# **Implementation of Customer-Oriented Approach in Land Rearrangement Activities (Land Consolidation) Changes Professional Abilities of Surveyors**

# Seija KOTILAINEN and Heikki SEPPÄNEN, Finland

Key words: land rearrangement, custom-oriented, professional abilities, surveyor

#### SUMMARY

One of the four basic values of the National Land Survey of Finland is to improve customer satisfaction. The authors are responsible for a development project that defines ways of improving customer satisfaction in land rearrangement activities (land consolidation) in Finland. The project aims to look for communication-based and other means for implementing customer-oriented ways to carry out land re-arrangement projects. In this project we have already established opinions on customer orientation among customers and those who work with land rearrangements. At the same time the requirements that the implementation of customer orientation will set on employees were established.

When using a customer-orientated approach, technical and judicial expertise is not enough as such. It is also important to know the region, the culture of those living there and the history of the region. Furthermore, the significance of social capital must be understood. The approach must be based on regional requirements. In addition, equality and fairness must be emphasised. Integration of conflicting customer needs is a demanding task. This means that negotiation and co-operation skills of surveyors have to be continuously improved. Thus, the support and guidance provided by the working community becomes more important. Social subjects should also be included in the basic training.

#### YHTEENVETO

Yksi Maanmittauslaitoksen neljästä perusarvosta on asiakastyytyväisyys. Kirjoittajat ovat vastuussa meneillään olevasta kehittämishankkeesta, joka määrittelee asiakastyytyväisyyden kehittämistä tilusjärjestelyissä Suomessa. Hankkeen tarkoituksena on etsiä viestinnällisiä ja muita keinoja asiakaslähtöisyyden toteuttamiseksi. Siinä on selvitetty työntekijöiden ja sidos-ryhmien käsityksiä asiakaslähtöisyydestä sekä asiakaslähtöisyyden työntekijöiden ammattitai-dolle asettamia vaatimuksia. Tässä esitellään asiaa pääosin näihin selvityksiin perustuen.

Kun toimitaan asiakaslähtöisesti, tekninen ja juridinen ammattitaito eivät yksin riitä. Tulee tuntea alueella elävien asukkaiden kulttuuri ja alueen historia. Lisäksi on ymmärrettävä sosialisen pääoman merkitys. Työtavan on lähdettävä alueellisista tarpeista ja sen tulee painottaa tasa-arvoisuutta ja oikeudenmukaista kohtelua. Ristiriitaisten asiakastarpeiden yhteensovittaminen on vaativaa työtä. Tämä merkitsee maanmittareiden viestintä-, yhteistyö- ja neuvotte-

TS 8C - Land Consolidation

Implementation of Customer-Oriented Approach in Land Rearrangement Activities (Land Consolidation) Changes Professional Abilities of Surveyors.

lutaitojen korostumista. Tällöin tuen ja ohjauksen tarve työyhteisöltä on entistä tärkeämpää. Myös peruskoulutukseen tulee ottaa mukaan ihmistieteellisiä aineita.

Integrating Generations FIG Working Week 2008 Stockholm, Sweden 14-19 June 2008

# **Implementation of Customer-Oriented Approach in Land Rearrangement Activities (Land Consolidation) Changes Professional Abilities of Surveyors**

# Seija KOTILAINEN and Heikki SEPPÄNEN, Finland

# 1. INTRODUCTION

## 1.1 Land rearrangement strategy 2008-2013 of the Ministry of Agriculture and Forestry

In Finland the Ministry of Agriculture and Forestry controls the land rearrangement activities. In 2007 a land rearrangement strategy for 2008-2013 was completed in the Ministry. What is emphasised in the strategy is customer orientation. Land rearrangement activities must be based on the needs of the customers. However, customer orientation does not mean the fulfilment of all the needs of those involved in the project. The project must receive strong support and be regionally and economically profitable. (Ministry of Agriculture and Forestry 2007)

Arrangements are carried out effectively and economically in co-operation with different parties, thus allocating the support of the society appropriately. The operation must strongly support the objectives of the society, such as the vitality of rural areas and diversified development, environmental care and protection, and the improvement of traffic safety. (Ministry of Agriculture and Forestry 2007)

The strategy emphasizes the importance of improving cooperation in the respective administrations and towards essential parties. Drainage, flood control and water protection can be mentioned as examples as well as environmental care and landscape preservation, environmental protection and development of villages. Regarding the development of villages authorities collaborate with residents, municipalities, provincial federations, T&E Centres (Employment and Economic Development Centres), village communities etc. It seems that the interests of more and more parties have to be considered and combined. (Ministry of Agriculture and Forestry 2007)

The National Land Survey (NLS) is responsible for land rearrangement duties in Finland. The NLS has four basic values, one of which being customer satisfaction. Even though the NLS has obtained top grades in customer satisfaction surveys, the agency continuously wishes to improve its services. Therefore the NLS introduced a project in 2007 for improving the customer oriented land rearrangements. Improvement is the objective in the land rearrangement strategy 2008-2013 of the Ministry of Agriculture and Forestry.

TS 8C - Land Consolidation

Implementation of Customer-Oriented Approach in Land Rearrangement Activities (Land Consolidation) Changes Professional Abilities of Surveyors.

## 1.2 Customer orientation in different time periods

Various needs have controlled land rearrangement activities at different times. From the customer's viewpoint the needs have changed the approaches to and applying procedure of land rearrangements. In the 1990's a single property owner or co-owner could institute proceedings concerning land rearrangement that could be carried out regardless of how widely the division was supported. In addition, the authorities were able to start such proceedings, although this possibility was used only once. The procedure was criticized because hearing those concerned did not provide the result that the majority wished for. (Ministry of Agriculture and Forestry 1996)

After the legal regulation change that became effective in 1997 a single property owner or coowner is still able to apply for land rearrangement. What was included in the regulation was that if social projects are concerned then the executor of the project is able to apply for such an arrangement. Also, in socially important issues a District Survey Office is able to institute land rearrangement proceedings. The advantages gained of such an arrangement must exceed the expenses and disadvantages of the procedure. If property owners agree on conducting appropriate land rearrangements, then the procedure can be carried out, but only if the advantages exceed the expenses. (Ministry of Agriculture and Forestry 1996)

The opinions of those involved must be emphasized when working out an economically appropriate regional entity. The land rearrangement area has to include in addition to the estates owned by the applicant, areas that should be incorporated thereto in order to achieve an appropriate arrangement. If it is appropriate to incorporate certain areas, they may be included if the owners in the specific areas do not object. This means that if a project encounters opposition, the project in question is not necessarily carried out. However, a qualified majority regulation is not known in legislation. (Ministry of Agriculture and Forestry 1996)

In conclusion it may be noted that a single property owner or co-owner is competent to apply for proceedings, but wide support is required of other property owners for carrying out the project. At meetings each of those involved is entitled to represent his/her cause. In a meeting the majority of those present may select one or more representatives to participate in the preparation of issues to be discussed (the extent of the arrangement) and in the surveillance of fundamental improvement work. (Real Estate Formation Act, 12 April 1995/554)

# 2. BASIC CONCEPTS OF CUSTOMER ORIENTATION

The concept of customer orientation is either understood as an end product that satisfies the customer or as an approach that is applied to prepare the product. In the latter one the customer supposedly participates in the production process. Applied to land rearrangements customer orientation can be defined as the end result of the arrangement, or as the good quality of the property structure. The customer orientation of the production process in turn refers to the customer's satisfaction with the performance of the different land rearrangement duties including general duties, needs assessments and legal land surveys.

TS 8C - Land Consolidation

Implementation of Customer-Oriented Approach in Land Rearrangement Activities (Land Consolidation) Changes Professional Abilities of Surveyors.

The customer orientation of the production process may refer either to who is entitled to start process proceedings or how participation, influence and decision-making are carried out in the process. An important issue to consider in land rearrangements is whether the customer is entitled to start proceedings, and when the issue is pending how the customer is able to participate in and influence the proceedings.

Customer orientation can be more broadly understood in such a manner that it satisfies an individual, a community in the target region and an entire society. Applied to land rearrangements this refers to the viewpoint of a single property owner or all property owners (including residents) within the area and the viewpoint of the entire society. A well-executed land rearrangement tends to maximize the advantages of all parties.

Interest groups refer to all the parties involved in the project. The most essential interest groups include landowners, residents in the area, officials, lessors and leesees, drainage companies, compilers of road and drainage plans, contractors and suppliers, the producer association, rail administration, road administration, T&E centres, the press, local radio, forestry centres, municipal authorities, rural advisory centres, environmental administration and the regional council. The internal interest groups of this administrative sector include the Ministry of Agriculture and Forestry, the central administration of the NLS, the management of District Survey Offices, the management of the land rearrangement process in District Survey Offices, the land rearrangement teams. (Ministry of Agriculture and Forestry 2007)

## **3. RESULTS OF THE ASSESSMENTS**

The data used included the thesis "Customer-oriented land rearrangement" (Kristiina Wallius 2007) and an Intranet inquiry and interviews with eleven employees dealing with land rearrangements in the NLS.

## **3.1** General information about the inquiry

Approximately 80 employees handle land rearrangements either on full-time or part-time basis. The number of employees to respond to the inquiry was 58, the response rate thus being 72,5. Figure 1 shows that employees with very different job titles answered the inquiry.

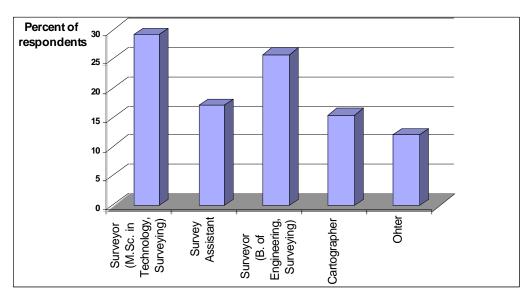


Figure 1. Job titles of those who answered the inquiry, in percentage

Almost 80 percent of the respondents have worked with land surveying duties for more than 15 years. However, less than 40 percent has gained experience from land rearrangement duties. Experienced workers have recently started to work with land rearrangements. The respondents were equally divided into categories according to experience. The classifications used were: less than 2 years, 2-5 years, 5-15 years and over 15 years of experience from land rearrangements. This classification was used in addition to the Job title classification for analysing the questions.

Approximately 90 percent faces the customer face to face and on the phone and merely a few only on the phone or indirectly through documents (Figure 2). Encounters occur almost on a daily basis, answered about 38 percent of the respondents. Approximately 39 percent of them meet the customer less frequently than once a week.

TS 8C - Land Consolidation

Implementation of Customer-Oriented Approach in Land Rearrangement Activities (Land Consolidation) Changes Professional Abilities of Surveyors.

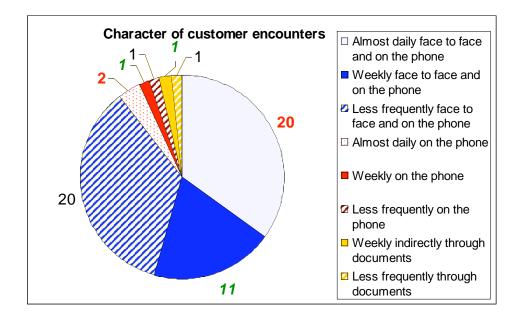


Figure 2. Character and frequency of customer encounters (number of people)

The respondents are experienced land rearrangers. On average their work experience was 5-15 years. Principally they encounter the customer face to face and on the phone. Considering the high response rate, the answers provide a reliable picture of the experience and conceptions of land rearrangers.

### 3.2 Components of the customer orientation concept

Table 1 shows what is generally thought of being important in land rearrangements and the order of importance. The last column specifically shows the different components included in customer orientation.

**Table 1**. Components and importance of the customer orientation concept and issues considered being relevant (Internet inquiry, Wallius 2007, all components in the Internet inquiry in the order of importance are in italics.)

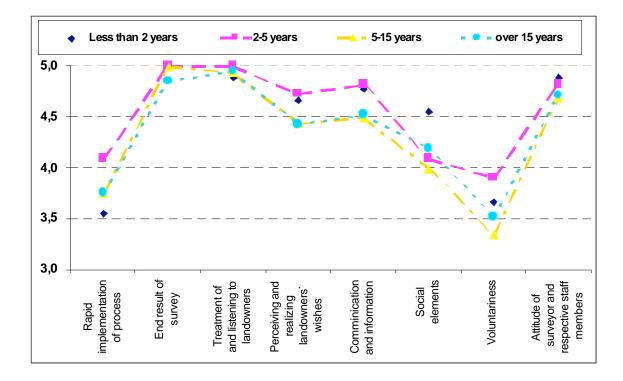
Component (Issue)	Importance of	Importance of	Customer orientation
	the component,	the component	concept / Importance of
	result of the	according to	the component, Wallius
	inquiry	Wallius	
End result of survey	1 (1)	2	6
Treatment and listening	2 (2)	1	1
Attitude / Implementation of	3 (3)	3	2
those performing the survey			
Communication and information	4 (4)	4	3
Perceive and realize wishes	(5)		
Social elements	5 (6)	6	4
Rapid implementation of proc-	(7)		
ess			
Voluntariness	6 (8)	5	5

Customer orientation is rather thought of as a process approach than an end result thereof. The end result of land rearrangements is a sum of compromises, on which the interests of the regional community and the entire society have their effect. Thus, the end result cannot be considered as a part of an individual-oriented customer orientation image of land rearrangements. However, the end result (good property structure) is included in community-oriented and society-oriented customer orientation images. The community-oriented customer orientation image is based on the residents' views, whereas the society-oriented customer orientation image rests on the objectives of the entire society.

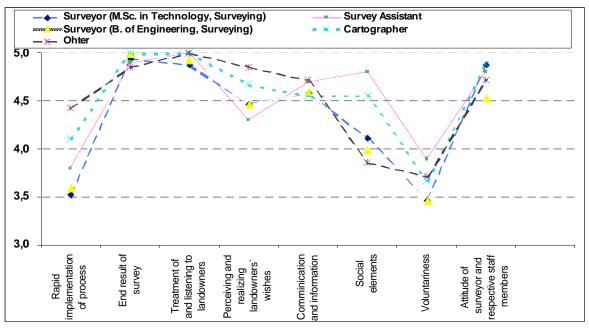
The views of landowners, other interest groups and those who work with land rearrangements on the important duties of the customer orientation concept and land rearrangements are very similar. Experience within the field does not seem to make a difference concerning the significance of the components included in customer orientation (Figure 3). The job title classification, however, shows some differences (Figure 4).

TS 8C - Land Consolidation

Implementation of Customer-Oriented Approach in Land Rearrangement Activities (Land Consolidation) Changes Professional Abilities of Surveyors.



**Figure 3**. Issues considered being of importance in land rearrangements. The responses are divided by Experience in land rearrangements. (The closer the average of the responses is to 5 on the scale the more important the respondent considers it to be.)



**Figure 4**. Issues considered being of importance divided by Job titles (The closer the average of the responses is to 5 on the scale the more important the respondent considers it to be.) Respondents at manager level considered the rapid implementation of a process to be of im-

Seija Kotilainen and Heikki Seppänen

Implementation of Customer-Oriented Approach in Land Rearrangement Activities (Land Consolidation) Changes Professional Abilities of Surveyors.

Integrating Generations FIG Working Week 2008 Stockholm, Sweden 14-19 June 2008

TS 8C - Land Consolidation

portance. Correspondingly surveyors with a Master degree in surveying, those with a Bachelor's degree in surveying and survey technicians considered it to be less important. One explanation is that the time used for completing a process is an essential indicator of the land rearrangement process that the managers are monitoring. Surveyors with a Master degree in surveying, those with a Bachelor's degree in surveying and survey technicians have a different view as they encounter the difficulties of the practical details and the complexity of the work.

The opinions of the respondent groups varied on the significance of taking social elements into account. Survey assistants and cartographers considered it important to take such factors into account, whereas the respondents at the manager level were of a different opinion (Figure 3). The rapid implementation of a process is considered important but taking social elements into account may endanger this.

Several of the respondents suggested that trust is something that affects the establishment of customer relationships. Also the idea of expertise is important. Communication skills also affect customer relationships and include: an ability to put oneself in the customer's position, appreciative treatment and systematic handling. All responses explained in this chapter can be considered to complement "The attitude of the surveyor and other staff members". If this component functions properly, confidentiality is created and the land surveyor gives a good learned impression.

## **3.3 Results of the interviews**

The most important components that came up in the interviews for creating good customer relationships were very much in line with the results of the inquiry. Customer orientation is a multidimensional entity, in which different components affect one another. Such components include:

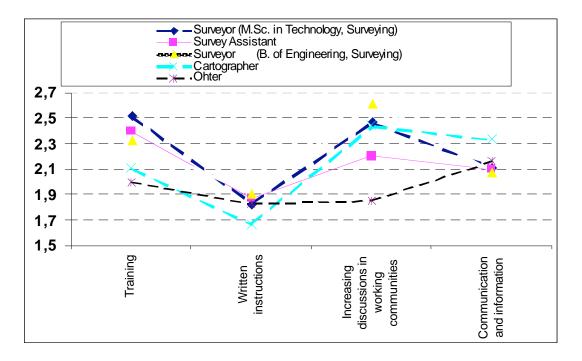
- Basic information and preparation
- Listening to customers
- Providing information and communication (referred to as information and communication in the inquiry)

Basic information and preparation emerged from the interviews. Adequate preparation of the issue at hand was considered as the basis for successfully confronting a customer. Information creates certainty and provides the conditions to treat the customer fairly and impartially and to take the customer's needs into account. Social studies have been totally excluded from the basic training. The lack of such studies was considered as a difficulty in the beginning of the career. What was also considered to be important was the knowledge of regional circumstances: knowledge of local history and the social network and characteristics are required to successfully implement land rearrangements.

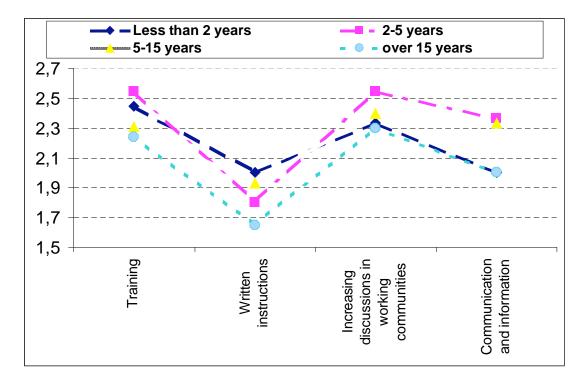
### 4. MEASURES TO IMPROVE THE SITUATION

Training and more discussions in the own team were suggested as some of the measures to assure customer orientation. The situation can be improved by increasing information and improving communication.

Figure 5 shows the responses to this question according to respective job titles. Correspondingly Figure 6 shows how work experience affects the views on which measures are considered to be necessary. Those who have responded using other job titles (manager level) seem to consider increasing discussions within the teams less important than the employees placed in the other categories. The division based on experience shows that those having more than 15 years of experience generally regard the necessity of development most critically. Instructions are suggested as the worst development measure.



**Figure 5**. Division according to job titles. Measures to improve the situation (The closer the average of the responses is to 3 on the scale the more important the respondent considers it to be.)



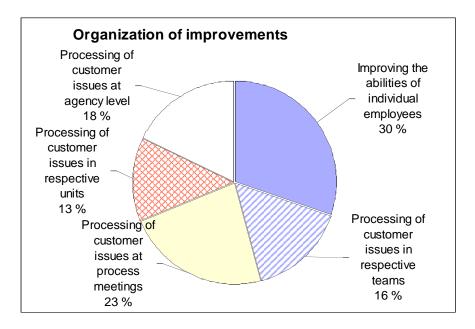
**Figure 6.** Division based on experience. Measure to improve the situation. (The closer the average of the responses is to 3 on the scale the more important the respondent considers it to be.)

Almost half of the respondents considered the current communication to be adequate. More than 20 percent of the respondents described communication as something "that serves the needs of all parties" and correspondingly about 20 percent thought that communication was insufficient.

Seven percent of the respondents said that communication might occasionally be even harmful, thus referring particularly to negative newspaper articles. In the open comments given in connection with this question communication was specifically associated with newspaper articles, the significance of which was emphasized. Well-written articles increase knowledge and amend incorrect conceptions.

## 5. ORGANIZATION OF IMPROVEMENTS

Improvements associated with customer orientation and harmonization of approaches are required at all levels (Figure 7). To improve the abilities of individual employees is very important.



**Figure 7**. Which organizational level plays an important part when renewing land rearrangements so that the needs of the customers are taken into account and the approaches are harmonized?

#### 6.POST-PROCESSING OF DIFFICULT CUSTOMER SITUATIONS AND PROCESS-ING EXPERIENCES

Approximately 64 percent of respondents announced that they had been involved in difficult customer situations. Half of them (29 respondents) explained that they are still processing those situations. More than half of the respondents said that they had shared their experiences with colleagues or in their teams. Experiences are less frequently processed outside the own working community. The result indicates that the approaches of the working community should support handling of difficult customer situations.

## 7. CONCLUSIONS

According to the land rearrangement strategy of the Ministry of Agriculture and Forestry the use of land rearrangements should be based on landowners' needs and on one's own wishes. What is emphasized in addition to customer-oriented thinking is the improvement of cooperative structures within the respective administration and towards other parties. In the future the interest of a number of parties are to be considered and combined.

The individual-oriented customer orientation image comprises communication and information on the project, listening to those involved and establishing needs and desires, impartial treatment and fairness, justification of decisions and making participation possible. The community-oriented customer orientation image complements this by including mediation in the approach. Such a customer orientation image also comprises enabling co-operation, utilization of information and expertise, and taking the social elements of the target region into account. It is all about the process approach. When the society-oriented customer orientation image is considered in association with the two previous ones, then the objective to achieve a good end result, property structure, is included in the image. For carrying out such an image one has to consider in addition to the objectives of the landowners and the residents, the efficiency and economy of the process, the climate change, the maintenance of biodiversity, the cultural heritage and the regional vitality, i.e. common needs of a society.

Conflicts have occurred between the customer orientation images, which should be settled optimally to form an entity during the arrangements. This means that information and expertise on social sciences are required in land rearrangement duties. Information is needed on the culture and history of the region and on human behaviour in general. Communication, cooperation and negotiation skills are of importance. The basic training and job training should include such information. At work the primary measures to improve such skills include discussions and training. Improvements are to be carried out at all levels of the organization, at team, process and agency level.

#### REFERENCES

Real Estate Formation Act, 12 April 1995/554 (amendments included)

Ministry of Agriculture and Forestry, 1996. Working group memorandum on support of parties involved in land consolidation. Working group memorandum MAF 1996:20.

Ministry of Agriculture and Forestry, 2007. The land rearrangement strategy for 2008-2013 of the Ministry of Agriculture and Forestry.

Wallius, K.: Customer oriented land rearrangement. University of Vaasa. Faculty of Public Administration. Thesis on regional studies. Vaasa 2007.

TS 8C - Land Consolidation

Seija Kotilainen and Heikki Seppänen

Implementation of Customer-Oriented Approach in Land Rearrangement Activities (Land Consolidation) Changes Professional Abilities of Surveyors.

#### **BIOGRAFICAL NOTES**

Senior Adviser, Seija Kotilainen, born 1955, Lic.Tech.

Academic experience: Licentiate of Technology in Surveying, Helsinki University of Technology (HUT), Dipl. Ing.(1981)

Practical experience: Surveying Engineer in several District Survey Officies 1981-1990, Senior Adviser in the Development Centre of National Land Survey of Finland 1990-

Activities in home and International relations:

Chair of the Finnish Society of Surveying Sciences 2004

Member of the Board of the Finnish Society of Surveying Sciences 1993-94, 2003, 2005

#### Chief Engineer, Heikki Seppänen, born 1946, M.Sc,

1.4.2006 - Head of Land Consolidation Team, the National Land Survey of Finland, Central Administration

1.1.1999 – 1.4.2006 Senior Engineer, Main task was the developing of new processes for land reallocation (especially Nature Reserve Areas) and supporting the District Survey Offices in land consolidation.

1994-98 Chief District Surveyor, North-East Finland District Survey Office of the NLS 1988-93 Chief District Surveyor, Kuusamo District Survey Office of the NLS 1970-88 Surveying Engineer, The National Land Survey of Finland (NLS)

## CONTACTS

Senior Adviser Seija Kotilainen The National Land Survey of Finland Development Centre Opastinsilta 12 C P.O. Box 84, FIN-00521 Helsinki FINLAND Tel: +358 40 5510569 Email:seija.kotilainen@nls.fi

Head of Land Consolidation Team Heikki Seppänen The National Land Survey of Finland Central Administration Opastinsilta 12 C PP.O. Box 84, FIN-00521 Helsinki FINLAND Tel: +358 205 41 4963 Fax: +358 205 41 5005 Email: heikki.seppanen@nls.fi

TS 8C - Land Consolidation Seija Kotilainen and Heikki Seppänen Implementation of Customer-Oriented Approach in Land Rearrangement Activities (Land Consolidation) Changes Professional Abilities of Surveyors.

Integrating Generations FIG Working Week 2008 Stockholm, Sweden 14-19 June 2008