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The agreement process as a land acquisition and compensation method in public road projects in Finland – Perspective of real property owners

Seija Kotilainen
seija.kotilainen@aalto.fi
Licentiate of Science in Technology

Abstract. *During the last decade the Finnish Road Administration (Finnra)[1] has spent approximately €25 million on agreement-based land acquisition and compensation in public road projects. Finnra has considered that its use of an agreement process would improve its image. However, the success of the agreement process has not been studied.*

This research is focused on the perspective of real property owners. The first question was to discover if a model created with the help of Deutsch's social process theory (1973) could explain real property owners' satisfaction with the agreement process. Second, the advantages of using agreements instead of expropriation were studied by a model built during the study.

Deutsch's research findings concerning social process factors explained satisfaction well. Feeling of confidentiality[2] (task-orientation) and high levels of participation and getting information (communication) both had positive effects. Feeling of confidentiality meant confidential terms, fair discussions, and concentration on facts during negotiations. High levels of participation and getting information concerned real opportunities to negotiate. If an owner had taken the initiative to negotiate (perception), this also had a positive effect on satisfaction. Feelings of pressure and quarrels in the beginning (attitudes) led to dissatisfaction. Later experiences caused dissatisfaction, such as contractors acting badly during the construction or Finnra itself not keeping its promises.

In the study two advantages of using an agreement process instead of expropriation were found. One was the nature of the compensation. In the case of expropriation it was monetary, but in the case of agreement it could be anything, for instance a piece of land, reparation works, or even a holiday flat. In these cases, agreements could give extra value and be a real, alternative to expropriation. Other cases that made agreeing a substantive

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[1] Finnish Road Administration was responsible for public roads until 1 January 2010. After that it became the responsibility of the Centres for Economic Development, Transport and the Environment on the local level, and of the Traffic Agency on the national level. (http://www.tiehallinto.fi/servlet/page?_pageid=68&_dad=julia&_schema=PORTAL30&kieli=fi&_pageid=68.)

[2] This meaning could be called as well an atmosphere of trust.

alternative to expropriation were those situations where timing played an important role. In this connection, there was the question of rapid payment of compensation.

Keywords: *public road, agreement, land acquisition, real property owner*

1 Introduction

1.1 Background of the study

During the last decade Finnra has acquired more than 20,000 hectares of land from approximately 100,000 real properties for public road construction purposes. It has spent about €240 million on land acquisition and compensation of public road projects. In the last five years the annual sum has grown. Of the total, about €25 million has been used for agreement-based compensations and the rest for compensation in expropriations. (Tiehallinto 42/2003, p. 8, Korhonen 2010–11.)

Agreement-based land acquisition and compensation seems to be a permanent part of the land acquisition system. In recent years, Finnra has favoured agreements, because it believes they improve its image. The success of the process related to agreement-based land acquisition has, however, not been studied. Here we focus on the success of the agreement-based land acquisition process from the perspective of real property owners. The study discusses the following topics:

- Can a model of satisfaction created in the study explain satisfaction with the agreement process?
- Could there be some advantages when using the agreement process instead of expropriation?

The current study belonged to the field of surveying sciences, but offered social psychology aspects. The research methods were quantitative and qualitative. The perspective of the owners was ascertained in a survey study using questionnaires. Possible advantages were studied by using also material oriented context analysis of documents.

The context of the study was in conflict resolution. It was done from the perspective of real property owners, not from the perspective of society.[3] The study didn't focus on experiences concerning the outcome of the agreement process, because real property owners must have been satisfied with the outcome at the time the agreement was concluded.

1.2 Theoretical contexts

1.2.1 Conflict and conflict management and resolution[4] methods

Negotiations with real property owners are required when acquiring land for public roads, if expropriation is not used. It is basically a question of a conflict situation between an owner and Finnra, but not always.

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[3] For instance, here we didn't look at transactions costs of society.

[4] Conflict management means the way conflict is handled so that it does not expand. After conflict resolution it is finally over; parties are satisfied (Kotilainen 2007, p. 44).

Conflict is a process, in which one party believes that the other party opposes or negatively influences the achievement of the first party's interests or aims (Wall & Callister 1995, p. 517). Conflict can be seen as the root of personal and social change. It also demarcates groups from each another and in this way helps establish group and personal identities. A conflict can have negative functions, especially if it takes a destructive course. The objective state of affairs never rigidly determines the absence or presence of conflict, because psychological factors also influence. This means that whether conflict takes a productive or destructive course is open to influence even under unfavourable objective conditions. (Deutsch 1973, pp. 8–11.)

Methods for conflict resolution and management can be classified in many ways (Peltonen & Villanen 2004, pp. 14–20). Singer uses a simple and clear classification: unassisted negotiation, assisted negotiation and judicial resolution of a conflict. Judicial resolution and management of a conflict can further be divided into court decision, arbitral decision, and authority decision. (Singer 1994, pp. 15–29.) Here we are interested in unassisted negotiations. We focus on agreements between an individual real property owner and the state agency. In the empirical part we are interested in those real property owners who have had experiences in negotiations during the last five years before our enquiries.

1.2.2 Different approaches to expropriation[5]

There are two legal systems in western countries. This concerns also acquiring land for public road purposes by force. The first is an adversarial system, which is used in common law countries, for instance in the United Kingdom and in the United States. Especially in the United States attorneys play the main roles in the courts. The second is a bureaucratic system, where the court itself plays the main role. This system is used on the Continent, for instance in Germany. The Finnish legal system has its own characteristics and a lack of elitist continental jurisprudence. (Ervasti 2004, pp. 91–102, Viitanen 2002.) Finland has also its own expropriation process for public roads, the public road survey. It is an administrative proceeding.

Both adversarial and bureaucratic systems have their bad and good aspects. But what matters here is the fact that real property owners are not in the centre in these compulsory proceedings. Instead, real property owners have key roles when land acquisition happens by agreements. Commonly conflict resolution methods, like negotiations, are the same kind of activities in all western countries (Ervasti 2004, p. 30).

The focus of the study is in conflict resolution and management. Morton Deutsch is famous for his research into conflict resolution and negotiations. His researches concern experiences of human beings, as in social psychology. These are the reasons why his theory is used here. Another relevant researcher, also American, is Carrie Menkel-Meadow. Her research interests are in situations where there is a possibility to solve the case not only by means of negotiation but also by legal action. To get the theory of Menkel-Meadow concrete, we use here special researches concerning expropriation. (Munch 1976, Imrie & Thomas

[5] Expropriation, eminent domain and compulsory purchase are synonyms (Viitanen 2002).

1997, Lin & Lin 2006.)

1.2.3 Factors affecting conflict resolution (Deutsch 1973)

Deutsch has categorised conflicts into destructive and constructive ones. A conflict is destructive if parties are dissatisfied and feel that they have lost something. A conflict is constructive if all parties are satisfied at the end. In a cooperative situation a party can achieve his or her goals only if the other party can attain his or her goals. It is called a *promotive interdependence* situation. In a competitive situation there is a negative correlation between the attainments of parties' goals. Their goals are said to be *contrariwise interdependent*. Most situations involve a complex set of goals, when parties can be promotively interdependent with respect to one goal and contrariwise interdependent in relation to one another. (Deutsch 1973, pp. 11, 17–22.)

The effects of one party's actions upon another will be the function of the nature of their interdependence *(situation)* and of the action that takes place *(process)* (Deutsch 1973, p. 365). In a promotive interdependence situation effective types of actions are (citing Deutsch, 1973, pp. 29–31, 365–368):

- *Task-orientation*: The situation and process highlight mutual interests and coordinated efforts to seek a common solution. The legitimacy of each others' interests and needs is recognised. Parties' special talents are used to solve the joint problem, so that the duplication of effort is reduced. This limits the scope of conflicting interests, and leads to a solution that is responsive to the needs of parties.
- *Attitudes toward one another*: There is a trusting, friendly attitude with a positive interest in the others' welfare. This increases the readiness to respond helpfully to the other's needs and requests.
- *Perception*: There is increased sensitivity to common interests. This stimulates a convergence and conformity of beliefs and values.
- *Communication:* There is an open, honest communication of relevant information between parties. All are interested in informing as well as being informed by others.

In a contrariwise interdependence situation effective actions are (citing Deutsch, 1973, pp. 29–31, 365–368):

- *Task orientation*: The minimisation of the other's power and interests becomes an objective. The conflict becomes a matter of general principle and is no longer defined as a particular issue.
- *Attitudes toward one another*: The situation and process leads to suspicious and hostile attitudes. This increases the readiness to exploit the other's needs and weaknesses and causes negative responses to the other's requests.
- *Perception*: There is increased sensitivity to opposite interests, to threats, and to power differences.
- *Communication*: There is little communication or misleading communication. Each party seeks to obtain accurate information about the other but to mislead, discourage, or intimidate the other.

According to Deutsch there are also other factors outside social process determining the course of conflict resolution. They are characteristics of parties, the nature of conflict, third parties, prior relationship and estimations of success. (Deutsch 1973, pp. 367–376.)

1.2.4 Factors affecting conflict resolution – a model for testing

Based on Deutsch (1973) a theoretical model was formulated and adapted to the Finnish context. Factors which may affect positively on conflict resolution were task-orientation, positive attitudes toward one another, positive perceptions and good communication. The factors tested outside social process were characteristics of real property owners, use of third parties, nature of conflict, prior relationships, later relationship in the project, background information about real property, and the outcome. The model was operationalised to practical questions in paragraph 2.2.2.

1.2.5 A theory of needs (Menkel-Meadow, 1984)

Menkel-Meadow has focused on negotiations in the litigation context. She has studied situations where there has been a possibility to solve the case instead of by negotiation, also by legal action. (Menkel-Meadow 1984, pp. 755–758, 764–766.) From the perspective of real property owners it is essential to know if there are advantages in using agreements instead of authority decisions in the Finnish context.

When negotiations are done "in the shadow of the court", the first assumption is that parties desire the same goals, items and have the same values. The second assumption is that only limited items are available. These assumptions mean firstly that there is only one issue, price, to negotiate, and secondly that both parties desire equally and exclusively to win on this issue. As the court often declares winners and losers, negotiators feel like they are winners or losers. This kind of negotiation is called traditional or adversarial. (Menkel-Meadow 1984, pp. 764–766, 783–784.)

The assumptions of the traditional model affect the behaviours that are recommended for negotiations. They lead to common solutions, rather than tailored ones. "Split the difference" solutions are common, but they are mostly unsatisfactory solutions for the parties. (Menkel-Meadow 1984, pp. 766, 768–775.)

When agreements are done in the same way as in court, they are not a real alternative to court actions. The traditional model will lose its qualities when more than one issue is negotiated. The new model is based on needs (a theory of needs). There are some questions to ask; What? How much? When? How? By whom? Parties can agree that the compensation is something else than money (What). In some cases one or both parties should benefit if the money is put into a bank for a fixed time. The bank increases the benefit by paying interest (How much). Timing of the payment can be important to one party, but not the other one (When). Process of delivery can as well be such that one or both parties of negotiation benefit from it (How). The use of third parties to expand resources

available is a common device for solving problems (By whom). (Menkel-Meadow 1984, pp. 784–813.)

1.2.6 Research into real property owners' positions in expropriation

Imrie and Thomas (1997) pointed out that the legal discourses[6], practices, and institutions of compulsory purchase were powerful factors in the United Kingdom. The research showed that the interrelationships between the law, legal struggles, and urban regeneration should be rethought. This meant the importance of discourses and contexts in the construction of law and legal processes. (Imrie & Thomas 1997.)

Munch (1976) conducted research into compensation for land acquisition with and without expropriation. The study contained an empirical part from the United States (an urban removal project in Chicago). The results showed that expropriation was not necessarily a more efficient institution than a purchase on the free market. High-valued properties received compensation above their market value, but low-valued properties got less than their market value. The reason for this was the structure of court costs. (Munch 1976.)

Lin and Lin (2006) studied one road-widening project in the United Kingdom and one in Taiwan. The property owners did not accept cash compensation for compulsory purchases passively; instead they took legal, market-oriented, and political measures. Market-oriented measures such as selling properties, just leaving properties, or hiring out properties were used in the United Kingdom. In Taiwan political steps such as campaigns, petitions, and protests were used. The researchers found reasons for the different approaches. In Taiwan property owners had no chance to sell properties to the government before the properties were needed for construction work. In the United Kingdom selling was possible. The method was a statutory notice by which an owner could require the authority to purchase land in an early stage of a development project. (Lin & Lin 2006.)

For some of the cases, solutions other than monetary ones could be also available. Land-for-land compensation could work with large rural projects, but not in urban ones, where the same kinds of areas that property owners had lost should be rarely available. A road widening project needed only small fractions of properties, which was the reason why there were not really any alternatives to monetary compensations. (Lin & Lin 2006.)

1.2.7 Advantages of using agreements instead of expropriation – a model for testing

On the basis of Menkel-Meadow, Imrie and Thomas, Lin and Lin, and Munch, a theoretical model was formulated (Table 1). It was used for testing the possible advantages of using an agreement process instead of expropriation in the Finnish context.

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[6] This meant discussions, which involved different themes by which social reality was built (Imrie & Thomas 1997).

Table 1. *Advantages of using agreements; theoretical factors and factors in the Finnish context*

Theoretical factor (Menkel-Meadow)	Factor in Finnish context
What is delivered?	Content of compensation
How much is delivered?	Theoretical basis of compensation
How much is delivered?	Real property owner's transaction costs
When is it delivered?	Timing of getting payment
How is it delivered?	Possibilities for discourses during negotiations
By whom is it delivered?	Party or person to deal with

An agreement should be favourable for the real property owner in a case where there is more than one alternative (not only money, but also, for instance, pieces of land) to agree with. The theoretical basis of compensation can be different when concluding an agreement than when taking part in expropriation. If the theoretical basis of compensation leads to better compensation in an agreement situation than in an expropriation situation, this also favours agreements. When the real property owner's transaction costs arising from expropriation are higher than with an agreement process, this could favour agreements. Rapid payment of compensation should also increase the use of an agreement process. From the viewpoint of the real property owner the compensation process should contain the possibility of discourses. It is also important that a real property owner has the chance to negotiate with a third party instead of with a representative of the Finnish Road Administration. Sometimes the possibility of using a mediator could be helpful.

The questionnaire had four aims of questions taken from the model in Table 1. They were "The duration of the agreement process", "Content of compensation", "The best party to be negotiated with" and "Need for a mediator during negotiations". (More in Paragraph 2.2.2.)

1.3 Functions of the public road project

1.3.1 Public road project and expropriation

A public road project includes a permit phase and an implementation phase. The permit phase consists of a preliminary engineering plan and a final engineering plan. Implementation can be carried out by expropriation in a public road survey, by a land rearrangement or by an agreement. Already in the planning stages real property owners should be heard. (Maantielaki [Highways Act] 503/2005, Chapters 2 and 5.)

According to the Expropriation Act (Lunastuslaki [Act on the Redemption of Immovable Property and Special Rights] 603/1977, Section 4), expropriation is forbidden if the matter can be handled in some other way. One other way is an agreement process. But in practice the possibility of an agreement doesn't have to be considered before expropriation. Expropriation is seen to guarantee equal treatment for all owners as well as the speed and flexibility of land acquisition (Ojanen 1978, p. 43). For instance, during the period 1 January 2004 to 31 August

2004, 88 per cent of real property areas were expropriated and agreements were made for only 12 per cent (Tiehallinto 2004).

Public road survey is an implementation method only used in Finland (Larsson 2000, pp. 9–23). Compensation must be determined in the survey, if it has not been agreed upon (Highways Act, Section 74). Land, buildings, severances and injurious affections are valued and compensated following the principle of full compensation. The compensation does not always guarantee that one could purchase property corresponding to the one lost. In order to ensure housing and business activities, the compensation must be adapted so that one can purchase a corresponding dwelling or achieve a corresponding level of business activities. Also those costs arising because of a real property owner taking part in negotiation meetings, and other transaction costs, are compensated. (Expropriation Act, Sections 29–39 and 82, Mikkola 2003, pp. 34–35, Hollo 1984, p. 221.)

There are two more issues of process to mention. First the road authority can take possession in advance if it is necessary to start road construction at once. The second issue concerns quick compensation. A real property owner is entitled to advance compensation during expropriation. (Expropriation Act, Sections 52, 58 and 61–62.)

An expropriation committee shall take decisions in survey meetings, where real property owners can take part. In the meetings real property owners have the right to express opinions about their case. Both a real property owner and the expropriator can mandate an outsider to represent them in the survey. (Expropriation Act Sections 12, Real Estate Formation Act 554/1995, Chapter 15 and Section 286.)

The process of public road survey is specified by the institutions in detail, when the process is compared to the planning stage of the agreement process (Kotilainen 2007). This doesn't mean a totally authoritarian process. Instead, a case study of real property owners' experiences showed that in expropriation real property owners had mainly possibilities for discussions, but the possibilities for discussions with taking positions could be better (Kotilainen 2011).

1.3.2 Procedures for agreement

In recent years, Finnra has favoured agreements. It believes they can reduce disputes and improve its image[7] (Tiehallinto 42/2003, p. 8). Finnra calls agreement activity "voluntary land acquisition and compensation". (Hämäläinen 2005, pp. 84–87.)

Finnra purchases entire and built real properties. It concludes agreements when real property owners lose their homes, summer cottages or whole or essential parts of their business activities. Agreements are also made for land, severances and injurious affections. (Hämäläinen 2005, pp. 34–37.) In cases concerning a piece of land situated under the new road, or concerning soil, the agreement can be in euros per hectare or in euros per cubic metre. The final amount of compensation

[7] The sum of one's experiences influences her or his image of an authority. (Tyler 1990, pp. 75–76.) This means that the image is changing slowly during the years.

is not discovered until the public road survey, during which the final land area or cubic metres are measured. (Information in MAHA database.)

The basis of the compensation is the same as in a public road survey (Hämäläinen 2005, pp. 37), which is full compensation based on market value. In Finland the Real Estate Purchase Register is used to assess market values. This public register contains all purchases of real estates and their parts. (http://www.maanmittauslaitos.fi/default.asp?id=957.)

If the price during negotiations should rise above a full compensation, Finnra shall not conclude any agreement (Tiehallinto 42/2003, p. 13). Finnra pays also all the extra costs which real property owners incur because of the purchase (MAHA). But what is interesting, it decides case by case whether to inform a real property owner of the possibility of agreement. But when the parties enter negotiations, the manners for negotiating agreements are free for the parties to choose. (Kotilainen 2007.)

2 Methods and procedures

2.1 Methods

The current study was an empirical survey study, where the research methods were logistic regression analysis (quantitative) and theory-based content analysis (qualitative). Qualitative methods had a significant role in the study.

The perspective of the owners was ascertained in a survey study using questionnaires. The method used to analyse the open-ended answers of the questionnaires, was theory-based content analysis. Possible advantages of the agreement process were studied also by using material oriented context analysis of documents. (For the methodology, see Tuomi & Sarajärvi 2006, pp. 95–102.)

2.2 Data collection from the agreements made during 2001–2005

2.2.1 Basic data

The objects were the agreements made from the beginning of 2001 to the end of 2005. The material was obtained from Finnra's MAHA database. This database was reliable, as it had been used for compensation payments.

The material in the database is divided into three types.

1. Transactions are based on the agreements of entire real properties or essential parts of them when Finnra purchases the object.
2. Lump sum compensation covers the compensation paid for buildings or pieces of land. It also covers the compensation paid for severances and injurious affections.
3. 'Other type of compensation' is used in special cases. Apart from expropriation situations, transactions are performed when areas intended to be used for traffic purposes in the detailed plan are left unconstructed. Finnra is obliged to acquire these areas. (Highways Act, Sections 68, 74.)

2.2.2 Questionnaires and aim of questions

Three kinds of questionnaires were created:

- *Major agreements* are all transactions and compensations exceeding €10,000 (areas, buildings and constructions used for dwelling and business).
- *Transactions for traffic areas* are transactions in detailed plan areas.
- *Minor agreements* are agreements below €10,000, plus compensation for severances and injurious affections and other compensations.

The transactions carried out were major agreements, since their significance to Finnra seemed to be considerable. Areas, buildings, and constructions exceeding €10,000 were categorized as well to major agreements. In order to check the correctness of this classification, average values, and median, maximum and minimum prices were calculated (Table 2).

Table 2. *Agreements 2001–2005, MAHA database, Finnish Road Administration*

Agreement category	Number, property owners	Average value (€)	Median (€)	Maximum price (€)	Minimum price (€)
Major agreements	111	55,190	43,500	378,000	202
Agreements for traffic areas	19	31,170	30,818	80,550	2,254
Minor agreements	575	3,477	1,153	60,000	8
Total number of owners	705	(Total number of real properties 863)			

In the questionnaires every question was formulated to operationalise the theories into practice[8]. There were four main parts of the questionnaire: background information about the parties; nature of the conflict; prior and later relationships; and social process. The nature of the conflict was estimated partly from the object of agreement, partly from the reasons for entering into the agreement. The questions of relationships concerned earlier experiences and later experiences during the project. One question concerned satisfaction with the outcome. The questionnaires also had three other questions about the advantages to using agreements instead of expropriation. At the end of the questionnaires there were two open-ended questions.

Theoretical factors to be studied were modified to the aims of the questions (Table 3). The questionnaires are in Appendix 1. Two real property owners tested the questionnaires before they were sent to the respondents.

2.2.3 Responses

The number of responses received was 229. Fifty-nine respondents had answered most parts of the questions, but not the question concerning the agreement process. This meant that 170 responses were taken into the study. That's why the total response rate was 26 per cent. (The questionnaires were sent two times to the respondents, because after the first round the response rate was very low.)

In the major agreements and transactions for traffic areas, the objects of the agreements were:

[8] The scale used for the answers to the questions was a dichotomy. The reason for this was that the oldest road projects occurred nearly six years before (in 2001) the enquiry happened (in 2006). So it was obvious that the respondents could not say if they were little, more or extremely satisfied at the end of the project. Therefore, no kind of Likert scale was used.

Table 3. *The aims of the questions and factors they are describing*

Factor to be described	The aim of the question
Characteristics of real property owners, Deutsch	Livelihood (depending on road project)
Characteristics of real property owners, Deutsch	Role in agreement (owner or part owner, other role)
Nature of the conflict, Deutsch	Getting information about the possibility of expropriation (alternative process)
Communication, Deutsch	A high level of participation and getting information
Task-orientation, Deutsch	Feeling of confidentiality
Attitudes, Deutsch	In the beginning there were quarrels
Attitudes, Deutsch	Pressure under negotiations
Nature of the conflict, Deutsch	Reasons for going into agreements
Perception, Deutsch	Real property owner's own initiative
Nature of the conflict, conflict size, Deutsch	The object of the agreement
Possible third parties, Deutsch	The negotiator from Finnra
Prior relationship, Deutsch	Prior experience of public road surveys
Prior relationship, Deutsch	Prior experience of Finnra
Background information of real property	Where the real property was situated
Later relationship	Later experience during the project
The outcome	Satisfied with the outcome
Factor to be explained	Satisfied with the process
When is it delivered?, Menkel-Meadow	The duration of the agreement process
What is delivered?, Menkel-Meadow	Content of compensation
By whom is it delivered?, Menkel-Meadow	The best party to be negotiated with
By whom is it delivered?, Menkel-Meadow	Need for a mediator during negotiations

Table 4. *Compilation of the structural responses*

Questionnaire	Number of responses	Number of owners	Response rate; approxi-mation	Open-ended writing	Comments of a few words
Major agreements	26	97	27	15, pictures	3
Transactions for traffic areas	4	19	21	2	2
Minor agreements	140	543	26	61	48
Total	*170*	*659*	*26*	*78*	53

- 25 cases of whole dwellings, business buildings, or other buildings;
- 8 cases of building land, forest land or arable land; and
- 3 cases of other compensations.

The objects of the minor agreements were:

- 73 cases of compensation for severances and injurious affections;
- 20 cases of compensation for arable land and for gardens;
- 24 cases of compensation for soil; and
- 86 cases of compensation for under drains, ditching, water pipes, premature felling of trees, private road intersection or for a private road.

The minor agreements involved many of the aforementioned objects. Part of them included repair and restoration works. Some minor agreements had been unwritten.

3 Results

3.1 Numeric data of responses

Figure 1 shows the compilation of the response data used with the statistic analysis. (Sums of answers per question are not always 170 in Figure 1 because of non-responses.) The data was partly newly classified for analysis.[9]

3.2 Statistical analysis

The statistical method used was binary logistic regression (Pampel 2000). It is used when the dependent variable is a dichotomy. The method of estimation was maximum likelihood estimation. The model predicted the possibility of satisfaction with the agreement process.

The variable "Role" got high values on kurtosis and skewness. It was taken away from the analysis. In the check of multicollinearity no high values were found. Partial correlation analyses showed that variables "Duration of the agreement process" or "Satisfaction with the outcome" were not the variables influencing satisfaction. Instead it was the variable concerning feeling of confidentiality (There were confidential relations, straightforward discussions and concentration on facts). "The negotiation situation" was one more variable, which had not influenced satisfaction, but "The scale of agreement" had. The rules of causality (high correlations between independent variables and dependent variable, reason before cause, no third factor to explain the cause and support of Deutsch's (1973) theory) were fulfilled by all variables in the final model (Table 5).

[9] There was a new factor: "The monetary scale of the agreement". Major agreements and traffic area agreements were big ones, minor agreements were small. The question concerning reasons for entering into negotiations was divided into: "Reasons for entering into the agreement process were something else than a minor value object" and "Positive attitude towards the other party/ agreement possibilities". Also the question of negotiation situation was divided into three: "A high level of participation and getting information"; "There were confidential relations, straightforward discussions and concentration on facts (Trustworthiness)"; and "In the beginning there were quarrels".

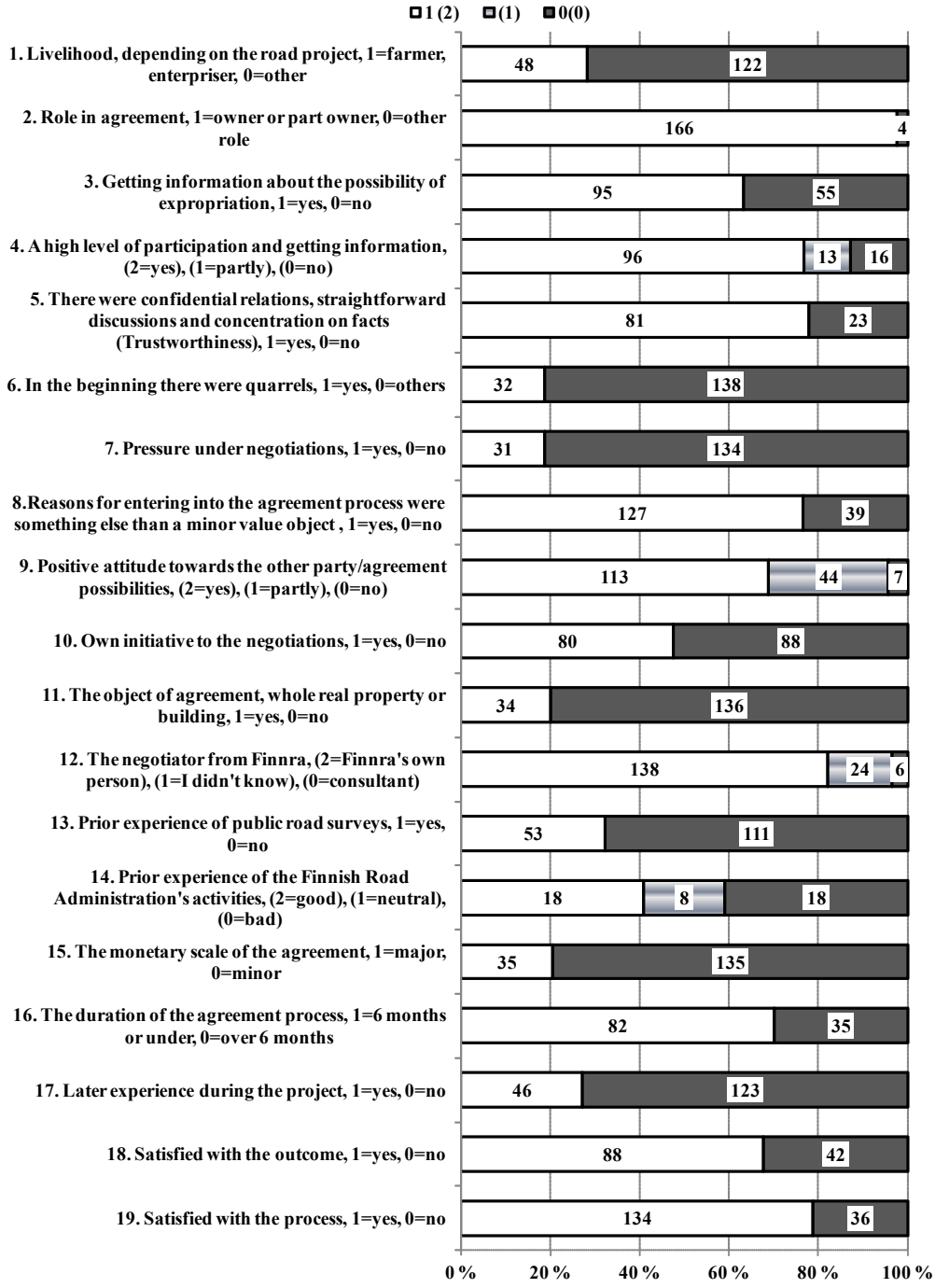

Figure 1. *Numeric data of the responses (per cents and numbers), n=170*

Table 5. *Results of logistic regression analysis, n=170*

Goodness of fit statistics

Statistic	Independent	Full
Observations	**170**	**170**
Sum of weights	170,000	170,000
DF	169	163
-2 Log(Likelihood)	**175,537**	**70,383**
R²(McFadden)	**0,000**	**0,599**
R²(Nagelkerke)	**0,000**	**0,716**
AIC	177,537	84,383
SBC	180,673	106,333
Iterations	0	6

Test of the null hypothesis H0: Y=0,788

Statistic	DF	Chi-square	Pr > Chi²
-2 Log(Likelihood)	6	105,154	< 0,0001
Score	6	93,344	< 0,0001
Wald	6	32,722	< 0,0001

Standardized coefficients

Source	Value	Standard error	Chi-Square	Pr > Chi²	Lower bound (95%)	Upper bound (95%)
Own initiative to the negotiations	**0,488**	**0,222**	**4,830**	**0,028**	**0,053**	**0,922**
A high level of participation and getting information	**0,672**	**0,182**	**13,694**	**0,000**	**0,316**	**1,028**
Confidential relations, straightforward discussions and concentration on facts	**0,697**	**0,171**	**16,596**	**< 0,0001**	**0,362**	**1,032**
In the beggining there were quarrels	**-0,356**	**0,156**	**5,194**	**0,023**	**-0,663**	**-0,050**
Later experience during the project	**-0,659**	**0,197**	**11,212**	**0,001**	**-1,045**	**-0,273**
Pressure under negotiations	**-0,353**	**0,151**	**5,500**	**0,019**	**-0,649**	**-0,058**

Confidential relations, straightforward discussions and concentration on facts (*task-orientation)* and a high level of participation and getting information (*communication)* both had positive effects on satisfaction. If negotiations were conducted on the owner's own initiative *(perception)*, this own activity of the owner also affected positively. Feeling of pressure under negotiations and quarrels in the beginning of negotiations *(attitudes),* and later bad experiences during the project, caused all dissatisfaction.

Model fit

To test the fit of the model, deviance was analysed (Table 5, 175,537). It was not much bigger than degree of freedom (Table 5, DF 169). To test further, pseudo R^2 values were calculated[10] in two different ways (Pampel 2000, pp. 48–54). The improvement according to the McFadden pseudo-R^2 was 59.99 per cent and according to the Nagelkerke one, 71.6 per cent. The model fit seemed good.

[10] First was calculated the difference between the baseline log likelihood -2 times and the model log likelihood -2 times. Baseline log likelihood means the situation where the model contains no independent variables. The model log likelihood is the case where the model contains these six variables. The decrease was 105,154.

One more test of the fit is the classification table (Table 6). The model fit was excellent with satisfaction (94.03 per cent). Only 8 cases of 134 were predicted wrongly. When looking at dissatisfaction, 11 cases of 36 were predicted wrongly. The model predicted 69.44 per cent of dissatisfaction correctly. Commonly the model was very good, because it predicted 88.82 per cent of all cases correctly.

Table 6. *Classification table, n=170*

from \ to	0	1	Total	% correct
0	25	11	36	69,44 %
1	8	126	134	94,03 %
Total	33	137	170	88,82 %

Residual analysis

Residuals were presented as studentized residuals. The data had three observations with high residuals (values 2,991, 3,893 and 3,500). No mistakes were found in the data handling or classification. Nor could any clues be found from the open-ended answers. These three observations were left in the results.

The residuals should have a normal distribution, if the model was good. The Jarque-Bera test (Jarque & Bera 1987) showed that the distribution was normal[11].

3.3 The analysis of open-ended answers

The length of the open-ended answers varied from a few sentences to three pages. In one answer different themes were discussed several times. Table 7 depicts the themes found. (The open-ended questionnaire responses are next under presented partly in the form of direct quotes.)

Table 7. *Compilation of themed written responses*

Themes in open-ended responses
Pressure
Bad outcome
Bad final engineering phase
Bad later experience
Good/Bad agreement method
All things should have been agreed at the same time.
The whole public road project was too long a process.

Pressure and voluntariness

There had been feelings of pressure. Also concluding the agreement was not experienced as being entirely voluntary.

[11] Observed value 5,233 DF 2 p-value 0,073
Critical value 5,991 α 0,05

H_0: The sample followed a normal distribution. H_a: The sample did not follow a normal distribution. As the p-value was greater than the significance level α=0,05, one could not reject the null hypothesis H_0. The risk to reject the null hypothesis while it is true was 7,30%.

"The negotiation situation of the Finnra was simply far superior."

"We had nothing to say in the matter."

"The authority had supremacy."

Bad later experiences

There were two reasons for bad later experiences. The first was that contractors had acted inappropriately later on during the construction. Secondly Finnra itself had not kept its agreement promises. Agreements concerning small objects had been sometimes unwritten. This had caused confusion later during the project when the respondents compared their unwritten agreements and the activities which have been done because of these agreements.

"The Road Authority gives constructing activity to a contractor, who acts badly on our property, where there are still buildings belonging to us. There was a deal that nothing should be taken away from the old building, but the Road Authority takes and the contractor disturbs all what's left at the end."

"They came without notification to our lot."

"There should have been agreement with Finnra on the date until which all should have been rebuilt."

"Bad effects don't happen until later during the road project. That why I do no agreements anymore."

Some respondents thought that negotiations had been poor because of lack of information. Others' opinions were that the process was quick and easy. Commonly, the project appeared to be one major conflict with smaller conflicts concerning issues like planning, public road survey and construction. Owners preferred constructive negotiations, not destructive ones.

The open-ended answers confirmed the results of reason-cause analyses. They also gave more understanding about reasons of satisfaction, especially concerning later experiences during public road projects.

3.4 Non-response analysis

Since the response rate was 26 per cent, an analysis of non-response was conducted. Ten randomly selected owners were phoned and asked for the reasons for their non-response. The owners stated that they had not been interested, because they hardly ever shall come across a similar situation, or they had been in a hurry. The ones who made minor agreements had received the final compensation not until in connection with the public road survey. This explained why they had not been interested in answering. These three reasons became clear during the first four calls. When six more calls had been completed, no more reasons had transpired. Therefore, it seemed that a saturation point had been reached, and there was no reason to continue the telephone calls.

The non-responses have nothing to do with satisfaction. But non-response seemed to occur when the owner had got the final compensation not until during the public road survey. Therefore the results are also valid with the sample, in the situations when the final compensation had happened during the agreement process. If you think about agreeing, these situations are the real agreement situations.

3.5 Validity and reliability

The sample consisted of data from 2001–2005. The agreement strategies of Finnra have not changed from 2006–2010 compared to 2001–2005, because processes and objects of agreement were the same during 2001–2010. (Korhonen 2011.) If the responses had come from only some parts of the country, but the agreements had been done in every part, this could have caused problems with reliability. Statistical analysis (Wilcoxon rank sum two-sample test) showed that the area distribution was the same in the sample and in the population. This strengthened the interpretation that the results are reliable commonly in agreements during 2001–2010.

The questions asked measured the theories used quite well. But some questions should have been asked about attitudes and perceptions during the negotiations. Furthermore there was no question to describe the estimations of success.

3.6 Possible advantages of using agreements instead of expropriation

Possible advantages of agreements were studied in the context of legislation and other regulations in force. There was no special regulation of agreement situations concerning the contents of compensation and timing of paying compensation. That is why property owners' opinions concerning these factors were also used.

There was no difference between the valuation methods of the public road survey and an agreement process. No transaction costs accrued to real property owners either because of expropriation or of an agreement process, as the expropriator paid them. There were also the possibilities of discourses during both processes. In both processes both parties had the chance to mandate an outsider to represent them.

One difference between expropriation and agreement was the content of the compensation. In expropriation it was monetary or sometimes works "in kind", but in the case of an agreement it could be anything, for instance a piece of land or even a holiday flat. Another difference between expropriation and agreement was when timing played an important role. For instance, there could be a question of getting monetary compensation as quickly as possible. Some respondents informed me that it took only some phone calls, but 35 respondents answered that the agreement process took six months or more. Thus real property owners could get compensation very fast in some cases, but not always. In those cases where there were many possibilities for compensation and rapid payment of compensation, agreements could be real alternatives to expropriation.

The open-ended answers showed that some property owners would need a mediator to help them with the negotiations. If a real property owner needs a mediator, the process used closely resembles a public road survey. This means that in this case it is not clear whether an agreement process is better than a public road survey.

4 Discussion

This research was the first to study agreements as a land acquisition method in connection with public road projects in Finland. It focused on the perspective of real property owners in real agreement situations, where the final amount of compensation was decided during an agreement process, not with a public road survey.

The first question was to discover if the model based on social process theory (Deutsch 1973) could explain real property owners' satisfaction with the agreement process. Second, the advantages of using an agreement process instead of expropriation were tested. The research methods of the social process theory were logistic regression analysis (quantitative) and theory-based content analysis (qualitative). The population was the agreements of the public road projects in Finland during 2001–2010. The sample consisted of agreements during 2001–2005. When testing the advantages of using agreements, content analysis was also used.

The results show that feeling of confidentiality *(task-orientation)* and a high level of participation and getting information *(communication)* both have positive effects on satisfaction concerning the agreement process. Feeling of confidentiality means that there are confidential terms, fair discussions, and concentration on facts. A high level of participation means a real chance to discuss and negotiate. If negotiations are conducted on the owner's own initiative *(perception),* this activity of the owner also has a positive effect. Feelings of pressure and quarrels in the beginning of the negotiations *(attitudes)* cause dissatisfaction.

The model created in the study explains real property owners' satisfaction with the agreement process excellently and their dissatisfaction well. Prior experiences, occupation, or the role of the real property owner, the negotiator from Finnra's side, the object of the agreement, the time it takes to reach an agreement, or satisfaction with the outcome do not influence satisfaction with the process, but later experiences during the project cause dissatisfaction. In some cases contractors act badly or Finnra does not keep its promises.

The findings show that both constructive (co-operative) and destructive (competitive) negotiating styles are used. Those who experience negotiations as being constructive are more often satisfied than those who consider them destructive. Both negotiating styles lead to management of the conflicts, but only by using a constructive style are conflicts resolved. Agreements with public road projects are not experienced as being fully voluntary. They should not be called "voluntary land acquisition and compensation", but "agreement-based land acquisition and compensation".

Twenty-one per cent of the respondents were dissatisfied. Finnra's strategy of using agreements to avoid conflicts and to improve its image is not successful

in all cases. This means that negotiators should not use pressure. Negotiations should be brought to an end if quarrels continue during the process. Real property owners should have real opportunities to negotiate. If there is no confidentiality, then negotiations should not be continued. Furthermore, negotiations should always be started when a real property owner takes it upon himself to initiate an agreement. Finnra should also provide better co-operation and information sharing between persons negotiating agreements and contractors. The aim is to ensure that the last part of the agreement process deals fully with the issues in the agreement documents.

The results are applicable to the group of respondents. They also apply to the sample, but not in those situations when final amount of compensation has been decided outside the agreement process (in the public road survey). The results are valid in the real agreements on public road projects during 2001–2010.

In the study two advantages were found of using an agreement process instead of expropriation. In the case of expropriation compensation is monetary, but in the case of an agreement it can be anything, for instance a piece of land, reparation or restoration works, or even a holiday flat. Another issue to make agreeing a substantive alternative to expropriation are those cases when the monetary compensation is paid quickly. In Finland there is no difference between the valuation methods concerning expropriation and an agreement process. In addition, no transaction costs should accrue to real property owners either because of expropriation or of an agreement process. There is also the possibility of discourses during both processes.

To improve the satisfaction of real property owners the Finnish Traffic Agency should change the practical instructions for the agreement process. This means instructions where real property owners should always have the right to an agreement process. This possibility should be used at the early stage of the road planning process. The content of compensation should also be widened. Contractors should act properly towards property owners and expropriators themselves should keep the promises made in an agreement.

The main scope of this study was the process of agreement. It was researched from the perspective of real property owners. This meant that the study did not focus on societal transaction costs. There is a need for comparative research concerning the transaction costs of expropriation and of the agreement processes. Future studies should also be performed concerning the results of expropriation, e.g. discussing the full compensation principle from the perspective of real property owners' experiences.

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Appendix 1

Highly regarded receiver of this letter!

At the Helsinki University of Technology there is an ongoing dissertation research project studying agreement activities of public road projects of the Finnish Road Administration. There could have been a question of a purchase of real property or a land area, for instance "expropriation" of a traffic area in detailed plans or agreements concerning severances or injurious affections.

The aim of the enquiry is to discover **the opinions of those who have participated in agreement negotiations**. (In the district of Uusimaa one short enquiry on a similar issue has already been done, however I hope that the respondents of that questionnaire will still answer this questionnaire, so that I can obtain information from all over Finland.) The questions in this enquiry are different from those in the earlier questionnaire which is why it is important.

For research purposes I acquired all the information concerning purchases and other agreements made by the Finnish Road Administration from 2001–2005. According to this information you have been involved in an agreement case concerning your real property/property. You may have been involved with the agreement situation as a representative. However, if you have not been involved in agreement negotiations, please give the questionnaire to the person who was. You are not required to complete the questionnaire.

I have made the questionnaire very simple: only two pages, which you can mainly complete by crossing the right alternative. You should not spend too much time answering. I shall analyse all the information completely confidentially, and the research findings will be published in such form, that the identity of any respondent cannot be seen.

By answering you can influence the development of agreement negotiations in the whole of Finland! I hope you do not mind helping and answer as quickly as possible, and at the latest by 18 April 2006. I enclose a stamped addressed envelope so replies can be sent without any expense.

Many thanks in anticipation of your assistance.

Seija Kotilainen
Senior Researcher

Phone: 040 5470379

QUESTIONAIRE TO THE REAL PROPERTY OWNERS WHO HAVE CONCLUDED PURCHASE WITH THE FINNISH ROAD ADMINISTRATION

*1. Your main livelihood **when concluding the purchase?** (Cross right alternative)*

I was farming that farm. ☐ I was responsible for that business. ☐ I had other livelihood (E.g. a civil servant, retired). ☐

2. Your role when concluding the agreement/purchase.

I owned the real property. ☐ I was a part-owner of the real property. ☐ I acted as representative. ☐

3. The object of agreement was?(Cross right answer or answers)

Dwelling (land+building)	☐	Site (land)	☐	Traffic area (land)	☐	Animal shelter	☐
Business real property (land+buildings)	☐	Forest land	☐	Dwelling	☐	Other building	☐
Farm (land+buildings)	☐	Arable land	☐	Business building	☐	Court fees	☐

Other object.What?_____

4. The community of the agreement object. (for instance Ivalo)

*5. Did you have any prior experience of next issues **before** the agreement?*

Public road survey. Yes ☐ No ☐

Other activities of Finnra. Yes ☐ No ☐

*If you answered Yes, from which activity?*_____

Was this experience? Good ☐ Bad ☐ I cannot say ☐

6. Did they tell you that if you don't agree, the compensation should decided by expropriation?

Yes ☐ No ☐

7. Reasons for entering into the agreement process

Minor worth object and that why the agreement.	☐	There shouldn't be any conflicts when agreed.	☐
It was the cheapest way for me/for us.	☐	There shouldn't be any conflicts.	☐
Result should be achieved faster than with expropriation.	☐	Avoiding expropriation.	☐
Less publicity than with expropriation.	☐	The Road Authority advised to agree.	☐

Other reason. What?_____

8. Who handled the agreement process with you on behave of Finnra?

The civil servant from Finnra ☐ The consultant ☐ I am not sure. ☐

9. Think about the agreement situation. How did you experience it?

I did get information, they listened to me and I had possibility to discuss/negotiate.	☐	There were confidential relations, straightforward discussions and concentration on facts.	☐
I did get information, but they didn't listen to me.	☐	There were no confidential relations, straightforward discussions or concentration on facts.	☐
I didn't get information.	☐	In the beginning there were quarrels.	☐

0. What was the duration of the agreement process? (Months) _____ *How many meetings?* ___

1. Did you take yourself the initiative to the negotiations?

Yes ☐ No ☐

12. Did you experience any pressure under negotiations?

Yes ☐ No ☐

*13. Have you been later **after** agreeing in some way taking part in the road project?*

Yes ☐ No ☐

14. Are you satisfied with the agreement/agreement process still now?

I am satisfied with the price of the agreement. ☐
I am not satisfied with the price of the agreement. ☐
I am satisfied with the process of the agreement. ☐
I am not satisfied with the process of the agreement. ☐

IF YOU WOULD TAKE PART IN SOME OTHER ROAD PROJECT IN THE FUTURE, SO WHAT WOULD YOU WISH?

15. What would you want to receive in compensation?

Monetary compensation ☐
Forest land or other land ☐
A building worth the one I have lost. (If you have lost a building.) ☐
A summer cottage/ Holiday apartment shares ☐
Partly money, partly cheaper building ☐
Reparation works, restoration ☐

16. Who is the best to handle land acquisition and compensation activities?

Civil servant of Finnra, by agreement ☐
A contractor from the side of Finnra, by agreement ☐
An expropriation committee ☐
A private company from the side of Finnra, by agreement ☐
The National Land Survey of Finland before an expropriation, by agreement ☐
Other party. Which one? ☐

17. If you liked the agreement method, do you think you would need any impartial "third man"/outsider to help you in the future?

Yes ☐ No ☐

18. If you don't like the agreement method, why not?

19. Other wishes, if you should encounter a road project once again? (You can also write on the backside of the paper.)

If you want to discuss more with the researcher, please put your contact information here:
Name: Telephone:

Thank you for your answer!

QUESTIONAIRE TO THE REAL PROPERTY OWNERS WHO HAVE CONCLUDED AGREEMENT WITH THE FINNISH ROAD ADMINISTRATION

*1. Your main livelihood **when concluding the purchase?** (Cross right alternative)*

I was farming that farm. ☐ I was responsible for that business. ☐ I had other livelihood (E.g. a civil servant, retired). ☐

2. Your role when concluding the agreement/purchase.

I owned the real property. ☐ I was a part-owner of the real property. ☐ I acted as representative. ☐

3. The object of agreement was?(Cross right answer or answers)

Severance/Injurious affection to dwelling ☐	Severance/Injurious affection to farming ☐	Water pipe, connection ☐	Compensation soil ☐
Severance/Injurious affection to building ☐	Injurious affection; private road ☐	Cutting of trees ☐	Compensation underdrains ☐
Severance/Injurious affection to business ☐	Injurious affection to garden, fence ☐	Injures to ditches ☐	Injures; construction ☐

Other object.What?_____

4. The community of the agreement object. (for instance Ivalo)

*5. Did you have any prior experience of the following issues **before** the agreement?*

Public road survey. Yes ☐ No ☐

Other activities of Finnra. Yes ☐ No ☐

*If you answered Yes, from which activity?*_____

Was this experience? Good ☐ Bad ☐ I cannot say ☐

6. Did they tell you that if you don't agree, the compensation would be decided by expropriation?

Yes ☐ No ☐

7. Reasons for entering into the agreement process

Minor value object. ☐	There shouldn't be any conflicts when agreed. ☐
It was the cheapest way for me/for us. ☐	There shouldn't be any conflicts. ☐
Result should be achieved faster than with expropriation. ☐	Avoiding expropriation. ☐
Less publicity than with expropriation. ☐	The Road Authority advised to agree. ☐
	Other reason. What?_____

8. Who handled the agreement process with you on behave of Finnra?

The civil servant from Finnra ☐ The consultant ☐ I am not sure. ☐

9. Think about the agreement situation. How did you experience it?

I did get information, they listened to me and I had possibility to discuss/negotiate. ☐	There were confidential relations, straightforward discussions and concentration on facts. ☐
I did get information, but they didn't listen to me. ☐	There were no confidential relations, straightforward discussions or concentration on facts. ☐
I didn't get information. ☐	At the beginning there were quarrels. ☐

10. What was the duration of the agreement process? (Months) _____ *How many meetings?* ___

11. Did you take yourself the initiative to the negotiations?

Yes ☐ No ☐

12. Did you experience any pressure under negotiations?

Yes ☐ No ☐

*13. Have you been later **after** agreeing in some way taking part in the road project?*

Yes ☐ No ☐

14. Are you satisfied with the agreement/agreement process still now?

I am satisfied with the price of the agreement. ☐ I am not satisfied with the price of the agreement. ☐

I am satisfied with the process of the agreement. ☐ I am not satisfied with the process of the agreement. ☐

IF YOU WOULD TAKE PART IN SOME OTHER ROAD PROJECT IN THE FUTURE, SO WHAT WOULD YOU WISH?

15. What would you want to receive in compensation?

Monetary compensation ☐ Forest land or other land ☐

A building worth the one I have lost. (If you have lost a building.) ☐ A summer cottage/ Holiday apartment shares ☐

Partly money, partly cheaper building ☐ Reparation works, restoration ☐

16. Who is the best to handle land acquisition and compensation activities?

Civil servant of Finnra, by agreement ☐ A contractor from the side of Finnra, by agreement ☐

An expropriation committee ☐ A private company from the side of Finnra, by agreement ☐

The National Land Survey of Finland before an expropriation, by agreement ☐ Other party. Which one?

17. If you liked the agreement method, do you think you would need any impartial "third man"/outsider to help you in the future?

Yes ☐ No ☐

18. If you don't like the agreement method, why not?

19. Other wishes, if you should encounter a road project once again? (You can also write on the backside of the paper.)

If you want to discuss more with the researcher, please put your contact information here:

Name: Telephone:

Thank you for your answer!

QUESTIONAIRE TO THE REAL PROPERTY OWNERS WHO HAVE CONCLUDED AGREEMENT WITH THE FINNISH ROAD ADMINISTRATION (TRAFFIC AREA)

*1. Your main livelihood **when concluding the purchase?** (Cross right alternative)*

I was farming that farm. ☐ I was responsible for that business. ☐ I had other livelihood (E.g. a civil servant, retired). ☐

2. Your role when concluding the agreement/purchase.

I owned the real property. ☐ I was a part-owner of the real property. ☐ I acted as representative. ☐

3. The object of agreement was? (Cross right answer or answers)

Traffic area ☐ Also building ☐ Compensation, garden ☐ Other compensation ☐

Other object. What?

*4. Did you have any prior experience of next issues **before** the agreement?*

Public road survey Yes ☐ No ☐

Other activities of Finnra Yes ☐ No ☐

If you answered Yes, from which activity?

Was this experience? Good ☐ Bad ☐ I cannot say ☐

5. How did you get the information about the possibility for an agreement?

I was active and found out that Finnra had acquire the land. ☐ I heard from friends/neighbors about the possibility. ☐

Finnra contacted me. ☐ I got the information from newspapers or other media. ☐

6. Did they tell you that if you don't agree, the compensation should decided by expropriation?

Yes ☐ No ☐

7. What main goals did you have with the negotiations?

To get compensation as high as possible. ☐ To get the same compensation as commonly in the area. ☐

To get compensation on same level as neighbors. ☐ To get rid of a piece of land useless to me. ☐

8. Reasons for entering into the agreement process

Minor value object. ☐ There shouldn't be any conflicts when agreed. ☐

It was the cheapest way for me/for us. ☐ There shouldn't be any conflicts ☐

Result should be achieved faster than with expropriation. ☐ Avoiding expropriation. ☐

Less publicity than with expropriation. ☐ The Road Authority advised to take an agreement. ☐

Other reason.

What?

9. Think about the agreement situation. How did you experience it?

I did get information, they listened and I had possibility to discuss/negotiate. ☐ There were confidential relations, straightforward discussions and concentration on facts. ☐

I did get information, but they didn't listen to me. ☐ There were no confidential relations, straightforward discussions or concentration on facts. ☐

I didn't get information. ☐ At the beginning there were quarrels. ☐

10. How long did the agreement process take? (Months) _____How many meetings? _____

11. Who handled the agreement process with you on behave of Finnra?

The civil servant from Finnra ☐ The consultant ☐ I am not sure ☐

*12. Have you been later **after** agreeing in some way taking part in the road project?*

Yes ☐ No ☐

13. Are you satisfied with the agreement/agreement process still now?

I am satisfied with the price of the agreement. ☐ I am not satisfied with the price of the agreement. ☐

I am satisfied with the process of the agreement. ☐ I am not satisfied with the process of the agreement. ☐

IF YOU WOULD TAKE PART IN SOME OTHER ROAD PROJECT IN THE FUTURE, SO WHAT WOULD YOU WISH?

14. What would you want to receive in compensation?

Monetary compensation ☐ Land for worth of lost land (if you have lost over 5000 €) ☐

Reparation works, restoration ☐ Other issue. What? ☐

15. Who is best suited to handle land acquisition and compensation activities?

Civil servant of Finnra, by agreement ☐ A contractor from the side of Finnra, by agreement ☐

An expropriation committee ☐ A private company from the side of Finnra, by agreement ☐

The National Land Survey of Finland before an expropriation, by agreement ☐ Other party. Which one?

16. If you liked the agreement method, do you think you would need any impartial "third man"/outsider to help you in the future?

Yes ☐ No ☐

17. If you don't like the agreement method, why not?

18. Other wishes, if you should encounter a road project once again? (You can also write on the backside of the paper.)

If you want to discuss more with the researcher, please put your contact information here:

Name: Telephone:

Thank you for your answer!