

TECHNICAL ANNEX

OF PROJECT

AFFORD

PL97-2258

4.12.1997

Helsinki 1997

Muistion tausta

Oheinen muistio on VATT:n koordinoiman EU-tutkimushankkeen tutkimusohjelma (technical annex). Tutkimus, joka käsittelee kaupunkiliikenteen hinnoittelua, on osa EU:n liikenteen tutkimusohjelmaa (DG VII, Transport RTD Programme). VATT:n puolesta tutkimushankkeen on valmistellut Esko Niskanen, joka myös toimii itse tutkimuksen koordinoijana. Tutkimushanke alkaa 1.2.1998 ja kestää noin 1,5 vuotta. Tutkimussuunnitelman laatimiseen ovat osallistuneet kaikki konsortioon kuuluvat 10 tutkimuslaitosta ja yliopistoa kautta Euroopan.

Reino Hjerppe

PROPOSAL N°:	PL97-2258		
Project Title:	Acceptability of Fiscal and Financial Measures and Organisational Requirements for Demand Management	Project Acronym:	AFFORD
Main contractor:	Government Institute for Economic Research	Type:	ROR
		Country:	FI
Start date :	1.2.1998	Duration:	17 months
		Action type:	SC
Total Cost in kECU:	1 064,82	Total EU contribution in kECU:	692,65
Programme area:	5	Relevant workprogramme tasks:	

Objectives of the research (including demonstration sites)

The general objective of Project AFFORD is to promote marginal cost pricing practices in the context of urban transport, to show that marginal cost based pricing measures are desirable and feasible and, in particular, to show how barriers, institutional and political, can be overcome. The first stage is to operationalise the idea of marginal cost pricing. This means identification, detailed definition and assessment of the effectiveness of the practical pricing measures.

The more detailed objectives of Project AFFORD are to:

1. identify and define practical measures to implement marginal cost pricing;
2. assess the effectiveness of such measures in internalising externalities and affecting demand;
3. examine institutional issues affecting the implementation of such measures;
4. assess the economic and equity implications of such measures;
5. assess public and political acceptability of such measures, and how this may be improved where appropriate; and
6. provide conclusions for the practical implementation of pricing measures.

Case study cities:

The issues raised by the objectives 1-6 above are of great concern to all cities and urban areas in Europe. Six cities, in five Member States and in Norway, are chosen to be case study cities: Athens, Dresden, Edinburgh, Helsinki, Oslo and Madrid. Project AFFORD will be carried out in close co-operation with representatives of the case study cities.

Links with other projects, tasks, areas, programmes, policy actions

Project AFFORD will draw on existing studies, theoretical and empirical. The project has close links with a number of ongoing research projects for DGVII. Two such projects in the area of Urban Transport (Pricing and Financing) are OPTIMA (5.4/23) and TRANSPRICE (5.4/24). Project AFFORD will use results produced by these two projects and will use a subset of their case study cities, hence benefiting from the good working relationships already established with the city authorities.

Other ongoing research projects in the area of Urban Transport, relevant to Project AFFORD, are e.g. CONCERT-P (5.4/24), FISCUS (5.4/25&26) and FATIMA (5.4/27).

Projects with close links to Project AFFORD in the area of Strategic Research are e.g. PETS (1.2/15) and TRENEN II-STRAN (1.2/15).

Project AFFORD and other pricing projects for DGVII will be co-ordinated under the CAPRI (Concerted Action on Pricing) activities.

Main expected deliverables and status (C, R or P)

Deliverable 1: "Operationalisation of marginal cost pricing" (P)

Deliverable 2: "Public and political acceptance of marginal cost pricing in urban transport" (P)

Deliverable 3: "Policy guidelines for the introduction of marginal cost pricing in Europe" (P)

C=Confidential, R=Restricted, P=Public

Deadlines for deliverables

Deliverable 1 in week 26

Deliverable 2 in week 52

Deliverable 3 in week 69

Participating Organisations

N°	Role	Organisation name	Country Code	Type	SME	Total Cost in kECU	EU Contribution in kECU
1	CC	Government Institute for Economic Research (VATT)	FI	ROR	Yes	213,87	106,94
2	C	University of Leeds (ITS)	GB	EDU	No	115,50	115,50
3	C	Institute of Transport Economics (TOI)	NO	ROR	Yes	200,00	100,00
4	C	Universidad Politecnica de Madrid (UPM)	ES	EDU	No	81,00	40,50
5	C	Technische Universität Dresden	DE	EDU	No	108,19	108,19
6	C	TRIAS SA Consulting	GR	OTH	Yes	107,88	53,94
7	C	MIP - Politecnico di Milano	IT	OTH	No	72,01	36,00
8	AC	University of York	GB	EDU	No	71,09	71,09
9	AC	LT Consultants Ltd	FI	IND	Yes	69,59	34,80
10	AC	Center for Interdisciplinary Systems Research (C.I.S.R)	GR	ROR	Yes	25,70	25,70
11					No		
12					No		
13					No		
14					No		
15					No		
16					No		
17					No		
18					No		
19					No		
20					No		
TOTAL						1 064,82	692,65

Scientific officer in charge of the technical work

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CONTENTS

Summary fiche

1. Introduction	3
2. Project objectives	4
3. Project baseline	4
4. Project workplan	7
4.1 Work breakdown structure.....	7
4.2 Project life cycle planning.....	10
4.3 Project costs	11
5. Project management	12
6. Reports	14
7. Dissemination and exploitation plan	15
8. References	16

1. Introduction

Economic theory is rather unambiguous in concluding that the economic welfare of society in general will be maximised if economic agents, consumers and producers, are faced with prices reflecting the true, internal *and* external costs of their resource utilisation. This applies in particular to road users, where there are important externalities involved, including pollution, congestion, accidents, and road wear. Based on this theoretical line of reasoning, strong arguments have been put forward in support of road pricing as a means of controlling road use demand, especially in the most heavily congested European cities. Yet, road pricing appears to enjoy very little support among the population in general and among local policy makers in particular. There is an obvious paradox between the economic theory, which suggests marginal cost pricing is the right solution, and practical experience, which suggests that such pricing measures may be hard to implement.

Project AFFORD (Aceptability of Fiscal and Financial Measures and Organisational Requirements for Demand Management) aims to investigate the paradox and suggest how it might possibly be resolved. The project is designed to meet the requirements of Task 5.1.3/8 in the list of urban transport tasks.

The project starts by addressing the issues related to operationalisation of marginal cost pricing: how can the general idea of marginal cost pricing be implemented through practical measures? We will distinguish between the short run and long run, and will cover both. In any case, the focus will be on technologically feasible, present or future, pricing measures.

The principle of marginal cost pricing is based on the general concept of social optimisation: at the social optimum the social benefit of the last marginal unit of any product or service, e.g. a trip, must equal the social cost of producing this unit. Though this principle is well known and widely accepted as a general statement, its actual implementation is far from obvious. Our view is that many problems have arisen because of insufficient consideration of this basic issue. This is especially true in transportation, for there the definition of the product/service in many cases is not as clear as in private goods markets.

The AFFORD consortium is strongly committed to marginal cost pricing as an efficient way to improve the welfare of urban populations. The consortium endeavours to ascertain how such a policy could possibly gain acceptance and eventually be carried into practice, based on feasible technology applicable on a large scale. The aim of Project AFFORD is to present guidelines for practical implementation of marginal cost pricing in European urban transport.

The deliverables and final reports of Project AFFORD will be targeted at government officials and politicians dealing with urban transportation at all levels: local, national and EU. The project will contain a number of case study cities, and throughout the project we will work in close co-operation with policy makers. We will also make our results known to the general public through our dissemination activities. Naturally, the basic deliverables and reports will be presented in such a form that they satisfy the requirements of the scientific community. In addition, we will present our results in separate papers to be submitted to scientific conferences and journals.

2. *Project objectives*

The general objective of Project AFFORD is to promote marginal cost pricing practices in the context of urban transport, to show that they are desirable and feasible and, in particular, to show how barriers to their implementation, institutional and political, can be overcome. The first stage is to operationalise the idea of marginal cost pricing, i.e. the identification, detailed definition and assessment of practical pricing measures.

The more detailed objectives of Project AFFORD are to:

1. identify and define practical measures to implement marginal cost pricing;
2. assess the effectiveness of such measures in internalising externalities and affecting demand;
3. examine institutional issues affecting the implementation of such measures;
4. assess the economic and equity implications of such measures;
5. assess public and political acceptability of such measures, and how this may be improved where appropriate; and
6. provide policy guidelines for the practical implementation of pricing measures.

Case study cities

The issues raised by the objectives 1-6 above are of great concern to all cities and urban areas in Europe. Six cities, in five Member States and in Norway, are chosen to be case study cities: Athens, Dresden, Edinburgh, Helsinki, Madrid and Oslo. Project AFFORD will be carried out in close co-operation with representatives of the case study cities.

3. *Project baseline*

Cities and urban areas in Europe suffer from heavy congestion and environmental degradation as a result of current levels of car use. The Green Paper "*Towards Fair and Efficient Pricing in Transport*" Com(95)691.20.12.95 reported that the trend is likely to continue and further problems will arise. At the same time, the demand for use of public transport is low and the development of public transport systems is far below its potential. One reason for the current situation is that the private and social benefits and costs of using private car and public transport do not coincide. There is an obvious need, from the social point of view, to introduce consistent policy measures which can internalise externalities and correspondingly shift demand from private car to public transport.

Economic theory shows that marginal cost pricing is a condition, under the market approach, for economic efficiency. The principles of marginal cost pricing have been applied in the economic literature to all kinds of services, public and private. The so-called club theory provides a general theory, in principle covering all these applications: a road, a public transport system, a city etc. can be viewed as a 'club' (see Glazer et al. (1997)).

The principle of marginal cost pricing, and practical fiscal and financial measures, through which it may be implemented, have already attracted considerable interest also within

transportation. As stated in the Green Paper, however, transport sector pricing in practice is nearly always based on average cost pricing rather than marginal cost pricing. This is particularly true in the urban context. As a result prices in some cases are typically too high and in others too low. This has led to inefficient use of the existing transport system and, in the longer run, also to inefficient provision of its capacity. Characteristic to marginal cost based pricing measures instead is their flexibility, their ability to differentiate between different situations and different road users.

Technological research has already resolved many of the practical requirements for the introduction of sufficiently flexible pricing schemes. Various theoretical and empirical studies have assessed the effects of different pricing schemes on transport demand in an urban context, through modelling and attitudinal work (see e.g. Ghali and Smith (1993; 1995), Smith et al. (1994a; 1994b), Smith et al. (1997)). Institutional issues, and acceptance issues have also been investigated (see e.g. Verhoef (1996), Schlag (1997), Schlag and Teufel (1997)). Still, a huge gap exists between the lessons of economic theory and the possibilities of current technology on one hand, and the achievements in implementing road pricing thus far in practice. See also Niskanen (1997, forthcoming).

Project AFFORD will address these questions. It will assess the full range of fiscal and financial measures. The relevant marginal cost based pricing measures include road user charges, parking fees, fuel taxes, vehicle taxes and public transport fares and subsidies. In particular, practical road user charging measures to be considered include: (i) cordon charges, in which each vehicle crossing specified points in the network is charged fixed (or variable – depending on how we define the term 'fixed') tolls; (ii) distance-based charges, in which each vehicle is charged in proportion to the distance travelled within a specified charge area; (iii) time-based charges, in which each vehicle is charged in proportion to the time spent travelling within a specified charge area; and (iv) delay-based charges, in which each vehicle is charged in proportion to delays experienced while travelling within a specified charge area.

Besides marginal cost based measures, also their combinations with other measures will be covered. Here, the question of objectives arises. Objectives which motivate the move towards introducing transportation pricing schemes in practice may not be in line with the principles of marginal cost pricing, and with marginal cost based arguments for using fiscal and financial measures to manage transportation demand. Practical policy objectives of the measures to be considered include, besides improving economic efficiency, promotion of equity, raising revenue, environmental protection, aiding urban planning etc.

We will consider separately short-term pricing schemes that are immediately applicable using existing technology and long-term optimal solutions taking advantage of future technological advances. In the short run, marginal cost pricing measures aim to cover the external costs such as wear and tear of the network, congestion, accidents and noise. These costs have been extensively addressed in the literature, and their valuation in monetary terms has a relatively long tradition. In the long run, in a long-run solution, the full range of external costs, including environmental costs such as global and local pollution and social impacts, will be considered.

Project AFFORD uses a combination of economic analysis, predictive modelling, attitudinal surveys and consultations with the case study city authorities. The consortium combines

expertise and experience from economic, engineering, psychological and geographical disciplines at the pan-European level. Some of the partners have been involved in practical studies in the field, including the London Congestion Charging Study, the evaluation of the Oslo Toll Ring, and a series of case studies in Athens, Edinburgh, York and Leeds. The geographical spread of partners enables the project to provide a balanced overall view of the problems, and their general and specific local features, as well as the best solutions throughout Europe.

Links with other projects

Project AFFORD will draw on existing studies, theoretical and empirical. The project has close links with a number of ongoing research projects for DGVII. Project AFFORD and other pricing projects for DGVII will be co-ordinated under the CAPRI (Concerted Action on Pricing) activities.

Ongoing research projects in the area of Urban Transport, relevant to Project AFFORD, are e.g. OPTIMA (5.4/23), TRANSPRICE (5.4/24), CONCERT-P (5.4/24), FISCUS (5.4/25&26) and FATIMA (5.4/27).

Project OPTIMA assesses the role of pricing measures in integrated transport strategies. It has identified a series of strategies which are optimal in terms of efficiency and sustainability in nine cities in five Member States and Norway. The study has concluded that pricing measures such as road-user charges, parking charges, public transport fares etc. are required. It has also been acknowledged that the models used require greater detail in order to be able to assess the differences between alternative pricing policies adequately. Project AFFORD will use results from three of the case study cities (Edinburgh, Helsinki and Oslo) as inputs and will carry out the modelling work needed to address the precise formulation of charges.

Project TRANSPRICE investigates the use of integrated pricing mechanisms to change modal split. It specifies, demonstrates and evaluates the integration of different pricing measures, designed to change the modal split in urban areas. Road-user charges, parking charges, fares and other pricing measures are addressed also in this study. This work provides a detailed assessment of a series of individual fiscal policy alternatives. Results from a range of modelling tests and evaluations of practical trans-modal systems will be available for Project AFFORD for three case study cities: Athens, Helsinki and Madrid.

Project CONCERT will address integrated pricing/restraint measures in demand management; it will evaluate the impact of such measures on urban travel behaviour, and will test the public acceptability of the measures. Project FISCUS will examine real transport costs, internal and external, and financing schemes for urban transport system. Project FATIMA will investigate the role of the private sector in funding urban transport.

Projects with close links to Project AFFORD in the area of Strategic Research are e.g. PETS (1.2/15) and TRENEN II-STRAN (1.2/15). The aim of Project PETS is to provide advice on current arrangements for the pricing of transport, the appropriateness of the resulting pricing signals, the consequences of a more appropriate pricing structure, and the implications of

deregulation. Project TRENEN develops strategic models for transport policy assessment in the field of taxation, pricing and regulation.

4. *Project workplan*

4.1 *Work breakdown structure*

The objectives of Project AFFORD, as specified in section 2 above, are to:

1. identify and define practical measures to implement marginal cost pricing;
2. assess the effectiveness of such measures in internalising externalities and affecting demand;
3. examine institutional issues affecting the implementation of such measures;
4. assess the economic and equity implications of such measures;
5. assess public and political acceptability of such measures, and how this may be improved where appropriate; and
6. provide policy guidelines for the practical implementation of pricing measures.

Work breakdown structure follows this list of objectives. Project AFFORD contains six technical workpackages, which directly correspond to these objectives. The workpackages are:

- WP 1: Operationalisation of marginal cost pricing
- WP 2: Operationalisation of marginal cost pricing (part 2)
- WP 3: Institutional issues
- WP 4: Economic and equity issues
- WP 5: Acceptance
- WP 6: Policy implications, modifications and recommendations

These workpackages are useful to see as forming three parts. The first part consists of WP1 and WP2. They cover objectives 1 and 2 above, such that WP1 focuses on the economic analysis and WP2 on the engineering and modelling work. The second part consists of WP3, WP4 and WP5, which directly correspond to objectives 3, 4 and 5, respectively. WP 6 alone forms the third part. It will draw together the main results from the previous workpackages and will present policy guidelines for implementing marginal cost pricing in practice.

In addition, Project AFFORD contains one workpackage, WP7, for dissemination of the project results based on the outputs of WP6 and the project as a whole. This will include presentations to international conferences and publications within the European Union but also to wider audiences. Finally, there is one workpackage, WP8, for project management and quality assurance.

Hierarchy of the technical workpackages is presented in Figure 1. The overall content – detailed goals and stages – and the outputs of each workpackage as well as links between them are described in forms B in Appendix. Here we focus on the role of case city studies in these workpackages.

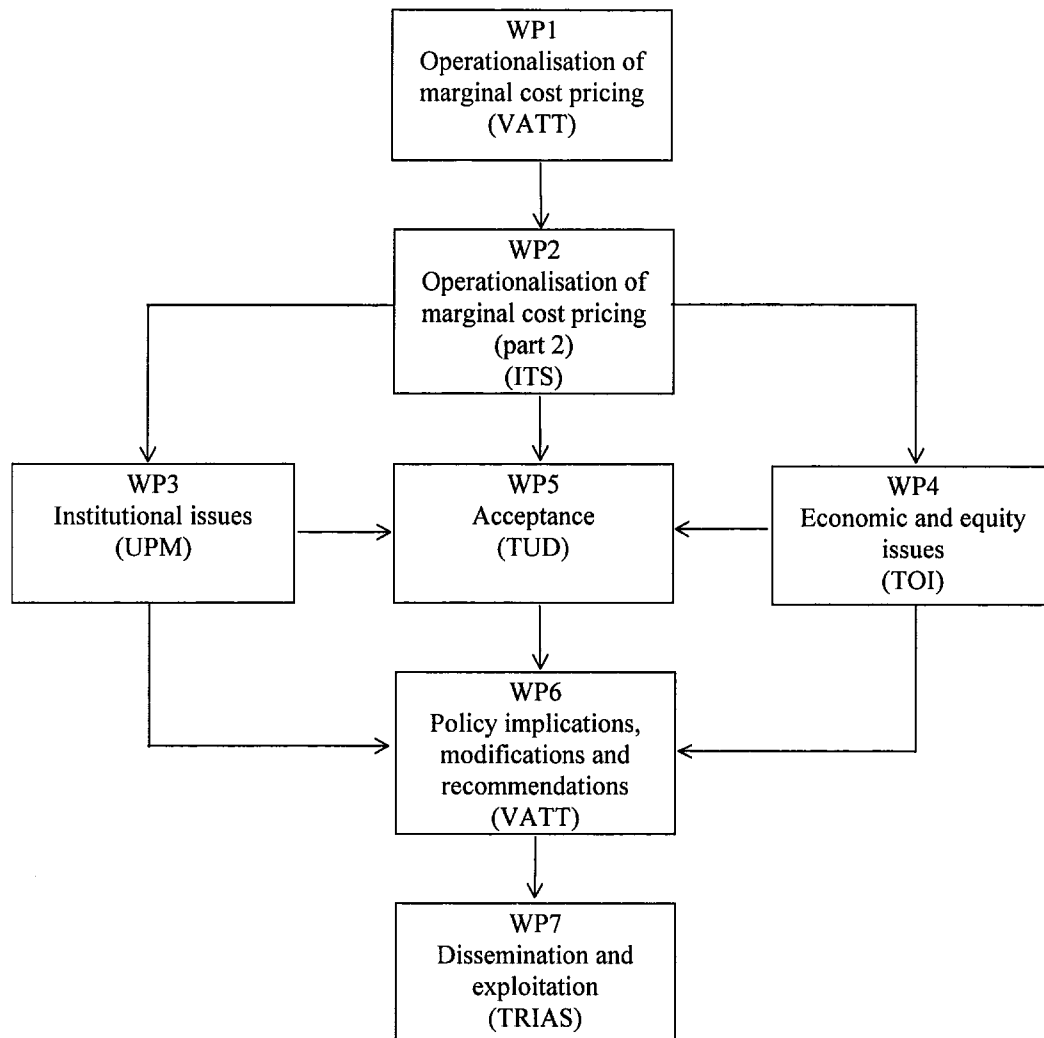


Figure 1. Workpackage hierarchy.

Figure 2 shows the involvement of the six case study cities – Athens, Dresden, Edinburgh, Helsinki, Madrid and Oslo – in the technical workpackages. Case city studies will be carried out in WP2, WP3, WP4 and WP5. In addition, all the case study cities will have an important role in WP6 on policy implications. The content of the case studies is described in more detail next.

In WP2, on operationalisation of marginal cost pricing, the case study cities will be Athens, Edinburgh, Helsinki and Oslo. We will use both strategic and detailed network modelling approaches to provide a comprehensive framework for presenting user and transport system responses. Strategic model tests will be carried out for Edinburgh, Helsinki and Oslo. This work will be based upon tests carried out previously under Project OPTIMA, which has used

the MVA START model for Edinburgh, and EMME/2 models for Helsinki and Oslo. These models can provide information regarding the effects of marginal cost pricing on economic efficiency, vertical income equity and revenue generation. We will also have access to a MEPLAN land use model in Helsinki. Detailed network modelling work will be carried out for both Edinburgh and Athens, and will build on tests previously conducted under Projects OPTIMA and TRANSPRICE, respectively. This will draw upon a range of modelling approaches which are appropriate for investigating alternative marginal cost based pricing measures, including the existing SATURN application in Athens. Detailed design and assessment models developed at the University of York will also be used.

City	Workpackage involvement			
	WP2	WP3	WP4	WP5
Athens	X	X		X
Dresden				X
Edinburgh	X	X		
Helsinki	X	X	X	
Madrid		X		X
Oslo	X		X	X

Figure 2: Case city studies by technical workpackage.

In WP3, focusing on institutional issues, the case study cities will be Athens, Edinburgh, Helsinki and Madrid. Madrid will serve as a pre-test city, in order to construct relevant assumptions before going into data collection and analysis. Differences from city to city, and from country to country, can be large in terms of institutions involved in the urban transport management and regulation, as well as in terms of their respective responsibilities and power sharing. The involvement of different levels of government can depend on national circumstances: the number of tiers of government, the current split of responsibilities, the coverage of existing legislation etc. It can also depend on local aspects: the transport modes involved, the modal split, the role of the private companies etc. Institutional arrangements for the proposed systems will be discussed in detail with the case study city authorities and, where relevant, with the respective regional and national governments. Transport operators, public and private, will also be consulted.

In WP4, focusing on economic and equity issues, the case study cities will be Helsinki and Oslo. Net economic benefits will be calculated for all schemes. Also financial implications will be assessed, in order to identify those sets of measures which may not be financially efficient or even feasible. In relation to the issue of equity, particular emphasis will be placed on the role of revenue allocation and on measures designed to overcome adverse equity impacts. Such measures may include improvements to public transport, reallocation of road space, special arrangements for needy groups (such as disabled drivers) or for those most disadvantaged, and, in particular, reallocation of revenues. Remedial measures will be assessed if they are expected to affect the performance of the underlying fiscal measures significantly.

In WP5, focusing on acceptance, the case study cities will be Athens, Dresden, Madrid and Oslo. Surveys will focus on four areas: (i) demographic variables, including income and mobility issues; (ii) problem awareness; (iii) acceptance and perceived effectiveness; and (iv) acceptability of the specified pricing measures. The surveys will be carried out based on the theory of reasoned action, and the survey methodology will combine psychological (e.g. attitudinal research, questioning, pairwise comparison) and microeconomic (e.g. stated preference, contingent valuation) experiences. The design will draw on previous experience (e.g. work carried out under the DRIVE and CARD-ME initiative). Regarding corporate acceptance we will address separately businesses which are transport related (e.g. commercial vehicle operators) and those which are affected because of their location and their employee and customer base (e.g. retail).

4.2 Project life cycle planning

Project AFFORD will be completed within 17 months. Figure 3 shows the progress of Project AFFORD: the duration and sequences of WP's 1-6, the timings of workshops and seminars, progress reports and deliverables, milestones and management meetings.

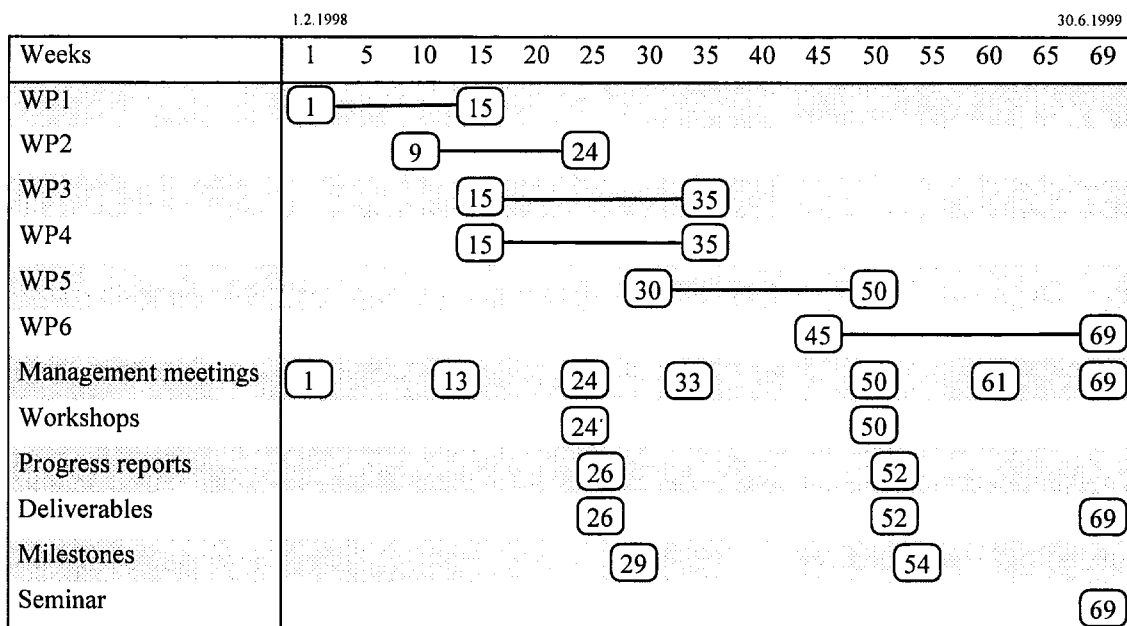


Figure 3. Progress of Project AFFORD.

Workshops and seminars

During Project AFFORD, two intermediate workshops and one seminar will be held. The purpose of the workshops is to discuss and finalise major deliverables associated with a milestone. The seminar is for the final presentation of the project, and it is meant for a wider audience.

The workshops will be held in weeks 24 and 50, and they will follow shortly after the major workpackage achievements. The seminar will be held at the end of the project, around week 69.

Progress reports

Project AFFORD will present two intermediate progress reports. The purpose of these reports is to help ensure that the project will be progressing according to schedule.

The progress reports will be presented in weeks 26 and 52, and they will follow shortly after the intermediate workshops described above.

Deliverables and final reports

Project AFFORD will present three deliverables:

Deliverable 1: *"Operationalisation of marginal cost pricing"*

Deliverable 2: *"Public and political acceptance of marginal cost pricing in urban transport"*

Deliverable 3: *"Policy guidelines for the introduction of marginal cost pricing in Europe"*

The Deliverables 1, 2 and 3 will be presented in weeks 26, 52 and 69, respectively. They are described in section 6 below.

Final reports will be presented within 2 months after the end of the project. These reports will present the complete findings of the study.

Milestones

Project AFFORD will contain two milestones, Milestone 1 and Milestone 2.

Milestone 1 will occur around week 29, following the completion of WP1 and WP2, the progress report of week 26, and Deliverable 1. It concludes the work on operationalisation of marginal cost pricing.

Milestone 2 will occur around week 54, following the completion of WP3, WP4 and WP5, the progress report of week 52, and Deliverable 2. It concludes the work on acceptance of marginal cost pricing.

4.3 Project costs

The total costs of Project AFFORD are KECU 1065. The EU contribution amounts to KECU 693. Project AFFORD contains in total 129.5 person months.

Table 1 shows the input of the partners and associated partners in person months. Table 2 shows a detailed breakdown of the project budget.

	VATT	ITS	TOI	UPM	TUD	TRIAS	MIP	UYORK	LTCON	C.I.S.R	Total
WP1	7	1	0.5	0.5	0.5	0.5	0.5				10.5
WP2		6	3					6	1	1	17
WP3	1	3		12.5		3	2.5		2.5	1	25.5
WP4	1	2	6.5				4		3		16.5
WP5	1		4	1	13					3	22
WP6	8	4		1				4			17
WP7	1		1			4		1			7
WP8	10	2	0.5	0.5	0.5	0.5					14
Total	29	18	15.5	15.5	14	8	7	11	6.5	5	129.5

Table 1: Distribution of person months.

	VATT	ITS	TOI	UPM	TUD	TRIAS	MIP	UYORK	LTCON	C.I.S.R	Total
Person months	29	18	15.5	15.5	14	8	7	11	6.5	5	129.5
Labour	149275	74 438	107 550	39 220	76 275	30 950	34 067	45 342	25 766	16 688	599 571
Equipment	0	2 857	0	0	0	4 167	0	0	0	0	7 024
External services/subcontractor	0	5 352	0	0	0	13 500	0	14 550	0	0	33 402
Travel/subsistence	22 000	10 092	14 565	11 758	10 000	18 000	11 800	3 200	7 470	3 300	112 185
Consumables and computing	0	4 403	0	0	0	3 500	1 500	1 000	4 663	712	15 778
Other costs	1 492	0	0	0	5 000	13 000	8 650	0	0	0	28 142
Overheads	41 102	18 357	77 885	30 021	16 913	24 760	15 991	6 998	31 692	5 000	268 719
Total	213 869	115 499	200 000	80 999	108 188	107 877	72 008	71 090	69 591	25 700	1 064 821
Full/marginal costs (F/M)	F	A	F	F	A	F	F	A	F	A	
Cost to EU	106 935	115 499	100 000	40 500	108 188	53 939	36 004	71 090	34 796	25 700	692 649

Table 2: Budget of Project AFFORD (in ECUs).

5. Project management

The overall administrative management of the project will be carried out by the Government Institute for Economic Research (VATT). VATT, as the Project Co-ordinator, will be responsible for general liaison with the Commission, submission of all documents, arranging Consortium workshops and management meetings, and distributing Commission payments to the other contractors.

Project management activities and the resources devoted to these activities, as well as quality assurance, are described in WP8.

Contracts

The contract between the Commission and the Consortium is signed by all main partners. The rights and responsibilities of all partners, main and associated, are defined in the contract. Exploitation rights will be further specified in a Consortium Agreement.

Obligations and rights of participants and relationship between participants

The partners involved in Project AFFORD will sign a Consortium agreement.

Project Co-ordinator

Dr. Research Director Esko Niskanen will be the Project Co-ordinator.

The Project Co-ordinator is responsible for the overall progress of the project, and will monitor the progress of all workpackage activities.

Project Manager

A senior researcher from VATT will be appointed as Project Manager.

The Project Manager is responsible for day-to-day administrative operations and for co-ordinating information flows within the Consortium.

Workpackage Manager

The partner responsible for a workpackage will appoint the Workpackage Manager.

The Workpackage Manager will present a workplan describing the intended workpackage activities to the Project Co-ordinator. The Workpackage Manager will send a notification of the start of the workpackage and its subtasks to the Project Co-ordinator. After completing the activity, the Workpackage Manager will deliver a report within one week.

Contact person

Each partner will nominate a person to be responsible for contractual and technical matters. All correspondence will take place through this contact person.

Steering Committee

A Steering Committee will be set up with one representative from each partner. The Steering Committee is assisted by a technical secretariat, which is provided by ITS.

The Steering Committee meets quarterly and decides, and votes if necessary, on the technical and scientific content.

Management meetings

The timings of management meetings are shown in Figure 3. A kick-off meeting will be held in the beginning, in week 1. Six management meetings will be held around weeks 13, 24, 33, 50, 61 and 69. Three of these meetings, those in weeks 24, 50 and 69, will be held in connection with the workshops and the seminar.

The Co-ordinator and the Workpackage Managers meet at the management meetings. Not all Workpackage Managers are required to participate in all these meetings. In these meetings,

the Project Co-ordinator, Project Manager and Workpackage Managers will carry out a review of schedules, responsibilities and deliverables and other reports.

Quality assurance

The Workpackage Managers have the responsibility of carrying out the quality assurance of the research work carried out in the workpackages as well as of the deliverables and other reports.

ITS will be responsible for overall quality assurance, with LT Consultants providing quality assurance for the work of ITS. Each uses ISO 9001 certified quality assurance procedures.

A senior research scientist from ITS will be appointed as Quality Controller. The Quality Controller will be responsible for the quality of the project as a whole. The focus will be on the quality of technical content and project management, the self-assessment of progress and the achievement of objectives. In addition, a group of peers will be established to cross-assess the workpackages and deliverables.

6. Reports

Project AFFORD will present three deliverables. These are:

1. *"Operationalisation of marginal cost pricing"* (Deliverable 1)
2. *"Public and political acceptance of marginal cost pricing in urban transport"* (Deliverable 2)
3. *"Policy guidelines for the introduction of marginal cost pricing in Europe"* (Deliverable 3)

Deliverable 1, *"Operationalisation of marginal cost pricing"*, will be presented in week 26. The deliverable will document the results of the work carried out in WP1 and WP2. It contains a review of relevant fiscal and financial measures, focusing on marginal cost based measures, and presents the results of the review of the existing economic and modelling work. The main purpose of the deliverable is to present the results of the operationalisation work: to identify, specify and assess effectiveness of the marginal cost based pricing measures for detailed investigation in the latter workpackages. The deliverable will thus serve as a comprehensive reference document for the rest of the study.

Deliverable 2, *"Public and political acceptance of marginal cost pricing in urban transport"*, will be presented in week 52. The deliverable will present the work carried out in WP3, WP4 and WP5. It will address the institutional issues (WP3) and the efficiency and equity issues (WP4), and will present, on the basis of these and direct acceptance studies (WP5), the conclusions on the acceptance issue.

Deliverable 3, "*Policy guidelines for the introduction of marginal cost pricing in Europe*", will be presented in week 69. The deliverable will present the output of the work in WP6, which contains the policy conclusions on the implementation of marginal cost pricing, on the basis of the results of the previous workpackages.

Final reports will be presented within 2 months after the end of the project.

7. *Dissemination and exploitation plan*

In accordance with the overall objectives of the Transport Research Programme, Project AFFORD is committed: (i) to disseminate the research results through a wide range of actions and media; and (ii) to encourage exploitation opportunities throughout the European Union. A separate workpackage, WP7, is defined for these activities.

Dissemination plan

Dissemination of the project results will be achieved through a wide range of actions. These include:

- (a) *Organising workshops and one seminar.* Project AFFORD will contain two intermediate workshops in weeks 24 and 50 and one seminar at the end of the project (see Figure 3). The workshops are planned to coincide with the deliverables and to precede the achievement of project milestones. The workshops will be held with a limited number of participants. The seminar will be open to a broader audience, with invited expert speakers external to the Consortium. At least one of these events is planned to be organised jointly with one or more other consortia undertaking research work in the Urban Transport and/or the Strategic Transport area of the 4th Framework Programme.
- (b) *Publicity for the project.* The appropriate publicity will be given to the project by preparing a project brochure at the outset and publicising findings and progress periodically. Three issues in the form of a newsletter are envisaged.
- (c) *World Wide Web pages.* A dedicated website will be designed and prepared for the Internet. It will be updated regularly according to the project progress.
- (d) *Participation in international and national conferences and congresses.* All partners will be involved in promoting the project through such activities. Presentations at conferences and the publication of papers in scientific journals will be encouraged, provided they are in line with the AFFORD Consortium Agreement.
- (e) *Co-operation with other DGVII projects and EU research programmes.* Wherever possible, co-operation with other consortia working on related areas will be pursued. The relationship with other Urban Transport and/or Strategic Transport projects dealing with similar or complementary issues or tasks (see links with other projects in section 3) will be given particular emphasis.
- (f) *Formation of a Technical Interest Group.* This group, consisting of politicians and decision makers from various EU countries, will be invited to comment and provide the benefit of their knowledge towards the success of the project. The Group will meet two or

three times during the project life. Meetings may be scheduled to coincide with the workshops and the seminar.

Exploitation plan

The project results will be discussed in detail with the representatives of the case study cities. The aim of the Consortium is to get the case study cities to support the results, by showing how they will benefit from the findings. Similarly, the results will be discussed with the relevant national governments, both through individual meetings and through the workshops. The goal of the Consortium is to get the policy conclusions accepted and applied, and the most immediate opportunity for exploitation lies with the case study cities.

More generally, it is envisaged that exploitation goals will be attained through a number of organisations, such as the Car Free Cities Network and EUROCITIES. Several of the case study cities in Project AFFORD are already members of such organisations, and will commit themselves to disseminating information to these organisations and thus encourage exploitation by a wider range of European cities.

In addition to exploiting the policy implications, there is potential for exploiting the new methods developed for modelling (specifically of marginal cost pricing) and surveys (for acceptance). These methodologies are expected to be increasingly necessary as more countries and cities will respond to the challenge of demand management. EUROCITIES and other such organisations will again provide opportunities for dissemination and exploitation of the project findings.

8. *References*

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PROPOSAL N°: **PL97- 2258**

Project Title: **Acceptability of Fiscal and Financial Measures and Organisational Requirements for Demand Management**

Project Acronym: **AFFORD**

Workpackage reference No: **WPI**

Workpackage/Activity title: **Operationalisation of marginal cost pricing**

Starting events / inputs

Week 1 / previous and ongoing EU research projects; other relevant research.

Description of the objectives

1. review existing economic research regarding the potential of marginal cost pricing to internalise externalities and affect demand patterns in urban transport;
2. identify and assess the detailed policy objectives which marginal cost based pricing measures as well as other related fiscal and financial measures may have in practice;
3. assess the economic principle of marginal cost pricing as a means to internalise externalities and to affect transportation demand in the urban context; and
4. identify the range of feasible marginal cost based pricing measures, and their relevant combinations with other fiscal and financial measures.

Description of activities and technical approach

- Task 1. Review of economic research:**
Review existing economic research, theoretical and empirical, regarding the potential of marginal cost based fiscal and financial measures to internalise externalities and affect demand patterns in urban transport.
- Task 2. Policy objectives:**
Identify the detailed policy objectives, including sustainable development, which marginal cost based pricing measures as well as other related fiscal and financial measures may have in practice. Assess the measures and their objectives within the context of the Common Transport Policy of the European Union. Consider separately short term, immediately applicable pricing measures using existing technology, and long term optimal solutions taking advantage of future technological advances.
- Task 3. Marginal cost pricing in the urban context:**
Assess the economic principle of marginal cost pricing as a means to internalise externalities, to promote sustainability and to affect transportation demand in the urban context. Identify indicators of performance for the effectiveness of alternative practical pricing measures against the identified objectives.
- Task 4. The range of relevant pricing measures:**
Identify the range of feasible marginal cost based pricing measures, and their relevant combinations with other fiscal and financial measures.

Outputs and deliverables

Task 1: "Review", input to tasks 2, 3, 4

Task 2: "Analysis", input to tasks 3, 4

Task 3: "Analysis", input to task 4

Task 4: "Conclusion"

WP1 provides input to Deliverable 1.

Duration / Schedule of workpackage

15 weeks / start week 1, end week 15

PROPOSAL N°: PL97- 2258Project Title: Acceptability of Fiscal and Financial Measures and Organisational Requirements for Demand ManagementProject Acronym: AFFORDWorkpackage reference No: WP2Workpackage/Activity title: Operationalisation of marginal cost pricing (part 2)**Starting events / inputs**

Week 5 / WP1; previous and ongoing EU research projects; other relevant research.

Description of the objectives

1. review existing evidence regarding the user and system responses of marginal cost based pricing measures as well as of other fiscal and financial measures in urban transport;
2. specify in detail the practical marginal cost based pricing measures, and their combinations with other fiscal and financial measures, to be studied further in the later work packages;
3. assess the effectiveness of the specified marginal cost based pricing measures; and
4. provide results on the modelled user and system responses of the specified marginal cost based pricing measures, to provide inputs to the analyses in the later work packages.

Description of activities and technical approach**Task 1. Review of user and system response:**

Review existing evidence regarding the impacts of marginal cost based pricing measures on the demand pattern in urban transport. Review existing research and practical evidence regarding user and system responses to marginal cost based and other fiscal and financial measures in congested urban networks.

Task 2. The range of relevant pricing measures (part 2):

Specify in more detail the practical marginal cost based pricing measures, originally identified in Task 4 of WP1, and their combinations with other fiscal and financial measures. Present detailed specifications of the measures, in terms of charge levels and their application in time and space, allowing for different user types and different travel conditions, as well as for different vehicle categories such as cars, light vans, buses, heavy commercial vehicles and trailers.

Task 3. Effectiveness of marginal cost pricing:

Assess the effectiveness of the specified marginal cost based pricing measures, against their objectives and identified performance indicators as well as the other relevant practical policy objectives. Provide results both on strategic impacts and detailed network performance.

Task 4. User and system responses:

Provide results on the likely user and system responses, relating to the specified marginal cost based pricing measures, to provide inputs to the analysis of the impacts on efficiency, equity and revenue generation in the later work packages. To that end, carry out case city studies, using existing transportation models. Strategic model tests, building upon tests carried out previously under Project OPTIMA, will be carried out regarding Edinburgh, Helsinki and Oslo. Detailed network modelling tests, building upon tests previously carried out under Project TRANSPRICE, will be carried out in Athens and Edinburgh.

Outputs and deliverables

Task 1: "Review", input to tasks 2, 3, 4

Task 2: "Analysis", input to tasks 3, 4

Task 3: "Analysis", input to task 4

Task 4: "Conclusion"

WP2 provides input to Deliverable 1.

Duration / Schedule of workpackage

15 weeks / start week 9, end week 24

PROPOSAL N°: **PL97- 2258**Project Title: **Acceptability of Fiscal and Financial Measures and Organisational Requirements for Demand Management**Project Acronym: **AFFORD**Workpackage reference No: **WP3**Workpackage/Activity title: **Institutional issues**

Starting events / inputs

Week 15 / WP1; WP2; other previous research.

Description of the objectives

1. identify institutional and legal structures prevailing in the Member States and other European countries, relevant to the implementation of marginal cost based pricing measures;
2. develop a framework for conceptual, theoretical and empirical analysis of the institutional factors;
3. identify institutional constraints and political barriers to the specified marginal cost based pricing measures;
4. specify the ways to overcome the constraints and barriers identified, including the need for reform; and
5. develop a series of institutional models to demonstrate the implementation of the specified marginal cost based charging measures in practice.

Description of activities and technical approach

Task 1. Review of institutional and legal structures:

Identify institutional and legal structures prevailing in the Member States and other European countries, relevant to the implementation of marginal cost based pricing measures specified in WP1 and WP2. Consider the roles of different levels and dimensions of government, and consider power sharing between institutions (local, regional, national) as well as institutional consequences of a deregulated or privatised market environment.

Task 2. Framework for institutional analysis:

Develop a framework for conceptual, theoretical and empirical analysis of the institutional factors, relevant to the implementation of marginal cost based pricing measures.

Task 3. Institutional constraints and political barriers:

Identify institutional constraints and political barriers to the marginal cost based pricing measures. Carry out case study studies, covering Madrid, Edinburgh, Athens and Helsinki; also briefly investigate institutional issues arising in the other case study cities. Madrid will serve as a pre-test city, to construct the assumptions before carrying out the data collection. Institutional arrangements for the specified measures will be discussed with the city authorities and, where relevant, with the regional and national governments. Operators, public and private, will be consulted.

Task 4. The need for institutional reforms:

Specify the ways to overcome the constraints and barriers identified, including the need for institutional reforms. Analysis will focus on the case study cities, but its aim is also to provide conclusions as general as possible. Investigate to what extent the appropriate procedures for implementation, enforcement and cost and revenue allocation will depend on local conditions, and to what extent the procedures are common.

Task 5. Institutional implementation models:

Develop a series of institutional models, again focusing on the case study cities, to demonstrate the implementation of the specified marginal cost based pricing measures in practice.

Outputs and deliverables

- Task 1: "Analysis", input to tasks 2, 3, 4, 5
- Task 2: "Analysis", input to tasks 3, 4, 5
- Task 3: "Analysis", input to tasks 4, 5
- Task 4: "Analysis", input to task 5
- Task 5: "Conclusion"

WP3 provides input to Deliverable 2.

Duration / Schedule of workpackage

20 weeks / start week 15, end week 35

PROPOSAL N°: PL97- 2258Project Title: Acceptability of Fiscal and Financial Measures and
Organisational Requirements for Demand ManagementProject Acronym: AFFORDWorkpackage reference No: WP4Workpackage/Activity title: Economic and equity issues

Starting events / inputs

Week 15 / WP1; WP2; WP3; other previous research.

Description of the objectives

1. identify indicators of performance suitable to the assessment of economic feasibility and efficiency and equity;
2. assess the economic feasibility of the specified pricing measures and suggest measures to resolve such problems;
3. assess economic efficiency of the specified pricing measures, by considering impacts separately on the transport market and the general economy;
4. assess equity impacts and issues of the specified pricing measures; and
5. assess the overall performance of the specified marginal cost based pricing measures.

Description of activities and technical approach

Task 1. Framework for performance analysis (indicators):

Develop a framework for the assessment of economic feasibility, economic efficiency, sustainability and equity of the range of pricing measures specified in WP1 and WP2. Identify indicators of performance best suitable to the evaluation of the pricing measures.

Task 2. Economic feasibility:

Assess the economic feasibility of the specified pricing measures, by providing estimates of the operating costs and by identifying financial constraints to their successful implementation. Suggest measures to resolve such problems. Carry out case study studies, regarding Helsinki and Oslo; in addition, use data on user and system responses on all the cities involved. Also address these questions in a deregulated and privatised market environment. Estimate the operating costs of the specified measures.

Task 3. Economic efficiency and sustainability:

Assess economic efficiency of the specified pricing measures, by considering impacts separately on the transport market and the general economy. Calculate net economic benefits for the schemes and assess wider financial implications. Also consider sustainability.

Task 4. Equity issues:

Assess equity impacts and issues of the specified pricing measures. Identify winners and losers, and assess equity impacts by theoretical and empirical analysis, and in close consultation with the case study city authorities. Focus on financial impacts on groups of users; also address broader social issues and perceptions on the equity. Identify possibilities for resolving negative equity impacts, including the allocation of revenue.

Task 5. The overall performance:

Assess the overall performance of the specified marginal cost based pricing measures. Suggest solutions to economic inefficiencies and observed inequities.

Outputs and deliverables

Task 1: "Analysis", input to tasks 2, 3, 4, 5
Task 2: "Analysis", input to tasks 3, 4, 5
Task 3: "Analysis", input to tasks 4, 5
Task 4: "Analysis", input to task 5
Task 5: "Conclusion"

WP4 provides input to Deliverable 2.

Duration / Schedule of workpackage

20 weeks / start week 15, end week 35

Resources / Work breakdown

Code (if used)	Partner name	Yr 1 (M-Mth)	Yr 2 (M-Mth)	Yr 3 (M-Mth)	Yr 4 (M-Mth)	Yr 5 (M-Mth)	Total (M-Mth)
	TOI (leader)	6,5					6,5
	VATT	1,0					1,0
	ITS	2,0					2,0
	MIP	4,0					4,0
	LTCON	3,0					3,0
							0,0
							0,0
							0,0
							0,0
							0,0
							0,0
							0,0
							0,0
							0,0
							0,0
							0,0
							0,0
TOTAL		16,5	0,0	0,0	0,0	0,0	16,5

WP - Detailed breakdown by task and partner

Code (if used)	Partner name	Task 1 (M-Mth)	Task 2 (M-Mth)	Task 3 (M-Mth)	Task 4 (M-Mth)	Task 5 (M-Mth)	Total (M-Mth)
	TOI (leader)	1,0	2,0	2,0		1,5	6,5
	VATT	0,5				0,5	1,0
	ITS			1,0	1,0		2,0
	MIP	1,0			2,0	1,0	4,0
	LTCON		2,0	1,0			3,0
							0,0
							0,0
							0,0
							0,0
							0,0
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							0,0
							0,0
							0,0
							0,0
							0,0
							0,0
TOTAL		2,5	4,0	4,0	3,0	3,0	16,5

PROPOSAL N°:

PL97- 2258

Project Title: **Acceptability of Fiscal and Financial Measures and Organisational Requirements for Demand Management**Project Acronym: **AFFORD**

Workpackage reference No:

WP5

Workpackage/Activity title: **Acceptance**

Starting events / inputs

Week 15 / WP1; WP2; WP3; WP4; other previous research.

Description of the objectives

1. identify key concepts and issues, and different interest groups, related to acceptance;
2. develop a framework for conceptual, theoretical and empirical analysis of acceptance of the specified marginal cost based pricing measures;
3. assess public and political acceptance of the specified pricing measures, allowing for the trade-off between economic feasibility, economic efficiency and equity;
4. assess the acceptance of the specified marginal cost based pricing measures as compared to those of alternative pricing measures as well as of other methods to affect urban transport demand; and
5. develop recommendations and strategies for resolving the acceptance issues.

Description of activities and technical approach

Task 1. Review of key concepts and issues:

Identify key concepts and issues, and different interest groups, related to acceptance.

Task 2. Framework for acceptance analysis:

Develop a framework for conceptual, theoretical and empirical analysis of public and political acceptance of the specified marginal cost based pricing measures. Allow for the trade-off between economic feasibility, economic efficiency and equity.

Task 3. Acceptance of marginal cost pricing (case city studies):

Carry out case city studies regarding Athens, Dresden, Madrid and Oslo, to assess the public and political acceptance of the specified measures. Surveys are based on the theory of reasoned action and perceived social norms and their importance. The survey methodology will combine psychological and microeconomic experiences.

Task 4. Acceptance of marginal cost pricing (general analysis):

Assess the acceptance of the specified marginal cost based pricing measures as compared to those of alternative pricing measures as well as of other methods to affect urban transport demand. Consider public, corporate and political acceptance. Consider the population and the business community directly affected by the pricing measures as well as affected by its wider impacts on the local economy, as well as the politicians and policy makers responsible for implementing the specified measures and justifying them to other interest groups. Consider the ability of individual cities to adopt marginal cost based pricing measures different from those of their neighbours.

Task 5. Resolving the acceptance issues:

Develop recommendations and strategies for resolving the acceptance issues. The relevant strategies may include improvements to public transport, reallocation of road space, special arrangements for particularly needy groups (such as disabled drivers) or for those most disadvantaged and, in particular, reallocation of revenues. The analysis will focus on the case study cities. However, the recommendations and strategies will be presented as general as possible.

Outputs and deliverables

Task 1: "Analysis", input to tasks 2, 3, 4, 5
Task 2: "Analysis", input to tasks 3, 4, 5
Task 3: "Analysis", input to tasks 4, 5
Task 4: "Analysis", input to task 5
Task 5: "Conclusion"

WP5 provides input to Deliverable 2.

Duration / Schedule of workpackage

20 weeks / start week 30, end week 50

Resources / Work breakdown

Code (if used)	Partner name	Yr 1 (M-Mth)	Yr 2 (M-Mth)	Yr 3 (M-Mth)	Yr 4 (M-Mth)	Yr 5 (M-Mth)	Total (M-Mth)
	TUD (leader)	13,0					13,0
	VATT	1,0					1,0
	TOI	4,0					4,0
	UPM	1,0					1,0
	C.I.S.R.	3,0					3,0
							0,0
							0,0
							0,0
							0,0
							0,0
							0,0
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							0,0
							0,0
							0,0
TOTAL		22,0	0,0	0,0	0,0	0,0	22,0

WP - Detailed breakdown by task and partner

Code (if used)	Partner name	Task 1 (M-Mth)	Task 2 (M-Mth)	Task 3 (M-Mth)	Task 4 (M-Mth)	Task 5 (M-Mth)	Total (M-Mth)
	TUD (leader)	1,0	1,0	8,0	0,5	2,5	13,0
	VATT	0,5				0,5	1,0
	TOI		0,5	2,5	0,5	0,5	4,0
	UPM			1,0			1,0
	C.I.S.R.			1,5		1,5	3,0
							0,0
							0,0
							0,0
							0,0
							0,0
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							0,0
							0,0
							0,0
TOTAL		1,5	1,5	13,0	1,0	5,0	22,0

PROPOSAL N°: **PL97- 2258**

Project Title: **Acceptability of Fiscal and Financial Measures and Organisational Requirements for Demand Management**

Project Acronym: **AFFORD**

Workpackage reference No: **WP6**

Workpackage/Activity title: **Policy implications, modifications and recommendation**

Starting events / inputs

Week 45 / WP1; WP2; WP3; WP4; WP5; other previous research.

Description of the objectives

1. summarise and assess the main results of the study;
2. identify and assess points of significant uncertainty or otherwise critical to deserve special attention when implementing marginal cost pricing in practice;
3. assess the need for modifications to the marginal cost based pricing schemes investigated in the study;
4. assess the availability of realistic alternatives to the marginal cost based pricing schemes addressed; and
5. develop policy implications and recommendations for practical implementation, on the basis of the results of the study.

Description of activities and technical approach

Task 1. Summary:
Summarise and assess the main results of the study as well as the models used. The main focus is in the assessment the marginal cost based pricing measures, in terms of the objectives and performance measures specified, regarding the effectiveness of user and system response, the institutional and organisational requirements, the economic feasibility and efficiency, equity and acceptability.

Task 2. Critical points:
Identify and assess points of significant uncertainty or otherwise critical to deserve special attention when implementing marginal cost based pricing measures in practice.

Task 3. Modifications:
Asses the need for modifications to the marginal cost based pricing schemes investigated in the study. Conduct sensitivity tests for various parameters in the areas of uncertainty. Tests will focus on the case study cities of Athens, Edinburgh and Helsinki; test for other case study cities will be included where appropriate.

Task 4. Alternatives:
Reconsider and assess the availability of realistic alternatives to the marginal cost based pricing schemes addressed in the study, in terms of their performance regarding economic efficiency, sustainability, equity and acceptability. Assess proposals made for reducing any adverse impacts of the basic measures generated in the work on institutional issues, economic and equity implications, and acceptance.

Task 5. Implementation:
Develop policy implications and recommendations for practical implementation, on the basis of the results of the study, at detailed level and more general level concerning the practical relevance of marginal cost based pricing measures for solving urban transportation problems.

Outputs and deliverables

- Task 1: "Analysis", input to tasks 2, 3, 4, 5
- Task 2: "Analysis", input to tasks 3, 4, 5
- Task 3: "Analysis", input to tasks 4, 5
- Task 4: "Analysis", input to task 5
- Task 5: "Conclusion"

WP6 provides input to Deliverable 3.

Duration / Schedule of workpackage

20 weeks / start week 45, end week 69

PROPOSAL N°: **PL97- 2258**

Project Title: **Acceptability of Fiscal and Financial Measures and Organisational Requirements for Demand Management**

Project Acronym: **AFFORD**

Workpackage reference No: **WP7**

Workpackage/Activity title: **Dissemination and exploitation**

Starting events / inputs

Week 1 / WP1; WP2; WP3; WP4; WP5; WP6.

Description of the objectives

The objectives are to:

1. disseminate the results of the project to all possible actors (EU Commission, State, Regional and Local authorities, etc.) in the EU states
2. use the project sites as a means for better promotion of the project objectives and goals

Description of activities and technical approach

WP 7 consists of two Activities (Tasks):

- 7.1 Dissemination
- 7.2 Exploitation

Dissemination has the following tasks:

- Creation of an AFFORD brochure
- Creation of a WWW page
- Organising workshops and Seminars
- Global watching of the AFFORD partners' dissemination activities
- Formation of an advisory User Panel including representatives of Governments at different levels

The Following workshops and seminars are foreseen:

- Workshop 1 Week 24
- Workshop 2 Week 50
- Seminar Week 69

Exact date and places to be decided.

Dissemination and Exploitation plans are also described in section 7 of the Technical Annex.

Outputs and deliverables

The Dissemination and exploitation achievements will be reported in the Management and Progress Reports as well as in the Final Report. The project brochure as well as the WWW Page also comprise part of the Dissemination tasks.

Duration / Schedule of workpackage

69 weeks / start week 1, end week 69

WP 7 will start in week 1 of the project and will continue through the whole duration of the project. The dissemination activities will be more dense during the workshop/seminar events.

Resources / Work breakdown

Code (if used)	Partner name	Yr 1 (M-Mth)	Yr 2 (M-Mth)	Yr 3 (M-Mth)	Yr 4 (M-Mth)	Yr 5 (M-Mth)	Total (M-Mth)
	TRIAS (leader)	3,0	1,0				4,0
	VATT		1,0				1,0
	TOI	1,0					1,0
	UYORK	0,5	0,5				1,0
							0,0
							0,0
							0,0
							0,0
							0,0
							0,0
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							0,0
							0,0
							0,0
TOTAL		4,5	2,5	0,0	0,0	0,0	7,0

WP - Detailed breakdown by task and partner

Code (if used)	Partner name	Task 1 (M-Mth)	Task 2 (M-Mth)	Task 3 (M-Mth)	Task 4 (M-Mth)	Task 5 (M-Mth)	Total (M-Mth)
	TRIAS (leader)	0,3	0,2	1,0	2,0	0,5	4,0
	VATT	0,5				0,5	1,0
	TOI			1,0			1,0
	UYORK		0,5		0,5		1,0
							0,0
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							0,0
							0,0
							0,0
							0,0
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							0,0
TOTAL		0,8	0,7	2,0	2,5	1,0	7,0

PROPOSAL N°: PL97- 2258Project Title: Acceptability of Fiscal and Financial Measures and Organisational Requirements for Demand ManagementProject Acronym: AFFORDWorkpackage reference No: WP8 Workpackage/Activity title: Project management and quality assurance

Starting events / inputs

Week 1

Description of the objectives

The overall administrative management of the project.

This workpackage also contains quality assurance.

Description of activities and technical approach

The contract between the Commission and the Consortium is signed by all main partners. The rights and responsibilities of all partners, main and associated, are defined in the contract. Exploitation rights will be further specified in a Consortium Agreement. The partners involved in Project AFFORD will sign a Consortium agreement.

Task 1. Dr. Research Director Esko Niskanen will be the Project Co-ordinator. The Project Co-ordinator is responsible for the overall progress of the project, and will monitor the progress of all workpackage activities. A senior researcher from VATT will be appointed the Project Manager. The Project Manager is responsible for day-to-day administrative operations and for co-ordinating information flows within the Consortium.

Task 2. The partner responsible for a workpackage will appoint the Workpackage Manager. The Workpackage Manager will present a workplan describing the intended workpackage activities to the Project Co-ordinator. The Workpackage Manager will send a notification of the start of the workpackage and its subtasks to the Project Co-ordinator. After completing the activity, the Workpackage Manager will deliver a report within one week. Each partner will nominate a person to be responsible for contractual and technical matters. All correspondence will take place through this contact person.

Task 3. A Steering Committee will be set up with one representative from each partner. The Committee is assisted by a technical secretariat, which is provided by ITS. The Committee meets quarterly and decides, and votes if needed, on the technical and scientific content.

Task 4. The Co-ordinator and the Workpackage Managers meet at the management meetings, to carry out a review of schedules, responsibilities and deliverables and other reports.

Task 5. Workpackage Managers will have the responsibility of carrying out the quality assurance of the research work carried out in the workpackages as well as of the deliverables and other reports. ITS will be responsible for overall quality assurance, with LT Consultants providing quality assurance for the work of ITS. A senior research scientist from ITS will be appointed the Quality Controller.

Outputs and deliverables

Duration / Schedule of workpackage

69 weeks / start week 1, end week 69.

A kick off meeting will be held in the beginning, in week 1. Six management meetings will be held around weeks 13, 24, 33, 50, 61 and 69. Three of these meetings, those in weeks 24, 50 and 69, will be held in connection with workshops.

DELIVERABLES FORM

FORM C

PROPOSAL N°: **PL97- 2258**

Project Title: **Acceptability of Fiscal and Financial Measures and Organisational Requirements for Demand Management**

Project Acronym: **AFFORD**

Schedules of deliverables

Type and description of deliverables (Title)	Availability C-R-P *	Workpackage reference	Partner responsible	Due date for submission
D1 "Operationalisation of marginal cost pricing"	P	1, 2	VATT/ITS	Week 26
D2 "Public and political acceptance of marginal cost pricing in urban transport"	P	3, 4, 5	UPM/TOI/TUD	Week 52
D3 "Policy guidelines for the introduction of marginal cost pricing in Europe"	P	6	VATT	Week 69

*: C = confidential, R = restricted, P = public

VATT-MUISTIOITA / WORKING NOTES

1. Lehtinen Teemu: Suomen tuloverojärjestelmän efektiivinen rakenne ja sen poikkeaminen suhteellisuudesta. Helsinki 1991.
2. Mäki Tuomo & Tossavainen Pekka: Työmarkkinat vuosina 1990 - 1995. Helsinki 1991.
3. Salomäki Aino & Viitamäki Heikki & Virtanen Sari: Valtion tuki kotitalouksille: suorat tulonsiirrot ja verotuet 1968 - 1990. Helsinki 1991.
4. Valtion taloudellisen tutkimuskeskuksen julkaisutoiminta. Helsinki 1991.
5. PM. VATT:n siirtyminen tulosohjaukseen sekä Henkilöstöpoliittisen työryhmän muistio. Helsinki 1991.
6. Maksupolitiikan yleispiirteet OECD-maissa ja erityisesti Pohjoismaissa. Helsinki 1992.
7. Lehtinen Teemu: Nykyarvolaskelmat asuntorahaston uusiin lainoihin sisältyvän tuen arvioinnissa. Helsinki 1992.
8. Hirvonen Kirsi: Terveys- ja sosiaalipalvelujen markkinat: selvitys tietolähteiden nykytilasta. Helsinki 1993.
9. Sarho Risto: Vapaakuntakokeilun maksuihin liittyvät poikkeamishakemukset. Helsinki 1993.
10. VATT:n koulutuspoliittinen ohjelma. Koulutuspoliittisen työryhmän muistio. Helsinki 1993.
11. Säynätjoki Leena: Japanilaisen työelämän peruspiirteitä. Helsinki 1993.
12. Törmä - Vaittinen - Rutherford: Economic Effects of the Finnish Value-Added Tax Reform with Different Treatments of the Basic Production Deduction. Helsinki 1994.
13. Lehtinen - Niinivaara - Salomäki - Viitamäki - Alajääskö: TUJA-käsikirja 1991. Tulonsiirtojen ja verotuksen jakaumavaikutusten laskentamalli. Helsinki 1994.
14. Oksanen Virve: Katsaus eräiden eurooppalaisten tutkimuslaitosten toimintaan. Helsinki 1995.
15. Oksanen Virve: Euroopan unionin tutkimuksen neljännen puiteohjelman sisältö, rahoitus ja hakumenettely. Helsinki 1995.

16. Freund Hannu: Työnteon kannustaminen ja sosiaaliturva - katsaus eräisiin uudistuksiin. Helsinki 1995.
17. Valtion taloudellisen tutkimuskeskuksen toiminnan kehittäminen. Helsinki 1995.
18. Virén Matti: Kotitalouksissa tehtävän työn verohyvitysjärjestelmien vaikutuksesta valtion talouteen. Helsinki 1997.
19. Rissanen Matti: Telakkatuesta Suomessa. Helsinki 1997.
20. Virén Matti: Finnish Experiences in the European Union - Suomen kokemuksia Euroopan unionissa. Helsinki 1997.
21. Östring Timo: Julkisten palvelujen yksikkökustannukset Pohjoismaissa (KRON). Helsinki 1997.
22. Hjerppe Reino: Asiantuntijakuuleminen valtioneuvoston talous- ja rahaliittoa käsittelevästä selonteosta eduskunnalle valtiovarainvaliokunnan verojaostolle. Helsinki 1997.
23. Holm Pasi - Romppanen Antti: Arvio "Toimivampiin työmarkkinoihin" -raportin (Skog-Räisänen) ehdotusten kansantaloudellisista vaikutuksista. Helsinki 1997.
24. Verojärjestelmän kautta annettava tuki. Helsinki 1997.
25. Lith Pekka: Miljarderna i den grå ekonomin - En rapport om omfattningen och formerna för Finlands dolda ekonomi. Helsinki 1997.
26. Tax Expenditures in Finland. Helsinki 1997.
27. Niskanen Esko: Arvio kirjasta "The Economics of Regulating Road Transport" (Erik Verhoef). Helsinki 1997.