

# **Deployment of a Public Private Partnership (PPP) that Provides an Improved Business/administrative Tool as the Foundation for Planning, Managing and Encouraging Quality and Sustainable Economic Development for the Public Administration**

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## **SUMMARY**

PPP concessions and other similar business models have been used for many decades as tools for the public sector to achieve efficient project implementation success through private sector expertise, operational management and financing over an extended duration. Traditionally, these PPPs have been focused on infrastructure projects such as roads and utilities, as well as hospitals and schools. In reviewing the success of the PPP approach in these various public sectors, it has determined that it would be technically, operationally and financially feasible to develop a similar strategy for an additional “infrastructure” element: land and property rights information.

One of the key components for the successful management of an administrative territory is generation of revenue. Revenue is the catalyst for enabling the administration to provide improved or enhanced services to the citizens. However, new and/or consistent revenue generation is one of the most difficult challenges facing public administrations today – budgets are being trimmed and the possibility of implementing business process improvements which would ultimately provide financial benefit, but typically require investment, are nearly impossible to undertake. One of the primary sources of revenue for the administrative operating costs, of necessity, should be property taxes. However, that is typically not the situation.

Although the public administrations are often collecting a reasonably high percentage of taxes (60-80%) for known properties, the assessment/collection values are low as a result of a lack of a complete property inventory, as well as a reliable valuation model. Deployment of a PPP based on an efficient revenue generation model provides an improved business/administrative tool that is the foundation for planning, managing and encouraging quality and sustainable economic development for the public administration.

This paper addresses some the issues that impact the revenue collection process at the national and local government levels and provides an overview of the possible options for the successful implementation of a PPP model for land rights management.

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## **1. INTRODUCTION**

The role of the local administration is to manage their territory to the maximum benefit of the citizens. This management activity includes not only infrastructure development and maintenance, but comprehensive planning, economic development and public safety. All of these responsibilities have as their foundation spatial information. Spatial information is data based on geographic location with various attributes describing that location (i.e. addresses, property boundaries, land use, zoning, property values, etc.). It is estimated that almost 80% of all decisions which are made by the public administration (local, regional, national) require the use of spatial information.

The Central Public Administration is the “starting” point and foundation for spatial information through its collection, recording, processing and archiving of land parcel and land rights information. Once a reliable property asset inventory is established, then additional data attributes can easily be collected, developed and assigned to property. It is this comprehensive database that provides the government with a very powerful tool for managing and leveraging its most significant revenue assets: property.

It is the deliberate and accurate development of this property detail that is often the biggest challenge facing public administration officials today. The intensity of the effort, the cost of acquisition, the maintenance and support of the technical infrastructure and the operation and management of the resources (personnel, subcontractors, equipment) are each extensive endeavors which are not necessarily within the core competencies of a public administration. Additionally the costs that are associated with this type of development effort can also be significant and often prohibitive when viewed as a line item in an annual budget.

As an alternative to the traditional approach of acquiring a bank loan for the development and implementation of a land information solution such as this, the authors have investigated the possibility of utilizing a PPP approach for the development of such a solution for local public administrations, which are one of the most significant and vested beneficiaries of land information. Based on the efforts developed in Romania, , A feasibility study was conducted at the county-level in Romania where the local administration is composed of two institutions: local councils and mayors (for each territorial administrative unit) and the county council and county council president for the county itself (administrative division composed of 50-90 administrative units) in an effort to determine the viability of this concept. The

following sections present the findings and recommendations for implementing a successful PPP using land and real property information as the foundation for revenue generation in support of the PPP model.

## **2. OVERVIEW OF COUNTY ENVIRONMENT**

A county (judet) in Romania was selected to be the target of the feasibility study with the idea that a PPP could be implemented so as to develop a Spatial Information System for Territorial Management (SISTM). The selected county consists of 54 communal administrative territories, each with a mayor and municipal council as the administrative structure. The county itself is managed by a president and a county council. The primary issue facing the county is that in order to attract investment, they needed better infrastructure details/information (property boundaries, ownership, zoning, addressing, etc.) with which they could then market to external interests and provide clear options with confidence for development, acquisition and/or investment. Additionally, as with many public administrations, the ability to self-fund this infrastructure investment without seeking direct budget support from the national government was a key to the timely launch of the effort.

### **2.1 Existing Land Management Responsibilities of the Local Administration**

The following is a list of the primary responsibilities of local administrations pertaining to land management:

- Management and maintenance of the public domain of the territorial administrative unit. The public domain which consists of buildings and land, may specifically include:
  - buildings: hospitals, schools, historical and cultural monuments, institutions, etc.
  - land: streets, parks, roads, etc.
- Management and maintenance of the private domain of the territorial administrative unit. Private lands or buildings of the local administration can be rented, by concession or can be used by the local administration itself for development (based on the provisions of the existing legal framework in Romania).
- Retrocession of properties to citizens in accordance with property laws. Based on received requests, the administration can retrocede ownership rights for lands and buildings to owners, and create all the necessary documents from which property titles are emitted. This is performed by the property commission which is established at each of the administrative units, which is led by the mayor. This commission establishes the number of properties, the area and location of the properties and also the respective owners, based on archives in the Mayor's office and old deeds in combination with the requests of the citizens.
- Development and update of the urban regulations, inform the public, verification and control of the application of urban regulations. Based on development plans created by the central government and county authorities, as well as local community

necessities, a General Urban Plan (GZP) is created and approved by the local council for the administrative territorial unit. This plan establishes:

- The physical boundary limit of the localities inside administrative territorial unit;
- The use of the main zones of the localities (residential development, industrial development, etc.); and
- The infrastructure development, utility development, etc.

The GZP is further detailed by Zonal Urban Plans (ZZP) or Detailed Urban Plan (DZP) which result in the detailed urban regulation. By presenting an urban certificate, the local administration provides information to the public concerning the specific urban regulations for a location, as well as the juridical and economic status of the location.

- Issuance of construction permits in compliance with law and regulations. The urban certificate, together with construction plans, utility plans and agreements from the utility companies, accompany the request for a construction permit.
- Agriculture inventory, evidence and policies. The inventory of agricultural land and individual farmer's specific inventory is the foundation for the development and implementation of agricultural policies. This is the primary evidence for citizens, land and land use, buildings, herds, irrigation, silos, etc. and is created through citizen declaration.
- Maintenance of the addressing system for localities inside the administrative territorial unit. The responsibility for assigning names to streets and other places inside localities belongs to the local council. Numbers on houses and parcels are assigned by a specific department in the mayor's office. Traditionally, numbers were assigned to buildings, but, after the Year 2000, they were also assigned to parcels. There are no official and unitary regulations concerning the approach to implementing an addressing system.

## **2.2 Taxes, fees, and budgets for the local administrations**

The local taxes and fees that are collected by the local administrations are as follows:

- building tax;
- land tax;
- vehicle tax;
- fees for the issuance of certificates, permits and authorizations;
- fees for advertising and publicity;
- shows and fairs tax;
- hotel tax;

- special taxes; and
- other local taxes.

The tax values are established annually by the Law of the Fiscal Code. Taxes are established for persons who own/use fiscal objects (lands, buildings, vehicles, etc.). Persons are obligated by law to declare these objects. The local administration is responsible for the calculation, collection and verification of the taxes and their subsequent payments.

The county was successfully collecting property taxes on 60%-80% of the *known* properties within each of local administrations (communes). Although this seems to be an impressive rate of collection, the reality is that only 15%-20% of all properties in the county were officially registered and titled. This is an obvious flag for a potential revenue source for the PPP: increased property tax collection.

### 3. ANALYSIS

The analysis team reviewed not only the tax sources and collection rates and registration status of properties, but also evaluated each of the following:

- The existing legal and regulatory environment specifically as it relates to each of these topics so as to determine the legal basis for the establishment of a private sector/county PPP:
  - Fiscal Code
  - PPP or concession or similar law
  - Corporate law
  - Land Code
  - Property Tax Code (if different from Fiscal Code)
  - Municipal Code
  - Other laws, property rights, decrees, regulations and norms discussion the authorization and ability for the government to set fees, to collect fees, to conduct business with the private sector, etc.
- The existing information technology infrastructure in an effort to identify the level of computerization, communication and expertise that is resident at the local and county administrations;
- The existing geospatial data that is resident within the county offices, the mayors' offices and the national representative offices (e.g. cadastre office, etc.) that would be suitable for use in the SISTM;
- The existing workflows for land administration related activities between the various local/county/national offices;
- The identification of the necessary datasets that are needed to support a fully-functioning SISTM solution; and

- The identification of revenue sources from increased property taxes, fee collection for transaction support and subscription services for on-line access to land information, etc.

#### 4. FINDINGS

The following is a summary of the findings/results of the analytical investigation that occurred:

- The Fiscal Code is enforced subjectively, according to personal or political interests.
- Without an objective technical basis, the declaration-taxation mechanism is sub-optimal in generating revenue, and is likely to be inconsistently and unfairly applied to the taxpayers.
- Verification checks are based on declarations, rather than on-site inspections.
- There is no consistency between farming subsidies and property taxes.
- The UAT budget is only marginally supported by local property taxes. Accurate property data and information systems could significantly improve revenues through better identification and assessment.
- The Agricultural Registry, the Farms and Farmers' Registry, the Fiscal Registry, and the Address Registry are the inventories specific to land, land use, ownership, farmers, owners and taxes and are all the responsibility of the local administration. All of these inventories are based on land owner or user declarations. Furthermore, all of these inventories are only on paper (manual) thus making it difficult to develop status reports regarding the current situation. It should be noted that in 2010, a Government Decision mandated that the content and format of Agricultural Registry be correlated with Fiscal Role. As of this analysis, of the 3 UATs which were visited, none has yet to create the new Agricultural Registry.
- None of general area calculations existing in County Cadastre Office correspond with those existing in mayors' offices.
- The process of property retrocession to citizens is not yet complete. The property certificates which are currently being issued are an intermediary step only and will require the next steps of Property Title emission and Property Title validation.
- Approximately one third of total area of County is State land (private or public).
- Cadastral registry contains properties which represent approximately 15% of total number of properties in the county.
- With very few exceptions, most of the mayors' offices do not have a functioning zoning department. This is the reason why the majority of zoning support is provided

by the County Council zoning department. Although this is certainly a stop-gap solution, it does however, negate some of the decision authority of the communes.

## 5. SOLUTION FRAMEWORK

A majority of the decisions of the local administration requires accurate and up-to-date land information. Land management, development projects, infrastructure implementations and land tax collections are just a few of the major domains that require land information. The proposed solution needs to provide this information consistently and accurately over the long term.

The proposed solution to successfully manage land records and apply the data to perform municipal functions consists of the following components:

- Implementation of a **land information management system** to successfully manage land records and support land management related functions and related municipal management processes. (This will include developing effective, efficient, and consistent workflows and building institutional capacity to implement these workflows using the systems provided.)
- Priming the system with **updated and appropriate data** (cadastral, fiscal, regulatory, address and planning related).

The primary beneficiaries of such a solution include both the local administration and the citizens, as well as the central administration, private sector (notaries, banks, surveyors, etc.) and other public sector entities

### 5.1 Land Information Management System Concept

In order to improve the foundation of evidence (inventories) and provide support for local administration decisions, Stewart is proposing a system consisting of a County data center providing web-based access to all the mayors' offices. This solution will include:

- A geo-database of land information based on the official cadastre map;
- A valuation model for property;
- An administrative addressing system;
- Zoning information; and
- Public access (Internet and Intranet)

This spatial database solution is a major support for:

- Various evidence (inventories) for local administration (County Council and Mayors' Offices)
- Support for property taxation system
- Support for the physical development of County and UATs
- Support for zoning regulation to be applied, managed and controlled
- Support and source for national evidence (inventories)

## **5.2 Geodatabase**

A key component to the solution will be a geo-database, which will contain the land information. The foundation of this geo-database, will be the official cadastral map which contains land property limits and construction (buildings) together with the attributes describing the land and construction (area, destination, category of use, utilities, etc.), owner information and administrative boundaries. This geo-database will allow data to be exchanged with national cadastre office systems and other national systems that use/provide this data.

## **5.3 Valuation Model**

A valuation model will be added in order to insert the established value for each property in an automated mode. This value will have two aspects: 1) value for taxation as established by the fiscal code using technical data of land and buildings, and 2) market value, based on a model developed using the County Notary Chamber Annual Report (CNCR). This valuation model will generate a report on tax liabilities (taking into account exceptions) and may also be used to track tax payments.

## **5.4 Administrative Addressing**

An administrative address system, for all localities within the county, will be developed as an overlay to the cadastral map. The address system is a responsibility of local administration established by law. Not all localities have addresses established, and when they are based on the cadastral map, it will be easier to develop or to represent addresses. Each property inside and outside the localities will have an address assigned. It is important to develop an address system because all inventories of local administration are related to an address.

## **5.5 Zoning**

Again, using the cadastre information as the foundation, zoning (as per urban plans) and development information (as per development plans) will become an overlay within the system. This will provide an excellent tool for the mayor's office to make strategic decisions regarding the activities for growth and development within their communal territories. Tools will be provided to support zoning and planning related tasks.

## **5.6 Public Access**

Both an Internet and Intranet access will be available to the County council, Mayors' Offices, central institutions and the public as appropriate and/or allowed by law. This is an important element within the solution. Not only does it provide 24/7 availability of information to the users and provide an excellent information distribution mechanism, but also is a public "check" on the data and actions of their elected officials.

## **5.7 Primary functionality of the system**

The primary categories of functionality of the proposed system are as follows:

- Agricultural registry



- Construction registry
- Farmers and farms registry
- Property tax, fiscal role, list of all taxes and tax payers
- Urban regulations for the UAT and development with the issuance of urban certificates
- Addressing system

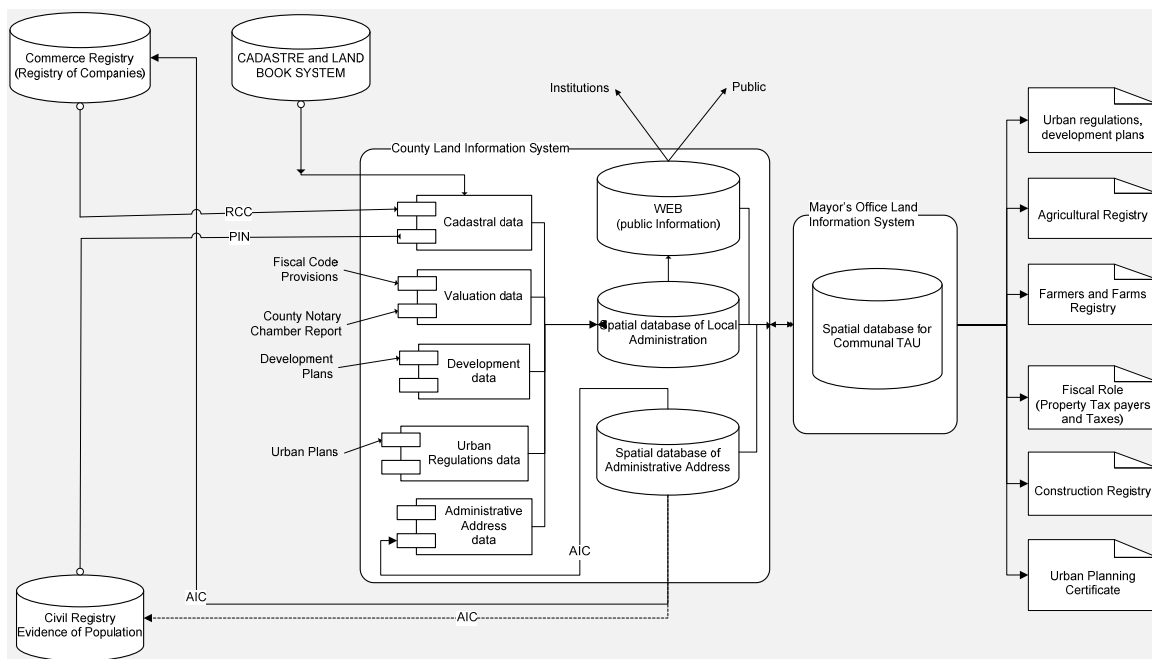
## 5.8 Primary categories of data

The primary categories of data that are needed to support the system are as follows:

- Cadastral data (graphical and textual)
- Fiscal code data and beacon data provided by CNCR
- Urban regulations
- Development plans
- Address data

## 5.9 Proposed General Structure of the System

The following diagram illustrates the proposed general structure of the technical solution<sup>1</sup>:



<sup>1</sup> Abbreviations in the diagram:

RCC: Registered Company Code

PIC: Personal Identification Code

AIC: Address Identification Code

## 5.10 System Development & Implementation Steps

Before any system configuration or development begins, current municipal management, and land information management workflows will be studied and the resultant recommended workflows will be developed. These processes will be used to modify the toolset<sup>2</sup> to include the previously listed functionality. This toolset will be implemented in a central location in the county. Relevant data that currently exists will be migrated into the system and will be augmented with new data collected to complete the aforementioned required data sets. Municipal offices across the county will be provided web-based access to the system. This will be followed by training to ensure adoption of the toolset by municipal staff.

In the second stage of development, the county departments for agriculture, forestry, waters, roads, utilities companies, environment, etc., will be invited to participate to the system. After the second stage of activity, a county-wide, correlated spatial data infrastructure (SDI) will be operational with all participants sharing land data and information.

## 5.11 Costs for SISTM PPP

The most significant cost for the successful SISTM solution for Romania is the development of the land base (cadastre) data set. Because the laws of Romania require a physical field survey in order for a property to be registered and titled, a significant amount of effort (physical and financial) will be focused in the early project stages on the data collection and verification of property information. This includes property boundary surveys, property attribute collection and property title research. The supplemental data layers (zoning, addressing, etc.) that rely on the cadastre will be fairly insignificant cost items. It is important to note that the strategy of the PPP is not only for the development and implementation of the solution, but also the on-going maintenance and support of the solution during the agreed partnership period.

The technology (IT, communications) investment will be the 2<sup>nd</sup> most significant investment component for the project, followed by project management and implementation. Under the PPP approach, the private sector partner will be providing the up-front project financing that will allow for the rapid development and deployment of the system. The faster the system is online, the faster revenues can be collected, thus bringing the financial and customer service benefits of the PPP approach to the forefront for both the public and private sector partners.

## 6. SOLUTION BENEFITS

There are numerous benefits to the proposed solution. Listed below are the key benefits to the local administration:

- The County local administration becomes the model for a reformed administration in Romania
- Secures property rights of all citizens and leverages property as investment

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<sup>2</sup> Stewart's landfolio® software is the tool used for the SISTM solution.

- Empowers citizens to shape their communities via market driven development
- Improved citizen services – local access, more data available/easier, improved efficiencies of the government
- Potential source of revenue and jobs
  - Real estate transaction services
  - Public safety/disaster planning/response/recovery
  - Transparent property tax
  - Accelerated rate of time to do business (faster payments = faster revenue)
- Attract Foreign Direct Investment (FDI) as a result of secure title, county knowledge of business opportunities
- Empowers fiscal decentralization
- Provides access to multi-departmental data sets
  - Improves decision-making
  - Inter/intra government communication
- Assist in compliance with EU agriculture (LPIS/IACS) regulations and fund distribution

## 7. CONCLUSION

In reviewing the potential revenue sources in comparison with the upfront investment by the private sector partner, the project has been deemed to be financially viable for both the private and public partners, with an estimated 25% ROI over a 10-year project lifecycle. Because of the large up-front data acquisition costs (surveying, mapping, etc.) there is a significant investment required at the onset of the project by the private partner.

The Cadastre that is created as a result of the data acquisition phase results in a reliable public record that contains a delineation of individual parcel boundaries, ownership information and the rights associated with each parcel that is used to confirm ownership and as a basis of taxation. When the ownership information is created in this manner, a modern, transparent and auditable land records management system is developed which is used to feed a GIS, in addition to a variety of land records management software modules developed by Stewart for land registry records keeping, cadastral mapping and tax revenue calculation.

It is estimated that the partnership will operate with negative cash flows in the first 5 years of the project, but will move to break even and positive revenue generation in year 6. Importantly, by adding an additional county(ies) to the PPP, the break-even point is accelerated significantly as is the ROI.

As of this writing, the PPP law in Romania has been rejected by the EU, thus requiring a re-write and re-submittal of the law by Romanian authorities. Therefore the implementation of the PPP approach has been delayed in Romania, but the project concept will continue forward with some initial efforts to be completed via conventional tendering.

This strategy will have to be customized for different clients, however as a result of the Romanian initiative, the foundational framework is now understood by the Stewart team, resulting in a rapid analysis procedure for evaluating suitability of each candidate client:

- In some countries, the private sector will effectively provide the required project financing, technology, management expertise, data collection/management services, and limited operational support. The public sector provides long term payment commitments from its operating budgets/revenue collection, existing data sets and the political will to support the project and implement the process changes to improve operational effectiveness, efficiency, and tax collection.
- In other countries, instead of the above financing approach, it may be determined that it is feasible to share in increased revenues resulting from improved tax and fee collection, and/or provide a completely outsourced/managed service.

Not all projects or clients will be suitable candidates for this PPP project option. The experience gained during the conduct of this feasibility study has provided the Stewart team with a valuable learning experience that will enable the company to effectively go-forward in Romania, as well as determine the viability of other potential markets which will produce an acceptable return on investment (ROI) for all the parties involved.

## BIOGRAPHICAL NOTES

**Jill Urban-Karr** is the Executive Vice President of the Stewart Global Solutions, where she is currently working on projects and market development activities in Africa, the Middle East, the Caucuses and Eastern Europe. She is a senior manager with a strong background in land registration, cadastre and real estate market modernization in both the public and private business sectors. She has proven her ability in strategic planning, process analysis, needs assessment, and proposal development on numerous international projects. Ms. Urban-Karr has pursued and implemented multi-participant e-Government and Land Tenure/Land Administration projects for both the public and private sector throughout the world, including: Costa Rica, Romania, Egypt, Madagascar, Benin, Bulgaria, Croatia, Jordan, United Arab Emirates, Belize, Bermuda and many others.

**Jack McKenna** is the Vice President for Stewart Global Solutions and he is currently consulting and managing projects in Latin America, the Caribbean and West Africa. He is an experienced surveyor, photogrammetrist, remote sensing and GIS analyst. He has extensive experience in technical proposal development and national mapping programs for developing countries and he has coordinated multi-participant GIS projects in both the public and private sectors worldwide. Mr. McKenna received a National Certificate in Civil Engineering from the College of Technology in Belfast, Northern Ireland in 1976. His career began with the Ordnance Survey of Northern Ireland (OSNI) where he was trained in cartography, surveying (Royal Institute of Chartered Surveyors standards) and photogrammetry. He has over 39 years of specialized experience in creation of GPS control densification networks, aerial survey for the creation of national mapping programs and implementation of enterprise-wide GIS functionality. Mr. McKenna joined the Stewart family of companies in 1999 when he managed GIS and mapping services for the company's US clients. In 2003 he expanded his activities to include international clients in the Caribbean, Latin America, Africa and the Middle East. Mr. McKenna is a member of the Urban and Regional Information Systems Association (URISA), the American Society for Photogrammetry and Remote Sensing (ASPRS) and the British Remote Sensing and Photogrammetric Society

**Paul-Dan Ursu** is a Senior Land Administration Consultant for Stewart Global Solutions where he is currently working on the detailed strategy for Public Private Partnerships with specific expertise in the countries of Eastern Europe. Mr. Ursu graduated from the Polytechnic University of Bucharest (Romania) with a degree in Computer Science Engineering in 1978. He has worked at both the local and national administrative levels of Romanian Government as the Director of IT. In addition to this feasibility study for the PPP, he has recently participated as the Technical Project Manager on Stewart's land policy development project in Benin, West Africa – a Millennium Challenge Corporation (MCC) funded project. Mr. Ursu is a Certified Project Manager (PMP) from the Project Management Institute (PMI).

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