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D3: Watertime steering committee meeting and stakeholder workshop 10-12 April 2003 (D2)

(Public)

13 April 2003

The first Watertime workshop and steering committee meeting took place on 10-12 April 2003 at the University of Greenwich, London SE10 9LS, UK. It consisted of three elements:

- Partners Meeting, 10 April 2003
- Steering committee meeting and open workshop, 11 April 2003
- Partners final meeting, 12 April 2003

1 PARTNERS MEETING, 10 April 2003

The partners meeting discussed progress so far in the various workpackages, and discussed the issues arising in the development of the analytical framework.

WaterTime partners:
PSIRU, School of Computing and Maths, University of Greenwich, UK
ERL, Universidad Complutense de Madrid, Spain
Institute of Environmental Engineering and Biotechnology (IEEB), Tampere University of Technology, Finland
International Water Affairs, Hamburg, Germany
Nomisma, Bologna, Italy
Eötvös József College, Hungary

Coordinator: PSIRU, CMS (M257), University of Greenwich, Park Row, London SE10 9LS, U.K.

A presentation was made by Ephraim Nissan (School of Computing and Mathematical Sciences, University of Greenwich, UK) on the formalisation of a case study narrative (Grenoble). This was discussed as a possible contribution to to final output of the project (WP5).

The afternoon was spent in a detailed discussion of the requirements of the analytical framework. All partners present contributed papers and ideas, which will be synthesized in the draft analytical framework itself.

2 STEERING COMMITTEE MEETING AND OPEN WORKSHOP, 11 April 2003

As well as the partners, the participants included members of the steering committee, other invited speakers, and a number of other interested researchers and representatives of NGOs and other bodies concerned with water. The total number attending the workshop was 40.

2.1 Steering committee meeting

Steering committee members present included:

- Robin Simpson, Consumers International, London, UK
- Emil Bojin, Consumers Protection Association (Asociatia Pentru Protecta Consumatorilor din Romania), Bucharest, Romania
- Bengt Hedenstrom, CEEP, Brussels, Belgium
- Steve Bloomfield, Unison, London, UK (representing EPSU)
- Arturo Gómez Martínez City of Cordoba and EMACSA (Empresa Municipal de Aguas de Cordoba), Cordoba, Spain

Apologies were received from CEMR (Council of European Municipalities and Regions); and the EEB (European Environmental Bureau).

The steering committee meeting opened with introductions from the partners and from the members of the steering committee, followed by a presentation from David Hall on the Watertime Project and one from Andres Sanz on the current workpackage, the analytical framework.

2.1.1 Discussion

These presentations were followed by a lengthy question and answer session to all the stakeholders in a round table format. Particular note was taken of a number of points raised:

Robin Simpson wanted to know what type of decisions will be covered by WaterTime, and emphasised that this should be flexible and cover the full range of decisions.

Steve Bloomfield pointed out that we are interested in the *context* and *environment* of decisions, such as the legislative framework, regulation, and public/private delivery. There are also larger issues of how pressure for liberalisation (eg from GATS) affects decisions within and about systems and structures. Moreover, the project should convey the full range of models of water used in Europe, not just one or two models.

Bengt Hedenstrom wanted to know whether WaterTime felt any restriction in regard to the EC, in terms of contextual analysis. For example, would we shy away (because of our EU funding) from considering the effects of the Growth and Stability Pact, which has forced some sell-off of utilities for fiscal reasons?

Emil Bojin noted that WaterTime's findings should be communicated to as many authorities as possible, national and local.

Arturo Gomez Martinez stressed the importance of involving stakeholders, in the way that trade unions are in Cordoba.

Mark Hann pointed out the importance of interviewing different stakeholders to get a range of perspectives.

Volodymyr Kuznyetsov suggested that including a city from Ukraine as a case study would broaden the range of contexts and issues covered, with interesting influences eg from the EBRD, World Bank, and other actors.

Members of the WaterTime team gave a number of responses, including:

- *The focus is on decisions regarding changes in ownership, but covers all aspects (economic, environmental, social etc) that are relevant to those decisions. This includes not only local context and institutions, but also the broader context of regional, national, international institutions and pressures.*
- *Naturally this context fully includes the EU as appropriate: WaterTime partners will be just as fully objective in this regard as they would be if the funding were from another source.*
- *The case study cities chosen represent a balance between covering a broad range of structural models, covering a range of other factors, and allowing for intra-country variation for a better understanding of the role of national-level influences.*
- *Interviewing a range of stakeholders will certainly be a key part of the case studies, and the involvement of a range of stakeholders is of fundamental importance to the WaterTime model that will be produced in WP5.*
- *Dissemination is a key part of WaterTime, not only to gain feedback on the ongoing project but to ensure its outputs will be known to, available to, and useful to a wide range of actors.*
- *Changes to the list of case studies are not desirable at this stage of WaterTime, but there are a number from eastern Europe, and one of the cities the model will be tested in is St Petersburg.*

2.2 Stakeholders Roundtable

The next session consisted of a series of presentations by various stakeholders on the issues addressed by Watertime. These included:

Consumers:
- Robin Simpson, Consumers International, London, UK
- Emil Bojin, Consumers Protection Association (Asociatia Pentru Protecta Consumatorilor din Romania), Bucharest, Romania

Companies:
- Bengt Hedenstrom, CEEP, Brussels, Belgium
- Arturo Gómez Martínez EMACSA (Empresa Municipal de Aguas de Cordoba)
- *(apologies were received from Richard Aylard, Thames Water Plc)*

Regulator:
- Mark Hann, Office of Water Services (OFWAT), Birmingham, UK

Local govt:
- Michel Desmars, Fédération nationale des collectivités concédantes et régies (FNCCR), Paris, France

Labour:
- Steve Bloomfield, Unison, London, UK

2.2.1 Presentations from stakeholders

- Robin Simpson, Consumers International, London, UK

The presentation described some of the different forms of consumer participation in water decision-making, ranging from formal representation (eg when concession agreements are made) to individual consumer responsibility. In the area of formal representation, the presentation noted influences such as the Water Framework Directive, and alternatives such as national representation within regulators' offices; river basin parliaments (in France); local public hearings (in Argentina and the US); or simply a municipal committee (in Skopje, Macedonia). The presentation outlined the influence and effectiveness of campaigns at times of critical decisions, for example in Brazil; and the potential for more embedded forms of participation, such as self-build projects for network extension (eg Lima, Peru) or the right to tariff discount for labour contributions (eg Colombia). It also noted the importance of individual consumers, particularly commercial and public organisations, being responsible and paying their bills; failure undermines investment in the system and raises prices for everyone else. The presentation also discussed the potential influences of future liberalisation, eg through GATS.

- Mark Hann, Office of Water Services (OFWAT), Birmingham, UK

The presentation outlined the structure of the UK water industry, and the role of Ofwat within it. It emphasised that Ofwat's mandate is primarily economic, with regulation on environmental issues left to other government bodies such as the Environment Agency. Nonetheless, sustainability is central to long-term economic viability, and therefore features significantly in Ofwat's thinking.

- Michel Desmars, Fédération nationale des collectivités concédantes et régies (FNCCR), Paris, France

The presentation described the different types of management of water supply systems in France, and the prevalence of the different types. It provided an overview of the current structures, including decisions to switch structures. It was noted that of the 500 contracts coming up for renewal annually, around 20% of local councils study the possibility of reverting to public management, with around 1% actually choosing to do so. The presentation also provided a historical perspective on the legal, commercial and political context, including the 1993 "Sapin" law on competition in tendering, and the role of decentralisation of decision-making since the early 1980s.

- Arturo Gómez Martínez EMACSA (Empresa Municipal de Aguas de Cordoba)

The presentation described the role of EMACSA (the municipal water company in Cordoba), and its relationship with government structures. It outlined various features of the Cordoba water system, and described the integration of various stakeholders into its management, including consumers and trade unions.

- Emil Bojin, Consumers Protection Association (Asociatia Pentru Protecta Consumatorilor din Romania), Bucharest, Romania

The presentation outlined the history of the privatisation of water in Bucharest, with the water company Apa Nova taken over by Vivendi in 2000. The history features a series of promises not met, with considerable price rises, a failure on Vivendi's part to invest its own funds (only a World Bank loan guaranteed by the city), and large-scale layoffs. There were also other problems of bad service, continuing large-scale leakage, and unauthorised price rises.

- Bengt Hedenstrom, CEEP, Brussels, Belgium

The presentation talked about the recent history of the Swedish water industry, in particular the lack of development (in fact, retrogression, from a low level) of the private sector. Fewer municipalities were choosing to go or remain private in the 1990s, and the public sector continued to go from strength to strength. The presentation also discussed the positive cooperation achieved between Swedish public sector companies and some of the Baltic states in particular, to develop management systems, transfer technology and experience, and to improve the environment.

- Steve Bloomfield, Unison, London, UK

The presentation discussed the Ofwat price review of the UK water sector, arguing that its tightness would lead to job losses and lower quality. It noted the rise of contractualisation, with negative impact on the industry through increasing complexity and fragmentation. It discussed the planned Water Bill, being broadly supportive, but with doubts about increased competition (for bulk commercial users) and a lack of a national provision for health and safety concerns in the industry. It also outlined some of the issues around water debt, which had increased since changes to UK legislation prevented companies from cutting off non-payers. In particular, it pointed out the importance of distinguishing between those won't pay and those who can't pay, in order to treat those two groups, plus paying consumers, fairly.

2.2.2 Discussion

1. What is the extent of competition for domestic customers in the UK? What is planned?

Mark Hann: Margins in the water industry are not available as in electricity. There are concerns about cherry-picking. Consumers don't want it. It is unlikely that competition through common carriage will be introduced in Scotland, as previously planned.
Robin Simpson: Water is a natural monopoly, so competition is inherently difficult.

2. In France 90% of concessions are unchanged at renewal, so there is little effective competition, which undermines the whole basis of the claims made for privatisation.

Michel Desmars: The rate is indeed quite low, but some contracts do change hands or revert to the public sector, and the possibility of change is usually there to some extent. Many of the 20-30 year concessions were put in place before recent competition/anti-corruption laws, and at the time there was often little effective competition for the larger concessions. For smaller concessions, there have been and are many more smaller companies in a position to bid. We have yet to see the real effect of the new laws.

3. Is Consumers International both independent and representative?

Robin Simpson: There is no monolithic interest among consumers. Large and small consumers have different interests in relation to water metering. In developing countries, connected and unconnected consumers have different interests in relation to prices being charged to support network extension. But there are common strands and CI tries to cover them all.

4. Can one appeal against the regulator?

Steve Bloomfield/Mark Hann: In the UK, companies can appeal, but consumers cannot.
Michel Desmars: In France, the courts can try to intervene, but it is not easy.

5. How prioritised are economic and environmental considerations?

Various: Cost-benefit type analysis must include all aspects and try to evaluate and weight them appropriately. EU directives can sometimes create problems in this respect, upsetting decisions by reducing flexibility and enforcing certain priorities.

Mark Hann: In terms of evaluating different priorities and issues, there are plenty of methodologies available, it's just that nobody gets round to using them.

Robin Simpson: Sometimes politics gets in the way of appropriate prioritisation and decision-making, eg in Lima, a city of 8m people in the middle of a desert, with a publicly-owned water utility and 50% leakage, which can't raise prices to invest in the system because of the populist manipulation from the council.

Steve Bloomfield: This emphasises the need to educate the public on the need for investment, to build a willingness to see prices rise if necessary, or to support other means of paying for it.

Michel Desmars: Most local governments need outside expertise for good decision-making; this needs to be independent and impartial, and with private consultancies it frequently is not.

Volodymyr Kuznyetsov: Certainly, sometimes political shortsightedness undermines investment, for example in Ukraine, the ministry of finance charges fees to pass on foreign loans to municipalities, raising costs and deterring investment.

2.3 Presentations from experts on decision making in the water sector

The third session consisted of a series of presentations from academic experts on various aspects of decision-making in the water sector. These included:

- "*Using stakeholder analysis to analyse decision making in the water sector*", Leon M. Hermans, Delft University of Technology, The Netherlands
- - "*Decision making on the reform of urban water services in Ukraine: case studies*", Volodymyr V. Kuznyetsov, Ukrainian Scientific Research Institute of Ecological Problems (USRIEP), Ministry of Environment and Natural Resources (MENR) of Ukraine, Kharkiv, Ukraine

"*Economics may be boring, but can it be useful in water management?*", Colin Green, Middlesex University, UK

- "*From Technocratic to Participatory Decision Support Systems: responding to the new governance initiatives*", Ângela Guimarães Pereira & Serafin Corral Quintana (European Commission Joint Research Centre (JRC), Institute for the Protection and Security of the Citizen (IPSC), Varese, Italy; and University of La Laguna, Spain)
- "*Decision Models - An analytical framework for the WaterTime project*", Deryn Graham, School of Computing and Mathematical Sciences, University of Greenwich, UK

2.3.1 Presentations from experts

- "*Using stakeholder analysis to analyse decision making in the water sector*", Leon M. Hermans, Delft University of Technology, The Netherlands

Decision making on water systems can be characterized as an interactive process in which different stakeholders exchange their views and negotiate trade-offs between their interests. A proper understanding of decision making processes therefore requires a focus on the interaction processes between stakeholders. Stakeholder analysis offers methods that are typically used for this purpose. There are different methods available for stakeholder analysis, with different theoretical backgrounds. An overview of these methods will be provided to help a more careful selection of a method to analyze specific cases. A case application will be shortly presented to sketch some of the implications of applying selected stakeholder analysis methods to analyze water management in real world cases.

- "*Economics may be boring, but can it be useful in water management?*", Colin Green, Middlesex University, UK

Typically, economists first bore you to death and then destroy your economy. However, the most succinct definition of economics is that it is the application of reason to choice, and the force of economics is then the extent to which it helps us making better collective choices and to implement those choices. The presentation outlined why we have to choose, and what we may mean by 'better choices', including those as to means of implementing decisions. It argued forcefully that much of textbook economics is based on false premises, but that an applied economic analysis grounded in reality is a key to improving water management. The presentation applied, for example, the realisation that water metering is not costless to show that there are trade-offs between the cost of metering and the water saved thereby, and argued that in many situations metering, particularly at the level of the individual consumer, is inefficient.

- "*From Technocratic to Participatory Decision Support Systems: responding to the new governance initiatives*", Ângela Guimarães Pereira* & Serafin Corral Quintana**

* European Commission Joint Research Centre (JRC), Institute for the Protection and Security of the Citizen (IPSC), Varese, Italy ** University of La Laguna, Spain

The presentation examined more than 10 years of developments in decision support systems (DSS) for environmental issues (waste management, water management, land-use planning, etc.) by a research group at the Joint Research Centre. In the earlier days the group developed some computer systems, aiming at *decision makers* understood as experts, whose requirements were often not obvious (many times imagining them as computer and systems literate), featuring expert knowledge databases and multi-criteria engines and requiring skilled users to take care of the analysis. Those were highly technocratic systems because they would not take into account the social context in which decisions were taking place, deploying mainly scientific information. The group has evolved the concept of the DSS through the years, the latter approach viewing it as a "context" or a "platform" for helping all those involved in decision making processes to access the necessary information for a useful debate to take place. This is in line with the new styles of governance, arising from the science and governance initiative in Europe. Newer tool developments for supporting dialogues, debates and deliberations are still computer tools, carefully designed for the audience they aim at and placed into a social process instead of embedding the social process into the system.

The presentation discussed this evolution and demonstrated the group's new principles for conceiving and designing these tools, namely the creation of a concept-tool named "TIDDD: Tools to inform debates, dialogues & deliberations". The latter was illustrated with a recently implemented project in the field of groundwater planning, in a French river basin. This system (software, model, and information gathering) took 6 months to develop, a reduction from the first such system which had taken 14 months. The presentation also addressed issues arising from quality assurance of information.

- "*Decision making on the reform of urban water services in Ukraine: case studies*", Volodymyr V. Kuznyetsov, Ukrainian Scientific Research Institute of Ecological Problems (USRIEP), Ministry of Environment and Natural Resources (MENR) of Ukraine, Kharkiv, Ukraine

This presentation addressed recent case studies of decision making on the reform of urban water supply and sanitation systems in Ukraine. Such cases include two World Bank-funded projects in Lviv and Odessa, as well as the EBRD-funded pre-feasibility study on 9 Ukrainian cities. In Lviv, the World Bank is proposing to introduce private sector participation (PSP) through the involvement of a Management and Operations Improvement Advisor (MOIA). The Odessa Participatory Initiative was conceived in 1995 to enhance the effectiveness of two World Bank-supported operations in the housing and water sectors, the approach being to develop institutions at the local level to support reforms in these sectors. Finally, USRIEP/MENR was involved, together with UK-based Halcrow Management Group, in the EBRD-funded pre-feasibility study

on 9 Ukrainian cities. The presentation included comments on the nature of the political reality of decision-making in Ukraine, where decisions are frequently driven, often capriciously or self-interestedly, by powerful individuals.

- "*Decision Models - An analytical framework for the WaterTime project*", Deryn Graham, School of Computing and Mathematical Sciences, University of Greenwich, UK

The presentation suggested a possible framework for the Watertime project, emphasising the acquisition of knowledge and the structuring of information. It suggested that the final outcome could be a computerised model, but the process advocated was not prescriptive in this respect, and involved the production of a "paper model" as mediating representation between the knowledge acquired and any computerised system. The presentation noted that different authors present methodologies with varying stages of knowledge acquisition, but that fundamentally they all involve the identification and conceptualisation of requirements and problem characteristics, formalising these into some mediating representation scheme, implementation, and final testing and validation (Graham & Barrett, 1997). Knowledge acquisition can be machine-aided or human-labour oriented. Johnson and Johnson's methodology (1987a), enhanced by Graham (1990), proposes a three phase knowledge elicitation process based around semi-structured interviews.The first phase is to perform a broad, but shallow survey of the domain. The second phase requires that a more detailed task analysis is performed by the elicitor, focusing on areas of interest. This model is qualitatively drawn up and uses a mediating representation, Systemic Grammar Networks. These are a context free, qualitative representation, which can be used as a tool for systems design, but their use does not imply the final use of any particular knowledge engineering shell or methodology. The third phase of this approach is to validate the models drawn up from the expert with the wider expert community. The SGNs could be reproduced as decision tables (Luger, 2001). Information theory (Shannon, 1948) could then be applied to structure these decisions in relation to their information content value, leading to decision trees, but still in the form of a paper model. Either the SGNs or decision trees are amenable to computerisation, using a Decision Tree Induction Algorithm (Quinlan, 1996) - focusing solely on the decision process. Alternatively, as or a more comprehensive Knowledge-based system – attaching procedures, queries and other features inbuilt in the software, as in an expert system shell.

Each presentation was followed by discussion. The meeting closed 1 hour late at 6.30 pm. It was generally agreed that the workshop was very interesting for all present, provided valuable insights for the project, and was helpful in disseminating understanding and awareness of the project.

3 FINAL PARTNERS MEETING, 12 April 2003

The final partners meeting decided on the following allocation of tasks under the various workpackages.