioned above, the first Inventory Implementation stage (Phase 1 Inventory) will concentrate on what is immediately available within the Urban Planning Departments and Service Departments in the Municipalities. The Second (Detailed Inventor) and third (Inventory Maintenance) inventory phases will widen the range of sources at local level (other Municipal Departments and local utilities); at regional level; at national level and at International level as follow:

   - *Other Municipality Departments* such as the Service Department (Public Works); Economic Assistance Department; Public Heath Department; and any other Municipality department

which creates data which can be utilised for planning purposes;

- *Local public, semi-public or private enterprises* (utilities) managing public services such as water supply; power supply, waste collection etc, in those cases where these services are not under the management of the Municipality;
- *Regional Institutions* such as the Regional Councils; Prefectures;
- *Regional Agencies* such as the Regional Environment Agencies (REA); etc;
- *National Institutions* such as the various Ministries, Universities; Research Institutions;
- *National Agencies* such as ALUIZNI; IPRO; INSTAT; PRCA; etc.
- *NGO at national and international level* which are or have been involved in project design and implementation in Albania;
- *International organizations* (such as the UNDP; the UNESCO; etc.)
- *International financing institutions* (such as the World Bank; The International Bank for Reconstruction and Development (IBRD) the European Bank for Reconstruction and Development (EBRD); The European Bank for Investments (EIB); etc. plus the related programmes such as GEF; LED; DELTA;
- *International cooperation agencies* (such as KFW; GTZ; JICA; USAID; Italian cooperation; SIDA;, etc. and related *Programmes* such as INTERREG; Millennium Challenge, etc.

A detailed list of possible source of information will be given in the report on **Task a. 3** *"Methodology and template for Municipalities to use to complete city inventory"*.

3. **HOW TO COLLECT**: Whereas the first inventory phase (Preliminary Inventory) will consist in a simple collection and collation of data available in the Municipalities (mainly in the Urban Planning department and Service Department), the second phase (detailed Inventory) will widen the range of data and the range of sources, analyze the data, identify the gaps and (where necessary), create the data to fill the gaps. The way of collecting and creating data may consist in:

   First Phase (Preliminary Inventory):

   - Prepare a simple template listing itemr and categories of data to be collected;
   - The Urban Planning department and Service Department collect the data required in the tempalte and prepare the Preliminary Inventory based on listed items and categories.

   Second Phase (Detailed Inventory): the Detailed Inventory should be carried out through the following procedure:

   - Prepare much more detailed templates listing itemr, categories *and sub-categories* of data to be collected;
   - Send to all departments within the Municipality the template specifying which part of the documents listed in the template are required from the specific department;
   - For the public buildings and services, the template will be accompanied by a map on which the various Departments can locate the existing public buildings and/or facilities listing their functions;
   - Carry out structured interviews with Municipality Departments with filled templates and maps at hand;
   - Send to the service utilities the templates together with the maps on which (if not otherwise available) they can trace the alignment of water, sewerage, power and telephone supply networks and locate the existing ancillary facilities (reservoirs; pump stations; water treatment plant; wastewater treatment plants; etc.);
   - Carry out structured interviews with the staff of the utilities with filled templates and maps at hand;
   - Analyze thoroughly the documentation received and find out any reference to other documents, reports, data and maps pertaining to the Municipality under consideration and identify the relevant source at any level (regional and/or national and/or international);
   - Contact the source (i.e. the institution owner of the information) and ask copy of the documentation (in digital form and/or in paper form);

- Search data and documents in the websites of national and international institutions and agencies. It is a stable policy of international institutions and organizations to make available reports on projects, studies, policies and strategic documents on their websites and leave the people free to unload those documents; this possibility can be easily verified by searching (for example) the *Strategies for the Local Economic Development* (LED) for the Municipalities of **Berat, Durres, Korça and Shkodra** on the World Bank website by digitizing : "*Local Economic Development";*
- If not available on the web, the identified documents can be required directly to the national or international institutions;
- Analyze thoroughly all the documentation received and identify the gaps and (where necessary) create or integrate the data to fill the information gaps through:
    i. City-wide questionnaires (for example for the socio-economic conditions as it has been done for Berat);
    ii. Specific surveys and studies;
    iii. Extrapolation of data from national data, maps and documents;
    iv. Establishment of web-site forums allowing people to exchange opinion and information on planning issues.

Third Phase (Inventory Maintenance): The completed detailed inventory will be updated periodically by reiterating the same procedure described for the Detailed Inventory in a very focused and targeted way since the GIS system (which will be implemented during LAMP project implementation) will allow to identify the gaps in the information. All administrative data (for example release of building permits, preparation of new detailed plans, construction of new infrastructures, etc.) which is created in the daily operation of a Municipality will be also included in the system to update the inventory.

Further details on the collection procedure will be given in the report on **Task a. 3** "*Methodology and template for Municipalities to use to complete city inventory*".

4. WHERE TO STORE THE COLLECTED DATA.

All the data collected at all Inventory stages, will be stored in an organized GIS system which will created during LAMP project implementation. The approach and methodology on the way to store and retrieve the inventory data is a specific task of the GIS consultant, therefore the present approach paper is limited to define only the basic storing criteria .

The basic criteria is that the GIS system has to be designed in a flexible way in order to allow a quick start during the Phase 1 Inventory (based on the information readily available), allow the storage of much more data during Phase 2 and, finally, allow the continuous update in the future.

As well known, Geographic Information Systems (GIS) allows for overlaying different thematic data sets and provide the planners with efficient methods of determining relationships between various layers of information. The strength of a GIS is that it offers the most powerful tool currently available for integrating spatial databases . Spatial relationships between areas and the fragmentation of these areas are examples of what can be determined utilizing a GIS. For these reasons, it is felt that a GIS is the best option for the creation and maintenance of the City inventories.