

How Is the VGGT Travelling over Time in the Survey Community?

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SUMMARY

During the FIG Working Week in Christchurch, in May 2016, FAO and FIG joined forces to make a further step in the implementation of the VGGT in surveying education and research. The FIG Academic Members Forum decided to form a working group with the aim of exploring the VGGT from a surveying perspective.

The working group proposed to conduct research to assess practical examples of VGGT implementation in different countries and the impact on the surveying profession. As a first step a 'methodology of assessing (type of) impact of the voluntary guidelines on surveyors and survey profession' is developed. Crucial aspects include thereby how to define impact (from a policy or a guideline) and clarify what needs to be considered when referring the survey profession. As part of developing this methodology, it became clear that an exploratory survey needed to be conducted relating various aspects of the introduction and acquaintance with VGGT among survey professionals. In this survey, titled 'How is the VGGT travelling over time in the Survey community?' the working group aims to address the following research questions: 1) What is the awareness and knowledge on the VGGT among surveyors, 2) What is the professional relevance and recognition, and 3) How is the VGGT addressed in surveying education?

An online questionnaire has been developed and sent to universities (FIG Academic Members), governments (FIG Affiliates), professional associations (FIG National Associations), and private sector (FIG Corporate Members). This paper presents both the underlying methodology and first findings from the survey. The aim is to clarify the degree to which survey professionals are either acquainted with the goals of VGGT and or are actively adopting part of the VGGT in their daily work, and to describe the variation in time, scale and geographic or institutional context related to this uptake. This variation could explain under which circumstances and in which institutional and professional context the uptake seems to be most or least successful.

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1. INTRODUCTION

FAO's Voluntary guidelines on the responsible governance of tenure of land, fisheries and forests in the context of national food security (FAO 2012), abbreviated VGGT hereafter, provide a general framework for both governmental officials and professionals on how to deal with land tenure in a responsible way. Traditionally, land tenure management is largely organized by land surveyors, taking care of the cadastral mapping part of registering tenure, and legal professionals, such as notaries, conveyancers or land registries, taking care of the legal part. The VGGT posit an alternative action framework for countries or subnational governments where either the land administration institutions do not exist, or where the institutions do not function properly. In both cases both mapping and registering (in the broader sense) still need to take place, yet the emphasis shifts from simply registering for anyone with a private individual right only, to acknowledging that a wider palette of different claims on land and space need to be acknowledged, and that a broader set of skills is required once land is governed. Only if this is done properly, the governance of land can be more 'responsible'.

Responsible land governance in the VGGT perspective still provides a role for land surveyors. However, to which extent are land surveyors aware of the VGGT details, and to which extent have the VGGT altered current practices of surveyors. Whilst the VGGT are promoted in many countries, little is known on the degree of adoption of the VGGT guidelines in current surveying practices and degree of adaptation in the day-to-day activities of land surveyors. To gain a better insight in the impact of the VGGT, a working group of FIG proposed to conduct research to assess practical examples of VGGT implementation in different countries and the impact on the surveying profession. As a first step a 'methodology of assessing (type of) impact of the voluntary guidelines on surveyors and survey profession' is developed. Crucial aspects include thereby how to define impact (from a policy or a guideline) and clarify what needs to be considered when referring the survey profession. As part of developing this methodology, it became clear that an exploratory survey needed to be conducted relating various aspects of the introduction and acquaintance with VGGT among survey professionals. In this survey, titled 'How is the VGGT travelling over time in the Survey community?' the working group aims to address the following research questions: 1) What is the awareness and knowledge on the VGGT among surveyors, 2) What is the professional relevance and recognition, and 3) How is the VGGT addressed in surveying education? This article addresses the results related to the first question.

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2. IMPACT THEORY

Before designing the survey we started by identifying how impact can be conceptualized. Any impact study is looking for actual (=observed, documented, planned, executed), potential (=assumed, simulated, extrapolated) and/or perceived (=felt, believed, desired, feared, framed) changes that occur as a result of a particular issue, innovation, phenomenon, policy or intervention. In other words, some deliberate or accidental modification occurs and it results in a complex set of changes (actual, potential, and perceived). If VGGT (V) is the modification and the survey profession (SP) is the object of change than in simple equation form the impact can be formulated as:

$$V \rightarrow \Delta SP$$

This relation assumes three fundamental issues: first of all, we need to know what the source of change, i.e. VG, actually stands for and implies. Secondly, we need to understand and unpack how the object of change, in this case the survey profession, is specified. Thirdly, we need to have some qualifications of what change can be considered impact is, and how to attribute impact to the source of impact.

On the first issue, we can conceptualize VG as a kind of government policy. A policy is generally defined as a *possible response to a problem* (Coenen and Lulofs 2011). FAO amongst other considers a policy: *A definite course or method of action selected (by government, institution, group or individual) from among alternatives and in the light of given conditions to guide and, usually, to determine present and future decisions*¹. Thirdly, policies tend to be connected to certain advocacy coalition frameworks (Schlager 1995, Sabatier 1988). Simply put, actors who share a particular (epistemic) belief system related to particular values, causal relations and problem frames and as a result of that influence and coordinate decisions in a particular epistemic direction. Hence, there are two clarifications necessary before defining what type of policy VGGT is. First of all, there is the issue of what is considered a problem or not a problem. This is dependent on both the problem specification process and the question of which problems attract governments and/or political attention. Secondly, policies (implementation) are often confused with decisions (implementation). A policy is however referred to a coherent set of decisions. As a result, we refer to a policy as a coherent set of agreed decisions aimed to solve a problem framed in a certain advocacy coalition framework. VGGT is therefore a policy that can be unraveled by both the content, coherence logic of the decisions (or aims) and the (values of the) actors who make up the policy subsystem, or the advocacy coalition framework. In Table form (Table 1):

Components of VGGT	Indicators, questions
Content	What are the main points and/or main actions pursued
Coherence logic	What sort of points, actions needs to be connected in order to be relevant, significant, successful ; which causal relations are

¹ <http://www.fao.org/wairdocs/ilri/x5547e/x5547e05.htm>

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	assumed
Advocacy coalition framework	Which and whose shared values are pursued are pursued; who has a benefit if the policy is realised, and who (or whose values are) is negatively affected

Table 1. VGGT defined as policy change / intervention components

On the second question, the Survey Profession is a container object which refers to multiple issues: the professional community of people ², professional practice and structures, their conventional rules of behavior, the usual required education and differentiation in levels of education, the epistemic values of the professional group of people (de Vries, Muparari, and Zevenbergen 2016), the legal rules along which the professional surveyors tend to work, the type of professional standard or recognized artefacts and standards pursued and the variety of surveying activities and goals internationally. In Table form:

Components of ‘Survey Profession’	Indicators, questions
Professional community of people	Which type of groups, associations, people make up the professional field of surveyors?
Professional practices	Which type of activities do land surveyors do where they might or might not need VGGT
Professional structures	Which type of professional rules stimulate or prevent professional activities
Conventional rules of behaviour within the profession	How do surveyors usually handle the rules?
Required education	Which degree or diploma is needed to act officially or unofficially as a (land/quantity) surveyor, or land use planner
Differentiation in educational levels	Which level of education is necessary to understand and deal with which parts of the VGGT?
Epistemic values and beliefs	How do surveyors generally look at a new framework? What do they think or believe about it?
Legal rules guiding profession	Which parts can be changed or not be changed in executing surveys
Type of professional standard or recognized artefacts and standards pursued	How are standards of professionals protected or checked?
Variety of surveying activities and goals internationally	What do surveyors actually do, day-to-day, and how does this differ per country?

Table 2. Survey profession unpacked - detailed components of survey profession

² <http://fig.net/about/index.asp>

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On the relation, namely measuring or assessing the impact (or, otherwise put: justifying the attribution, i.e. that the change in the latter is caused by the change of the former), one has to rely on impact studies and associate logic. (Sanderson 2002) argues that attributing impact to a policy should not only be based on linear, monolithic and causal attributions (meaning: B can directly be explained by the occurrence of A), but should also be derived from evaluating a number of side effects, unforeseen and unplanned developments. There are two ways of seeing this: either the principle of co-evolution (Luna-Reyes and Gil-Garcia 2013), i.e. a number of phenomena develop simultaneously yet independently, but somehow reinforce each other. As a result, the observed effect of one policy may be overestimated, because it is also the result of another (co-)development. Another take at this is the multiple streams model of (Kingdon 1995). A number of development is occurring simultaneously, and at some point in time there is a small window of opportunity in which they connect and reinforce each other. Hence, there are the following possible type of attributions / impact possible:

	Observed development / observed change in line with means of verification	Observed development / observed change not in line with planned goal
Planned goals have been specified with means of verification	Likely to be a direct effect / a direct impact	Apparently several changes have co-evolved simultaneously, but no clear connection / attribution can be found
Planned goals have not been specified with means of verification	Apparently there has been a window of opportunity where multiple streams of development connected	There is no impact or there is a negative impact

Table 3. Type of impacts and attributions of impacts

Now the ultimate exercise after having scanned and interpreted every document is to establish the type of impact values.

3. DESIGN AND EXECUTION OF SURVEY

Based on the above theoretical framework we designed the survey. The survey was first drafted using the above tables, but a rapid review learned that it resulted in questions with either too much jargon, or with ambiguous questions where multiple interpretations were possible. As a result, the questionnaire was adapted and further tested. Goal was to make the questions unambiguous and to provide more multiple choice answers to make the responding easier.

The eventual survey contained 35 questions, divided into 5 sections:

1. Respondent information
2. Educational level and membership details
3. Awareness and knowledge of VGGT

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4. Professional practice
5. VGGT in professional education

The survey was administered using surveymonkey (www.surveymonkey.com) to which the Technical University of Munich had a license. Both the internet link and the file and hardcopies of the survey were distributed. FIG further agreed to distribute the call to complete the survey via their regular newsletters.

4. RESULTS OBTAINED SO FAR

So far, a total of 65 respondents completed the survey, although only 53 of these were valid or complete. This is a modest result for the moment and does not yet allow a full-fledged statistical analysis. However, it seems that the survey was often completed by representatives from each of the countries and that the spread of the origin of countries is reasonable. Furthermore, the responses provide some patterns on some questions.

4.1 Respondent information

The respondents originated from 33 countries. Table 4 provides a summary of the origin of the respondents:

Continent / Region	Number of respondents	Countries
Africa	12	Madagascar (1), Morocco (1), Nigeria (4), South Africa (2), Uganda (1), Zambia (1), Zimbabwe (1)
Asia	11	Indonesia (4), Nepal (1), China (1), Pakistan (2), Sri Lanka (1), Thailand (1), Turkey (1)
Europe	15	Croatia (1), Denmark (1), Germany (3), Hungary (2), Ireland (1), Latvia (3), Switzerland (1), United Kingdom (3)
Latin America and Caribbean	5	Colombia (3), Mexico (1), Trinidad and Tobago (1)
Middle East	2	Egypt (1), United Arab Emirates (1)
North America	3	USA (3)
Pacific island, Australia / New Zealand	5	Australia (1), Fiji (1), Kiribati (1), New Zealand (2),
Total	53	33 countries

Table 4. Origin of respondents

Various types of organizations were represented among the respondents (Table 5):

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Type of organisation	Count
Private Sector	11
University	17
Non-government organisation	3
Professional organisation	5
State Government	2
National Government	10
Regional Government	4

Table 5. Type of organizations represented

4.2 Educational level and membership details

The basic data on age, educational background and whether or not registered surveyor are presented in Table 6:

Age category	Educational background			Yes / No registered or licensed surveyor	
	BSc	MSc	PhD	Yes	No
21-35 years	5	6	2	4	9
36-50 years	3	6	5	11	5
51-65 years	2	11	6	18	6
above 65	0	0	1	0	1

Table 6. Number and type of respondents per age category

Table 7 presents the type of organization and the highest qualification.

Type of organisation	Highest qualification						
	No resp.	Cert.	Diploma	Bachelors	Masters	PhD	Total
Private Sector	1	0	0	4	5	1	11
University	1	1	0	2	5	8	17
Non-government organisation	1	0	0	0	2	0	3
Professional organisation	1	0	1	1	1	1	5
State Government	0	0	0	0	2	0	2
National Government	1	0	0	3	6	2	12
Regional Government	0	0	0	1	2	0	3
Total	5	1	1	11	23	12	53

Table 7. Highest education per organization represented

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4.3 Awareness and knowledge of VGGT

The awareness of VGGT was tested in different ways. First of all, it related to how information is usually received and processed or read. Then a number of questions were posed on how the respondents actually knew about the VGGT.

Table 8 presents the form in which most information is received:

Type of information carrier	Count
Magazine	11
E-mail	16
Newsletter	7
E-newsletter	10
Website	12
Minutes	7
Facebook	9
Other (apps, linkedin)	4

Table 8. Type of newscarriers

Table 9 refers to whether information carrier is actually read. It provides an indication of how people are made aware and which carrier may be most suitable.

Do you read the information received	Count
Always	22
Most times	17
Sometimes	6
Missing value	7

Table 9. Frequency of reading information

Familiarity with VGGT is given in Table 10.

Have you heard of the VGGT	Count
Yes	23
No	17
Missing value	12

Table 10. Familiarity of VGGT

Table 11 provides the response count related to the degree of understanding with the VGGT

What do you understand about the VGGT?	Count
Unfamiliar	8

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Basic understanding	8
Good	9
Excellent	3
Not stated	24

Table 11. Level of familiarity with VGGT

Table 12 gives an indication when VGGT was more or less introduced.

When did you first hear about the VGGT?	Count
Very recently	10
Recently	7
A few years ago	13
Never heard of it	9
Missing value	13

Table 12. First acquaintance with VGGT

Table 13 provides an insight in how active respondents have been working with the VGGT

Have you ever been using or promoting the principles of VGGT?	Count
Yes	16
No	22
Missing value	14

Table 13. Active use of VGGT

For those who used or discussed the VGGT (approximately 8 respondents), Table 14 provides an overview of where and how this occurred.

Type of event	Organized by / when
Workshops	GLTN. Program for certification of Ejido Rights and titling of urban plots. UN Habitat partners meeting 2015. FIG WW Academic Forum 2014,2016. Regional workshop on tenure and disaster management in Trinidad and Tobago. Mekong region land governance project workshops. FIG Young surveyor meetings. ASEAN surveyor working group meeting.
Conferences	Applications of the VGGT in urban and peri-urban areas – key concepts, considerations and prospects. FIG-conference- Christchurch. Papers at FIG working weeks.
Working group	Exploring the VGGT in practice.

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	<p>PROCEDE. VGGT validation workshops 2015 and November 2016 at Abuja, Nigeria. FIG commission 2 Academic forum working group on the VGGT. RICS consultation / review panel for VGGT document</p>
Discussion forum	<p>Workshop on ‘International curriculum on responsible land administration’. The forum to convince surveyor General to subscribe to DFID systematic land titling in Nigeria.</p>
Teaching and learning	<p>As part of the required/recommended reading on my land management lectures on the BSc Geomatics programme . Promoted in the postgraduate research and in undergraduate programme in geomatics. MSc in Geo-information Science and Earth Observation for Land Administration, ITC - University Twente. I have incorporated it into the curriculum of the BSc Geomatics, and PG Diploma Land Administration. MSc Real Estate. Graduate Courses.</p>
Meetings	<p>FIG /FAO Special Session on Implementation of VGGT. XXV FIG Congress, Kuala Lumpur, Malaysia.</p>
Other	<p>Coordinating LGAF implementation in Croatia. Project development and implementation. Convincing Surveyors Council members as to the benefits of SLTR during. Council meeting in 2014.</p>

Table 14. Overview of where and how VGGT was introduced.

With regard to which elements of the VGGT are considered most crucial Table 15 gives an insight.

<p>The VGGT covers five aspects as a reference to improve the governance of tenure. Which aspect or section of the VGGT do you consider most crucial and/ significant for your professional work, and why?</p>					
	Most crucial / significant	Crucial / significant	neutral	Not so significant	Least significant
1. Guiding principles of responsible tenure governance	12	17	4	0	1
2. Legal recognition and allocation of tenure rights and duties	17	12	4	1	0
3. Transfers and other changes to tenure rights and	8	17	7	1	0

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duties					
4. Administration of tenure	16	12	6	0	0
5. Responses to climate change and emergencies	5	14	12	2	19

Table 15. Responses on the degree of significance per VGGT aspects

4.4 Professional practice

The following table 16 shows the degree to which the VGGT are part of professional surveying work, and the position of the respondents towards VGGT.

	yes	no
Are the VGGT in accordance with your national legal system?	19	14
Is VGGT part of your legal framework?	9	25
Should it be part of your legal framework?	26	6
Are surveyors in a good position to support the implementation of the VGGT?	28	6

Table 16. Relation VGGT to professional legal framework

N.B. Those who are not convinced that the VGGT should be part of the legal framework are predominantly from anglosaxon countries or having an anglosaxon system of land tenure legislation. Those who are not convinced that surveyors are in a good position to support the implementation of the VGGT are either from a developing country or Eastern Europe. There is no correlation between the ‘no’s of the question 3 and 4.

Table 17 indicates the degree to which the VGGT is considered useful for surveyors.

	Strongly disagree	Neutral	Strongly agree
VGGT is useful to the role of surveyors	2	4	12
The VGGT should be part of professional education of all surveyors	3	2	14
VGGT has provided positive impact to the professional surveying community	1	15	6
The knowledge of VGGT is widely disseminated within the surveying community	5	11	4

Table 17. Degree to which VGGT is useful for surveying community

4.5 VGGT in professional education

Regarding the education and the degree to which the VGGT are already or should be part of the surveying education, the following Table 18 provides the results.

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Level at which knowledge on VGGT should be adopted	Number
Vocational	4
Undergraduate	6
Graduate	5
Post graduate	9
PhD	5
Continuous professional development	18

Table 18. Level at which VGGT should be taught

Aspects which should be part of the VGGT curriculum are indicated in Table 19.

Aspects which should be part of the VGGT curriculum	Number
Guiding principles of responsible tenure governance	30
Legal recognition and allocation of tenure rights and duties	28
Transfers and other changes to tenure rights and duties	22
Administration of tenure	23
Responses to climate change and emergencies	16

Recommendations to on how the VGGT can be improved to have a global impact include:

- Making funds available
- Awareness raising exercises
- The use of FIG RNA
- Capacity building in terms of connecting with the international surveying community
- Conference and Workshops
- Promotion of new academics undergraduate program in land surveyor and land administration to post conflict process.

FIRST CONCLUSIONS

Have the VGGT had any impact on the survey profession? Overall, one could conclude: not yet in any significant way. A relatively low number has a good or excellent understanding of the VGGT, implying that it is not sufficiently clear how the VGGT can alter their profession. Moreover, a significant portion of the respondents (approximately 25%) has never heard of the VGGT, whereas a similar amount of respondents has only heard recently about it. This suggests that the information about VGGT has not yet hit the ground of the surveying profession. Despite this result, a fairly large portion of the respondents who are familiar with the VGGT have been actively promoting the VGGT. Apparently the VGGT are considered relevant for those who know about it. The questions

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is this, how can more people know about the VGGT. The results on where the VGGT were introduced to the respondents seem to indicate that those who actively participate in international workshops or local events are more likely to learn about the VGGT.

The biggest advantage of the VGGT which respondents see is in the administration of tenure and the legal recognition and allocation of tenure rights and duties. The majority of respondents recognize that the VGGT are not yet part of the legal framework related to their professional practice, but at the same time indicate that it should (although in the Anglo-Saxon countries this is doubted that it should). In general there is a majority who consider that surveyors should take a leading role in realizing this change in legislation, with a majority from developing countries and Eastern Europe who are more skeptical about this. In general, few surveyors believe that the VGGT has significantly changed or will significantly change the surveying profession.

The manner through which surveyors should get educated about VGGT is considered most effective when this is done thorough continuous professional development or post-graduate education. Teaching VGGT at vocational or undergraduate level is considered less effective or relevant. Apparently too little is still known about the actual content of the VGGT and how it could change regular, day-to-day activities of (cadastral) surveying. Also, it is not part of regulation, so there is no direct need to teach it at undergraduate levels.

The number of respondents was perhaps somewhat modest, and therefore it is recommended to continue this survey for a longer period, or to execute parts of the survey at a later stage. The latter could perhaps reveal if the VGGT is getting more known to the survey community or more embedded in surveying activities than currently.

A final note of appreciation goes out to all respondents who took the time to complete this survey and to the FIG secretariat who included the survey link in the regular newsletters.

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