



LAND TENURE CENTER

University of Wisconsin - Madison

Consultancy Services to
The Government of the
Republic of Trinidad & Tobago

LAND USE POLICY AND ADMINISTRATION PROJECT (LUPAP) LAND SURVEYING COMPONENT

SITUATION ANALYSIS REPORT

(INCLUDES A REVIEW OF THE 1998 REGULATIONS)

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1. EXECUTIVE SUMMARY

This report discusses the current status of land surveyors regulations in Trinidad and Tobago.

1.1 The terms of reference for the land surveying component of LUPAP were prepared before the Land Surveyors Regulations were approved in 1998. Within the profession there is general satisfaction that legislation and regulations have been prepared. However there is dissatisfaction in four specific areas:

- the significant areas where the 1996 Land Surveyors Act is silent.
- the ambiguities and inconsistencies between the 1996 Act and the 1998 Regulations. Recommended definitions of the major categories of land surveying are provided.
- the Regulations provide that specified rules be prepared for the execution and presentation of cadastral surveys – this needs to be done; also additional Regulations and Rules for cadastral surveys need to be prepared to reflect changes in surveying technology
- transitional measures to enable existing practitioners in various categories of land surveying to register are required

1.2 Suggestions for some of the new regulations required for geodetic surveying, hydrographic surveying, photogrammetric surveying and engineering surveying are outlined. In the context of land surveyors regulations, the consultants propose to remove land management entirely from the categories of land surveying; but to propose best practice cadastral land surveying guidelines to promote good land management.

1.3 The consultants are committed to adopting methodologies that ensure the fullest involvement of the profession (Board, Institute and Government); specifics of achieving this, such as meetings and working groups are described. The form of presentation of the consultants' proposals will be:

- For the 1996 Act: a list of additions, amendments and repeals;
- Regulations presented as one document incorporating the existing sections and new sections (modifications of existing sections will be clearly identified);
- A new document consisting of Land Surveyors Rules

1.4 The views of other professionals in land related disciplines have been sought to obtain agreement in specific areas where land surveying impinges on the other professions. A Working Group of the LUPAP Steering Committee is being created, this will include representatives of the concerned professions.

1.5 In conclusion a list of criteria that should inform and control the entire process of development of survey regulations is presented. For example what are the regulations seeking to achieve? what are appropriate adherence mechanisms? Surveyors are invited to consider these criteria.

2. INTRODUCTION

The LAND SURVEYORS REGULATIONS (under the Land Surveyors Act No. 33 of 1996) were published as legal notice no. 275 legal supplement Part B – vol. 37 No. 211 on 12th November 1998. These regulations:

- a) Prescribe procedures for the practice of land surveying
- b) Prescribe professional qualifications and experience required for registration under the Act of Trinidad and Tobago Land Surveyors.

During the period November 1999 to January 2000 Brazier and Griffith-Charles made this assessment of the current situation by:

- a) analysing the 1996 Act and the 1998 Regulations
- b) reviewing earlier legislation and regulations
- c) having discussions with the Land Survey Board and members of the professional body
- d) interviewing the consultant on the project to digitise the records at the Registrar General's Department.

(Brazier and Griffith-Charles are fully aware of computerisation projects at the Lands and Surveys Division.)

The terms of reference for the Land Surveying Component of the Land Use Policy and Administration Project (LUPAP) are at Annex D.

A comprehensive list of surveyors, both registered and unregistered, who may potentially be affected by any new regulations to be developed, was compiled and is at Annex A. A list of land related legislation which may impact on the practice of surveying in all categories is at Annex B.

3. REVIEW OF SITUATION

The current situation in the surveying community, in terms of the recently passed legislation governing the practice, is that there is satisfaction that regulations have been prepared. However there is dissatisfaction in the following areas:

- a) There are areas in which the Act is silent and where amendments may be required.
- b) There are some points in the regulations that are either counter to the provisions of the Act or ambiguous.
- c) The general policies for practice and presentation that are in force for cadastral surveying are not documented and this leads to charges of subjectivity and arbitrary application.
- d) There is a need for defining policies and specifications in order to maintain and improve standards in cadastral survey data acquisition and presentation.
- e) There is an urgent need for deriving equitable transitional measures for determining competencies and experience for

registration in areas of surveying other than cadastral surveying, similar to the measures provided for in the Act for the practice of cadastral surveying (See Part V, Clause 26).

These areas need to be addressed so that the survey system may become more open and acceptable to the surveying community.

3.1 AREAS IN WHICH THE ACT IS SILENT

3.1.1 Rules for non-cadastral surveying

The Act provides for Regulations to be made by the Board in Part XI, Section 64. Subsection e) of this part gives the authority to the Board to:

‘Prescribe any matter or thing relating to the accuracy of surveys’

This would allow regulations to be developed for all the other categories of surveying. The Regulations, however, at Section 41 Subsection 1 states:

‘All rules for the execution of cadastral surveys, recording of field notes, and the preparation of cadastral plans shall be established from time to time, by the Board, in consultation with the Institute and the Director of Surveys.’

This would only provide for Rules to be made for the execution of cadastral surveys and not any other category of surveying acknowledged under the Act and the Regulations. This Subsection should be revised to provide for rules to be developed for all the other categories of surveying.

3.1.2 Exclusionary Clauses for minor survey operations

Part IX Offences and Penalties subsection 55(c) in the 1996 Act states that anyone who performs any survey and who is not registered commits an offence. This would include the simplest acts of measuring areas of land using survey techniques or setting out boundaries within a parcel with no intention of creating new ownership or performing development. An exclusionary clause is therefore necessary to exempt the practice of surveying in innocuous exercises. The Act also makes illegal the practice of surveying by civil engineers all of whom have been taught some engineering surveying for the purposes of setting out construction. Again an exclusionary clause should exempt civil engineers from prosecution for carrying out restricted engineering surveying. This restriction on performing engineering surveying arises because civil engineers are given only limited instruction in the theory, methods and equipment required for land surveying. The civil engineer should not carry out complex surveying involving in-depth knowledge of geodetic principles.

3.1.3 Survey Technicians

The Act recognises survey technicians operating in a supporting role to the land surveyor, as has always existed in cadastral surveying and would continue to exist. The Regulations allude to this practice at Regulation 29(2), which states:

‘Every survey shall be carried out by a surveyor personally or by assistants under the supervision of a surveyor.’

For technicians to perform cadastral surveying unsupervised was also illegal under the previous survey legislation. Dissatisfaction now exists among some survey technicians in other surveying categories, who have been accustomed to performing surveys unsupervised. The current Act now makes such activities illegal and liable to fine and imprisonment as stated in Part IX Offences and Penalties, subsection 55(c). Current practice in cadastral surveying is tending toward employing graduate surveyors in the role previously performed by technicians, however, the problem should be addressed for those persons with many years experience who operate unsupervised. Two possible options are:

- a) for the technicians who desire to continue operating unsupervised to be required to upgrade their theoretical knowledge of surveying so that they qualify under the normal documented rules for Registration under the Act. In this case no special amendments would have to be made to the current Act or Regulations to permit their registration.
- b) to examine or otherwise assess the competence and experience of the technicians affected and to provide the opportunity for provisional registration for them for a finite period. In this case an amendment would have to be made to both the Act and the Regulations.

3.1.4 Registrar-Secretary term of office

The Act is silent on the length of the term of office of the Registrar-Secretary. This should be stated in order to allow for smooth transitions between successive personnel who may occupy this post.

3.2 AMBIGUITY IN THE LEGISLATION

There is some inconsistency in terminology:

The Act provides for a Surveyor being a:	The Regulations provide that the Major Categories of Survey are:
hydrographer	hydrographic surveying
engineer surveyor	engineering surveying
cadastral and land management surveyor	cadastral surveying
	land management
photogrammetrist	photogrammetry,
geodesist	geodetic surveying
cartographer	cartography
	geographical and land information systems
or as may be prescribed by the Board	any other land surveying discipline recognised by the Board & Institute

There is no one-to-one match between the categories of surveyor and the categories of surveying. There is therefore a need to clarify this issue. The definition of surveyor and the major categories of survey currently recognised by the Land Survey Board should be defined in the regulations.

There are two terms in the Act to define the processes performed by the individual covered by the Act, and two to define the individual; the processes are *land surveying* and *surveying*, and the individuals are *Land Surveyor* and *surveyor*. In each case (process and individual) the two terms should be condensed into one to provide more clarity and less ambiguity. They are synonymous.

Other professionals in land related fields have voiced disapproval of the term 'land management' to describe the functions sometimes performed by the land surveyor, particularly the cadastral land surveyor. There are other professionals who, like the land surveyor, demonstrate some of the many varied skills and knowledge required for efficient land management. It is recommended that since the land surveyor holds no monopoly in the possession of all the requisite land management skills that the term 'land management' be deleted from amongst the categories of survey.

It is arguable that cartography and geographical / land information system (GIS / LIS) management should also not be separate categories within surveying since persons other than surveyors may, through study and experience acquire the particular skills necessary for performing these functions. Therefore, even though regulations and best practice guidelines should be documented to maintain standards where these functions are used to assist the land surveying process, registration should not extend to cartography and GIS / LIS.

The definitions of 'major categories of survey' as stated in the regulations should be revised to read:

- cadastral surveying
- geodetic surveying
- hydrographic surveying
- photogrammetric surveying
- engineering surveying

This would bring the regulations into conformity with the Act and with the current practice in Trinidad and Tobago.

3.2.1 Recommended definitions of the major categories

The following are the recommended definitions of the major categories of survey and the professionals who perform them:

a) Cadastral surveyor

(As defined by the Act) is the individual who 'determines the form, contour, position, area, shape, height, depth or nature of any part of the earth or of any natural or artificial features, and the position, length, and direction of bounding lines on, below or above any part of the earth for the purposes of making legal

plans defining boundaries and registering land or documents with appropriate authorities’.

The functions also involve the acquisition, management and revision of spatial data for the informing of land management decisions.

b) Geodetic surveyor

The professional who determines the size, shape and gravity field of the earth and makes measurements to relate any part of the earth or any natural or artificial feature to the whole. In Trinidad and Tobago this could be extended to include the process of bringing national control into sites of survey.

c) Hydrographic surveyor

This is the professional who measures or depicts those parameters that are necessary to describe the precise nature and configuration of the sea-bed and any natural or artificial features located on it and their geographical relationship to the landmass. The individual also determines and measures the characteristics and dynamics of the sea.

d) Photogrammetric surveyor

This is the individual who determines ‘the form, contour, position, area, shape, height, depth or nature of any part of the earth or of any natural or artificial features’ as derived from air photography or other remotely sensed data.

e) Engineering surveyor

This is the professional who determines ‘the form, contour, position, area, shape, height, depth or nature of any part of the earth or of any natural or artificial features’. The individual is also involved in the setting out of proposed construction according to plan and specifications and the maintenance of positional specifications during construction.

3.3 DOCUMENTING POLICIES CURRENTLY IN FORCE FOR CADASTRAL SURVEYING, BUT NOT CLEARLY DEFINED:

The regulations state: 41(1) All rules for the execution of cadastral surveys, recording of field notes and the preparation of cadastral plans shall be established from time to time by the Board in consultation with the Institute and the Director of surveys. The rules shall include but may not be limited to such matters as:

- a) Acceptable perimeter closure for testing the accuracy of field work
- b) Methods for the survey of irregular boundaries
- c) The type, form and placement of survey marks
- d) Datum lines for surveys
- e) The units of measurement to be used on survey plans and the precision for distances, bearings, angles, areas and co-ordinates
- f) The construction of survey plans, including scales sizes, the type of material the forms to be used
- g) The data to be shown on survey plans

- h) methods of collection and recording field notes
- i) The types of surveying equipment to be used on surveys

Some of these rules were set out in the previous land surveyors' rules and the undocumented policies are related to these. The policies for checking and approval of plans that are currently in force need to be documented if they are to be retained. The following documents are currently under development by the Land Survey Board:

- a) Bye laws approved by the Board (Land Surveyors Handbook)
- b) Specifications for plan preparation for the submission of Survey Orders and Real Property Ordinance plans.

3.4 DEFINING NEW SPECIFICATIONS FOR CADASTRAL SURVEYING

New standards and specifications for accuracy and practice for cadastral surveys need to be determined to reflect changes in surveying technology and application. Some issues that may need to be revised include:

- a) Documenting qualifications and experience to be accepted for registration under the Act for all the categories of Land Surveyors in the transition period and beyond.
- b) Adjustments to cadastral surveys of individual lots for the purpose of improving the consistency of data (bearings, distances, areas, co-ordinates). This will help to improve the existing graphic index maps, and more significantly, be a fundamental contribution to the proposed digital cadastral database to be developed at the Lands and Surveys Division.
- c) Analysis of the propagation of errors and the accuracies required for the proposed digital cadastral database before determining limits to which distances and angles are to be quoted.
- d) Whether different accuracies are to be linked to the eventual topographic map scale areas of 1:2500 and 1:5000.
- e) The need for metadata, data standards, data quality specifications
- f) Land information management. Best practice guidelines in this instance should extend to the use of copyrighted data, and to data that may not be copyrighted but which should be regarded as intellectual property. Guidelines for the use of these data and the professional acknowledgement and reimbursement of the intellectual owner should be stated.
- g) The need for revising plan preparation rules to take into consideration recent and ongoing upgrading of the records at the office of the Registrar General. This upgrading includes the scanning of plans to create monochrome digital records. This is not consistent with the records kept by the Lands and Surveys Division, which have strict colour specifications.

- h) Both existing and proposed legislation which affects land management will be analysed to determine if additional cadastral surveying regulations are required to better inform how land management is practised. For example the 1999 Bills for The Registration of Titles to Land, The Land Adjudication with the requirement for parcel index maps, demarcation maps and unique parcel reference numbers must be addressed

3.5EQUITABLE TRANSITIONAL MEASURES

There is dissatisfaction at present from land surveyors who have been practising in particular disciplines but who are not being registered in those disciplines. Transitional measures are required to take into account individuals who have obtained some measure of experience in various categories. These procedures need to be documented so that the individuals feel that they are being treated equitably.

4. PROVISION OF NEW REGULATIONS

The terms of reference require that new regulations are prepared for the following categories of surveying:

4.1 GEODETIC SURVEYING

Some of the matters to be regulated include but are not limited to:

- a) Prescribing the datums to be used in Trinidad and Tobago
- b) Prescribing the specific transformation parameters that are to be used to transform co-ordinates between the datums
- c) Regulating the provision of survey control in the national context.
- d) Prescribing tolerances for the above.

4.2HYDROGRAPHIC SURVEYING

Trinidad and Tobago is party to the International Hydrographic Organisation and its rules and regulations governing the conduct and chart preparation of hydrographic surveys. Where the IHO rules and regulations are silent, standards would need to be prepared, documented and accepted. Some of the matters to be regulated include but are not limited to:

As with geodesy, prescribing the datums, and the specific transformation parameters that are to be used to transform co-ordinates between the various datums currently in use in hydrography in Trinidad and Tobago.

4.3PHOTOGRAMMETRIC SURVEYING

Some of the matters to be regulated include but are not limited to:

- a) Defining limits to the accuracy of data that can be captured from air photography.

- b) Defining accuracies and location of control points

4.4 ENGINEERING SURVEYING

Some of the matters to be regulated include but are not limited to:

- a) Prescribing closures for checking of gross errors.
- b) Prescribing tolerances for surveys and methods for computing.
- c) Prescribing monumentation for construction and the permanence of same for the duration of the construction.
- d) Procedures and principles for setting out and recording of data.

5. PROPOSED METHODOLOGY

5.1 FULLY INVOLVE THE PROFESSION

- a) To involve fully the profession in the review and the development of the regulations. Groups that comprise the profession and therefore would be part of the discussions include (but are not limited to):
 - The Institute of Surveyors of Trinidad and Tobago
 - The Land Survey Board
 - The Lands and Surveys Division
- b) To organise general meetings of the members of the profession for the acquisition and dissemination of information. Working groups for each of the sub-categories would come out of these general meetings and would use these meetings to report on the status of the recommendations.
- c) To strive for consensus amongst the profession as to what should be regulated and how.
- d) To obtain clear statements of the requirements of the profession and to provide clear statements on the recommendations.

The process is well underway as illustrated by Annex C, which advertises the first of the general meetings.

5.2 TO SEEK THE OPINIONS OF PROFESSIONALS IN OTHER DISCIPLINES

Land surveying regulations impinge on professionals in other land related disciplines notably valuation and land economy surveyors, planners and civil engineers. Professionals in these and other disciplines will be contacted for their views on the impact the proposed regulations would have on their practice. The LUPAP Steering Committee has nominated a representative group to review the relevant areas and comment.

5.3 PRESENTATION OF PROPOSALS

The legislative process is that:

- changes to the Act are approved by Parliament,
- regulations are approved by the Minister
- rules may be approved by the Board,

Therefore it is expected that the simplest and most expeditious route to revising guidelines for practice, in the face of rapidly changing technology, would be to amend rules.

Changes to the Land Surveyors Act 1996 will be presented as a list of additions, amendments and repeals.

The Land Surveyors Regulations will be presented as one document including both the existing 1998 regulations and additional regulations for each category of land surveying. Modifications (including deletions) of existing regulations will be identified clearly.

A new document containing Land Surveyors Rules will be prepared.

6. CONCLUSION

The specific criteria that should inform and control the entire process of development of these survey regulations are the following:

- a) What are the regulations seeking to achieve?
- b) What are appropriate adherence mechanisms?
- c) When are “best-practice guidelines” more appropriate than regulations?
- d) What works well at present?
- e) ...and what needs to be revised?

These questions must be realistically answered by the profession and would then guide the whole process of survey regulation development.

ANNEX A: SURVEYORS OF TRINIDAD AND TOBAGO

CADASTRAL (LICENSED) SURVEYORS (89)

Reg.	NAME OF SURVEYOR			STATUS
62	Mr.	Nasser	Abdul	Lands & Surveys Division
43	Mr.	Horace	Achille	Private enterprise
89	Mr.	Sacha	Addo	Private enterprise
20	Mr.	Leslie	Akum Lum	Private enterprise
48	Mr.	Anwar	Ali	Private enterprise
92	Mr.	Hayden	Ameerali	Private enterprise
76	Mr.	Lyndon	Antoine	Sole practitioner
41	Mr.	Aldwyn	Aqui	Private enterprise
42	Mr.	Calvin	Archibald	Sole practitioner
45	Mr.	Michael	Awang	Sole practitioner
95	Mr.	Joseph	Barbaste	Sole practitioner
37	Mr.	Cuthbert	Bazil	Sole practitioner
38	Mr.	Peter	Beard	Sole practitioner
77	Mr.	Colvin	Blaize	Sole practitioner
46	Mr.	Michael	Boucaud	Private enterprise
54	Mr.	Andrew	Bowles	Lands & Surveys Division
	Mr.	Francis	Charles	Sole practitioner
34	Mr.	Lawrence	Clarke	Private enterprise
96	Mr.	Shelby	Coker	Tobago House of Assembly
79	Mr.	Martin	Cook	Sole practitioner
	Mr.	Errol	Daisley	Private enterprise
49	Mr.	Roopchand	Deonanan	Private enterprise
59	Mr.	Rawle	Derrick	Petrotrin
74	Mr.	Winston	Doyle	Land Settlement Agency
60	Ms.	Stephanie	Elder-Alexander	Lands & Surveys Division
13	Mr.	Hollis	Eversley	Sole practitioner
2	Mr.	Gordon	Farrell	Sole practitioner
	Mr.	Percy	Farrell	Sole practitioner
69	Ms.	Camille	Fortune-Rollock	Lands & Surveys Division

Reg.	NAME OF SURVEYOR			STATUS
80	Mr.	Ron	Gajadhar	Sole practitioner
	Mr.	Garth	Gibbes	Sole practitioner
88	Mr.	Curtis	Gokool	Private enterprise
	Mr.	Darrell	Gomez	Sole practitioner
72	Mr.	Peter	Goodridge	Sole practitioner
63	Ms.	Charisse	Griffith-Charles	The UWI
84	Ms.	Lisabeth-Ann	Hamilton	Lands & Surveys Division
90	Mr.	Lenny	Hanomansingh	Private enterprise
9	Mr.	Albert	Haynes	Sole practitioner
91	Mr.	Dexter	Heerah	Sole practitioner
7	Mr.	Cecil	Herbert	Sole practitioner
11	Mr.	Godfrey	Jardine	Private enterprise
	Mr.	Darrell	Jardine	Sole practitioner
57	Mr.	Michael	Jones	Lands & Surveys Division
81	Mr.	George	Johnson	Sole practitioner
	Mr.	Kelvin	Joseph	Sole practitioner
73	Mr.	Trevor	Koylass	Sole practitioner
36	Mr.	Ivan	Laughlin	Private enterprise
50	Mr.	Tyrone	Leong	Lands & Surveys Division
66	Mr.	Gerald	Lewis	Sole practitioner
94	Mr.	Geoffrey	Long	Private enterprise
83	Mr.	Bhaghirathi	Maharaj	Lands & Surveys Division
61	Mr.	Winston	Mohammed	Private enterprise
87	Mr.	Brian	Moses	
	Mr.	Lance	Murray	Sole practitioner
64	Mr.	Hakeeb	Nandalal	Sole practitioner
93	Mr.	Ronald	Nowbutt	Lands & Surveys Division
97	Mr.	Shri	Persad-Maharaj	
12	Dr.	Aldwyn	Philip	Sole practitioner
58	Mr.	Murchisson	Pierre	Lands & Surveys Division
	Mr.	Vernon	Pinard	Private enterprise
86	Mr.	Indar	Ragoo	

Reg.	NAME OF SURVEYOR			STATUS
40	Mr.	Winston	Ramcharan	Sole practitioner
55	Mr.	Ganeshdath	Ramcharitar	Sole practitioner
22	Mr.	Krishna	Ramlakhan	Sole practitioner
23	Mr.	Arnold	Ramon-Fortuné	Private enterprise
67	Mr.	Harvey	Ramrekha	Sole practitioner
70	Ms.	Marion	Ramroop-Mohammed	Plipdeco
82	Mr.	Sugjage	Reemaul	Lands & Surveys Division
78	Mr.	Fitzherbert	Reyes	Lands & Surveys Division
	Mr.	Malcolm	Robertson	Sole practitioner
25	Mr.	Kelvin	Romero	Sole practitioner
71	Mr.	Lyn	Roopchand	Sole practitioner
	Mr.	Peter	Samuel	Sole practitioner
53	Mr.	Roop	Singh	Lands & Surveys Division
28	Mr.	Hector	Sankar	Sole practitioner
75	Mr.	Keith	Scott	Sole practitioner
53	Mr.	Roop	Singh	Lands & Surveys Division
29	Mr.	Hugo	Somarsingh	Sole practitioner
85	Mr.	Jamal	Sookoor	Private enterprise
47	Mr.	Kenneth	Sturge	Sole practitioner
30	Mr.	Winston	Sylvester	Sole practitioner
	Mr.	Gill	Thomson	Sole practitioner
31	Mr.	Glenn	Wilkes	Sole practitioner
17	Mr.	Paul	Williams	Private enterprise
	Mr.	Carl	Williams	Sole practitioner
65	Mr.	Burton	Williams	Private enterprise
18	Mr.	Elton	Wyke	Ministry of Housing
32	Mr.	Clement	Yip	Sole practitioner

HYDROGRAPHIC SURVEYORS (REGISTERED) (2)

Reg.	NAME OF SURVEYOR			STATUS
1001	Mr.	Richard	Cattermole	Private enterprise
1002	Mr.	David	Neale	Private enterprise

GRADUATE SURVEYORS (UNREGISTERED) (72)

Reg.	NAME OF SURVEYOR			STATUS
	Ms.	Cheryl	Elder	Lands & Surveys Division
	Mr.	Darren	Hamid	Lands & Surveys Division
	Ms.	Meena	Mohammed	Lands & Surveys Division
	Ms.	Alicia	Naimool	Lands & Surveys Division
	Mr.	Kelvin	Ramdass	Lands & Surveys Division
	Mr.	Ronald	Wiseman	Lands & Surveys Division
	Mr.	Russell	Yuille	Private enterprise
	Mr.	Ian	Grant	Private enterprise
	Ms.	Lisette	Maxime	Private enterprise
	Ms.	Paula	Drakes	Private enterprise
	Mr.	Barry	Hernandez	Private enterprise
	Mr.	Justin	Jean-Baptiste	Private enterprise
	Mr.	Dern	Seecharan	Private enterprise
	Ms.	Anna-Lisa	Ramsaroop-Baiju	Private enterprise
	Mr.	Montgomery	De Souza	Private enterprise
	Mr.	Ric	Ali	Private enterprise
	Mr.	Gerard	Buchun	Private enterprise
	Mr.	Sudesh	Seegobin	
	Mr.	Edsel	Thompson	Private enterprise
	Ms.	Tessa	Caprieta	Private enterprise
	Mr.	Randy	Rambhai	
	Mr.	Jefferson	Laptiste	
	Mr.	Damian	Hinds	
	Ms.	Sherrie-Lee	Samuel	
	Mr.	Carlton	Corneal	

Reg.	NAME OF SURVEYOR			STATUS
	Mr.	Curt	De Coteau	
	Mr.	Pritam	Kumarsingh	
	Mr.	Perkins	Marshall	
	Mr.	Asim	Ali	
	Mr.	Satesh	Ramsumair-Maharaj	
	Mr.	Suraj	Sankar	
	Mr.	Nigel	Mohammed	
	Ms.	Gillian	Burkett	
	Mr.	Vijas	Ramphalie	
	Mr.	Ian	Grant	
	Mr.	Tarick	Hosein	
	Mr.	Kelvin	King	
	Mr.	Avery	Roberts	
	Mr.	Vijay	Sookdial	
	Mr.	Kwame	Emmanuel	
	Ms.	Yosha	Ragbirsingh	
	Ms.	Shivanti	Balkaransingh	
	Mr.	Earl	Edwards	
	Mr.	Haydn	Solomon	
	Ms.	Karla	Edwards	The UWI
	Mr.	Andre	Rigsby	
	Mr.	Kenneth	Lowe	
	Mr.	Michael	Soo Ting	
	Mr.	Mohan	Petam	
	Dr.	Robin	Rajack	
	Mr.	Kirk	Woon Sam	
	Mr.	Kurt	Lee Wen	
	Ms.	Geraldine	Houlder	
	Mr.	Adrian	Maharaj	
	Mr.	Anil	Singh	
	Mr.	Rawle	Sirju	

Reg.	NAME OF SURVEYOR			STATUS
	Ms.	Nicole	Joseph	
	Mr.	Gregory	Forde	
	Mr.	Adam	Seesahai	
	Ms.	Angelique	Balbosa	
	Mr.	Michael	Chan Chow	
	Mr.	Patrick	Chinasing	
	Ms.	Mary	Frontin	
	Mr.	Gregory	Morris	
	Mr.	Visham	Rambhajan	
	Mr.	Chateram	Bachan	
	Mr.	Iqbal	Mohammed	
	Mr.	Martin	Richards	
	Mr.	Terence	Hosein	
	Mr.	Gerard	Wharton	
	Mr.	Anthony	Arjune	
	Mr.	Dexter	Davis	

SURVEYORS IN ACADEMIC SURVEYING FIELDS (UNREGISTERED) (4)

Reg.	NAME OF SURVEYOR			STATUS
	Dr.	Jacob	Opadeyi	The UWI
	Dr.	Raid	Al-Tahir	The UWI
	Dr.	Bheshem	Ramlal	The UWI
	Dr.	Keith	Miller	The UWI

TECHNICAL SURVEYORS (UNREGISTERED)

There are approximately a hundred technical surveyors in Trinidad and Tobago, both in Government Departments and in the Private Sector; there are about ten technical surveyors in the Lands and Surveys Division.

ANNEX B: LIST OF LAND RELATED LEGISLATION

Act	Reference:
State Lands Act	C. 57:01
State Grant and Leases (Reissue) Act	C. 57:02
Resumption of Land Act	C. 57:03
State Liability and Proceeding Act	C. 8:02
State Suits Limitation Ordinance	C. 5/2 (1950)
Housing Act	C. 33:01
Interpretation Act	C. 3:01
Highways Act	C. 48:01
Three Chains Act	57:04
Landlord and Tenant Ordinance	Ch. 27/16 (1950)
Leases and Settlements Estates Ordinance	Ch. 27/15 (1950)
Partition Ordinance	Ch. 27/14 (1950)
Real Property Ordinance	Ch. 27/11 (1950)
Real Property Limitation Ordinance	Ch. 5/7 (1950)
Prescription Ordinance	Ch. 5/8 (1950)
Wills and Probate Ordinance	Ch. 8/2 (1950)
Trustee Ordinance	Ch. 8/3 (1950)
Conveyancing and Law of Property Ordinance	Ch. 27/12 (1950)
Slum Clearance and Housing Act	C 33:02
Slum Clearance Housing (Temporary Provision) Act	C 33:03
Town and Country Planning Act	C 35:01
Trinidad and Tobago Surveying Act	C 60:01
Valuation of Land Act	C 58:03
Rent Restriction Act	C 59:50
Rent Restriction (Short Tenancies) Act	C 59:51
Rent Restriction (Dwelling Houses) Act	C 45/81
Agricultural Smallholding Tenure Act	C 59:53
Mines, Boring and Quarrying Act	C 61:01

Act	Reference:
Landlord and Tenant Act	No. 19/81
Land Law and Conveyancing Act	No. 20/81
Trustee Act	No. 21/81
Limitation Act	No. 22/81
Condominiums Act	No. 23/81
Land Registration Act	No. 24/81
Succession Act	No. 27/81
Registrar General Act	C 19:03
Registration of Deeds Act	C 19:06
Land Tenants (Security of Tenure) Act	No. 11/81 (as amended 15/83)
Forests Act	C 66:01
The Archipelagic and Exclusive Economic Zone Act	No. 24/86
The Territorial Sea Act	No. 22/86
Land Acquisition Act	No. 28/94
Land Surveyors Act	No. 33/96
State Land (Regularisation of Tenure)	No. 25/98
The Registration of Titles to Land Bill, 1999	No. 8/99
The Land Adjudication Bill, 1999	No. 6/99
The Land Tribunal Bill, 1999	No. 7/99

ANNEX C: NOTICE OF FIRST GENERAL MEETING



NOTICE **Information Circular to Surveyors of Trinidad and Tobago** **LAND SURVEYORS REGULATIONS**

This is to inform you that Ordnance Survey (Britain) has commenced work on a Government of the Republic of Trinidad and Tobago contract to review and develop Land Surveyors Regulations. To be successful we need the support of all the members of the surveying profession.

Methodology

We wish to involve fully the whole profession – Institute of Surveyors, Survey Board, & Lands and Surveys Division and so we will introduce the contract at a **Meeting to be held at 10:00am on Saturday 22 January 2000 at the Professional Centre.** We hope to get nominations for members of working groups who will review and revise our proposals. We will produce clear statements of the requirements; and strive for consensus. Our contract is to be complete by 30 June 2000.

Discussion Points

What are the regulations seeking to achieve?

What are appropriate adherence mechanisms?

When are “best-practice guidelines” more appropriate than regulations or rules?

What works well at present? and what does not?

Please come to this Meeting to ensure that we are aware of the views of the whole surveying profession.

For further information contact:

Fred Brazier 633 8948 or 625 0427 email: fbrazier@wow.net

Charisse Griffith-Charles 640 2959 or 662 2002 Ext. 3314 email: charain@tstt.net.tt

ANNEX D: TORS - LAND SURVEYING COMPONENT OF LUPAP

As part of a program of land tenure-based legislative reforms, the Government has proclaimed the new Land Surveyors Act. The definition of surveying includes such branches of the discipline as:

- engineering surveying
- photogrammetry
- geodesy
- land management
- hydrography

The Act seeks to regulate the practice of cadastral surveyors and land surveyors who practice in other surveying categories. The Land Surveys Regulations for the practice of cadastral surveying are currently being drafted by the Institute of Surveyors of Trinidad and Tobago.

The consultant is required to review the cadastral surveying regulations and to draft regulations for the other surveying categories mentioned above. The regulations will reflect the changes in the new Act as well as accommodate changes in cadastral surveying technology and methodologies including:

- use of computerised field equipment;
- high precision and sub-meter accuracy Global Positioning System receivers; and
- the development of computerised land information systems and management of land information.

These regulations should take into account and facilitate the modernisation efforts underway at the Land Registry and the Lands and Surveys Department to create an integrated parcel-based digital cadastre and land registry.

Note that these terms of reference were prepared before the Land Surveyors Regulations were approved in 1998.