

Service Analyses in Soil and Water Management Associations Taking the Nienburg/Weser Association as an Example⁴

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INTRODUCTION

WATER AND SOIL associations are service organizations. Their remit, in line with their statutes, is to provide services for their members and the general public, including the development and maintenance of waterways, the construction and maintenance of structures in and along waterways, and the operation and maintenance of irrigation and drainage installations. To provide these services, which are the very purpose of the association, it has to enter into a complex exchange of services with other organizations and providers or beneficiaries of services; coordination services, information services, negotiation services, representation services, etc., are all part of the various "secondary" service provided by or for water and soil associations within a network of relevant partners.

In view of the efforts to cut through the bureaucracy of the water and soil associations and to boost efficiency it would seem appropriate to analyze and make transparent this tapestry of various services and service relations into which the association is woven.

The Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, is currently developing a range of instruments which will make it possible to clarify and analyze complex service networks of this sort. Within the scope of "interact," an in-house research and development project, the GTZ is developing and testing concepts and instruments which should enable the identification and analysis of services within the overall framework of complex projects which embrace many actors.

One of the instruments developed by "interact" has been termed the "service interaction analysis (SIA)," which makes it possible to systematically record the intricate network of services and inputs provided by and for the organizations involved in any given project. At the same time, the service interaction analysis can be used to analyze problems arising between organizations or between different units belonging to the same organization in this context. taking into account the special nature of services.

The service interaction analysis has been tested in various GTZ projects, including projects in Haiti, Bolivia and Tanzania. In response to a request by the Director of the Bremen, Lower-Saxony and Saxony-Anhalt Water Association Federation, this instrument has now been tested for the first time outside the confines of development cooperation, taking the example of one individual water and soil association, the Nienburg/Weser Maintenance Association. The test

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took the form of a workshop which was held on the 17th and 18th of August in Nienburg/Weser, attended by the directors of several of the individual associations which go to make up the Bremen, Lower-Saxony and Saxony-Anhalt Water Association Federation. The workshop, and the experience gained there are presented in this article.'

THE OBJECTIVES AND PROGRAM OF THE WORKSHOP

The workshop aimed to record and analyze the services provided by and for the Nienburg Maintenance Association.

It was agreed in advance that the service interaction analysis would be tested, taking one of the 1,100 or so individual associations that make up the Bremen, Lower-Saxony and Saxony-Anhalt Water Association Federation as an example. The Nienburg Association was selected because both the services it provides and the problems arising in this context are considered fully representative of the individual associations within the federation. The 2-day SIA workshop embraced the following 7 fundamental steps, which are presented in detail under the heading *The Course of the Service Interaction Analysis*:

1. Presentation of the tapestry of relations
2. Definition of the range of services offered by the Nienburg Association
3. Definition of the range of services provided for the Nienburg Association
4. Analysis of strengths and weaknesses
5. Problem analyses 1 and 2
6. Identification of the Association's internal service program
7. Problem analysis 3

In point of fact two separate service interaction analyses were conducted: first, the analysis of the services linking the Nienburg Association to its external environment (steps 1 to 5); and second, the Association's internal services (steps 6 and 7).

At the end of the workshop, participants gave their assessment of the service interaction analysis and further action was discussed and planned.

THE COURSE OF THE SERVICE INTERACTION ANALYSIS

This section will look at the most important steps involved in service interaction analysis, as conducted at the workshop. The function of each step will be described briefly, followed by an account of the Nienburg experience.

7 The authors would like to thank all the workshop participants for taking part in the intensive discussions over two days, and would like to single out Mr. Mücke from the Nienburg an der Weser Association for special recognition and thanks for ensuring that the workshop ran so smoothly. The authors' special thanks also go to Baron von Seinaecker, who was responsible for logistics and helped prepare the subject matter subsequently covered by the workshop.

Step 1. Presentation of the Tapestry of Relations

The first step aims to render transparent the complex tapestry of relations that exists between organizations working within a service network. To this end, the organizations involved are presented graphically in the form of a so-called "relations map," which is intended to give an overview of the main participants and the interfaces involved, without recording every individual interaction precisely. The graphic presentation is used as a guideline in the subsequent analysis, particularly the problem analysis.

It is assumed that not only "goods and services" are exchanged at the interface between two organizations, but that other exchanges and communications take place. The following relations are taken into account within the scope of the service interaction analysis:

- Exchange relations of goods and services
- Legal relations
- Information relations.
- Interpersonal relations.
- Power and dominance relations.

At the workshop described here, the service interacting analysis focused on recording and analyzing service relations between organizations involved in the network.

The graphic presentation of the organizations involved in the work of the Nienburg Association was drawn up in conjunction with all workshop participants in a plenary session. On the basis of a hypothetical maintenance measure, one of the typical tasks of the Association, a list was drawn up of all the organizations with which the Association would come into contact within this context. It emerged that, in sharp contrast to experience already gained with this instrument in GTZ irrigation projects, the Nienburg Association has a large number of more or less isolated "one-off" relations to various organizations within the scope of its work. The various operations to be performed do not automatically lead on from one another as is the case in a number of consultancy projects in the field of "Technical Cooperation." In these projects, organization A provides consultancy services, for instance (GTZ input) to organization B (irrigation project in partner country), which in its turn advises or supports organization C (water users' association), which goes on to provide services to organization or group D (water users, members of a village community). The graphic presentation of these service interactions generally takes the form of a chain, whereas the presentation of the Nienburg model emerged as a sort of "solar system," with several organizations orbiting around the core organization, the Nienburg Association. The core organization is directly involved in all major operations. negotiating directly with planning authorities to obtain the necessary permits, contacting a planning office, organizing the construction work, etc. From the point of view of the Nienburg Association, the web of relations is then extremely dense (see Table 4).

Step 2. Definition of the Range of Services Provided by the Nienburg Association

One of the central activities of the service interaction analysis is to draw up an overview of the entire range of services provided by the organization or organizations under review. This illustrates the full breadth of the services provided by the organization for various bodies and/or individuals. To this end a list is drawn up of all the individual services provided by the organization, along with the beneficiaries of these services. The list is then broken down and

categorized by type of service and beneficiary. This tends to reveal a number of services which would otherwise often be glossed over or forgotten because of their intangible nature. These can be coordination inputs (liaising, clarifying legal issues) and information services (issuing circulars, organizing information events), which are frequently time-consuming and complex, although they are often not accorded the consideration they deserve in planning work, in contrast to the "real" or "hard" services (such as construction and repair work in the case of a water and soil association). The range of services also reveals the entire spectrum of beneficiaries of services who have relations to a certain organization.

Table 4. Network of relations of the Nienburg/Weser Maintenance Association.

This is a list of organizations and groups with whom the Maintenance Association has working relationships in order to accomplish its purposes. Items marked * are not directly relevant to maintenance activities.

1. Nienburg District Association (Umbrella organization)
2. Lower District Water Authority
3. Lower District Conservation Authority
4. Upper District Water Authority
5. Upper District Conservation Authority
- *6. Independent Conservation Associations
- *7. "29 Associations
- *8. Farmers' Association
9. Members
10. Obstructors
11. Contractors
12. Own engineering planning office
13. External engineering offices
14. Consultants
15. Other interested parties
16. Agriculture authorities
17. Water management authorities
18. Conservation authorities
19. Banks
20. Standards authority
21. Subsidizing agencies
22. Courts of law
23. Public prosecutors
24. Neighborhood associations
25. Fishery organizations
26. Holders of water rights
27. Communities
- *28. Town and country planning authorities
- *29. Raw material extraction companies
30. Forestry authorities
31. National and regional bodies
32. Social environment

In the present case, it rapidly became clear to all participants that attention tended to focus on the central activities (active maintenance measures, i.e., clearance, maintenance, repair work) of the Nienburg Association when work was organized. The Association, however, performs a large number of other services, which are not generally as systematically planned as the so-called "active maintenance measures." These include, in particular, the extremely time-consuming and often difficult information and coordination work of the Association (see Table 5).

Table 5. Range of services provided by Maintenance Associations in general and the Nienburg Association in particular.

Services provided for	Members	Nonmembers		
Type of Service		Permit-issuing authorities	Other institutions	Social environment
1. Active maintenance activities	* Clearance * Repair * Maintenance			Ecology (clearance, repair, maintenance)
2. Internal services	* Planning/engineering services * Internal administration services * Administration of membership fees * Updating records of land use			
3. Coordination services	* Internal coordination	* External coordination (obtaining necessary permits)	* External coordination (liaising and coordinating with other bodies) * Clarifying legal issues and cases	
4. Information services	* Information events		* Issuing circulars * Information events * Trade fairs/exhibitions	* Trade fairs/exhibitions * Information

Step 3. Definition of the Range of Services Provided to the Nienburg Association

The definition of all the services provided for the organization under review (with a list of the providers of these services) is intended to render transparent the requirements made of the organization as a result of its accepting these services, in addition to recording these services systematically.

In the case of the Nienburg Association the definition of services provided to the Association (Table 6) revealed that the Association is the beneficiary of a large number of services provided by various organizations, which demands major inputs on the part of the organization for logistics and to shape the relevant relations, although the true extent of these had never before been fully appreciated.

Step 4. Analysis of Strengths and Weaknesses

The analysis of the strengths and weaknesses of an organization was included in the service interaction analysis so as to enable the identification of problems and difficult operations within the range of services.

To assess the quality of the services provided by the Nienburg Association, workshop participants assessed the services listed in step 2 on a scale from 1 to 5, from very weak to very strong. Participants based their evaluation on both the effectiveness and the efficiency of the services provided (Figure 7).

All in all, the problem analysis made the decision makers more aware of the importance of the so-called "software" sector (better legal training, improved communication with external organizations and marketing) for the work of the Association.

On the whole, participants gave the Association higher marks for the work it performs in the "traditional" field of clearance, repair, engineering services, etc., than for the work it performs in the software sectors (coordination, information)—a result which may be of particular interest to the managers of the Association.

On the basis of the analysis of strengths and weaknesses, two particular problem areas were selected for closer examination.

Step 5. Problem Analyses 1 and 2

The problem analysis conducted within a service interaction analysis looks in more detail at those services which workshop participants have classed as problem areas. The special nature of services, i.e., that they can, as a rule, only be provided with the collaboration of the client, must be taken into account. Interaction with the client is particularly important in the case of interpersonal services, such as consultancy. This means that the problems of providing services must be seen not only from the viewpoint of the provider, but also from the side of the beneficiary and at the interface of these two sides, where the interaction per se takes place. Thus the problem analysis looks at the problems identified at three separate levels: i) problems involved in providing services, ii) problems involved in accepting the services, and iii) problems involved at the interface.

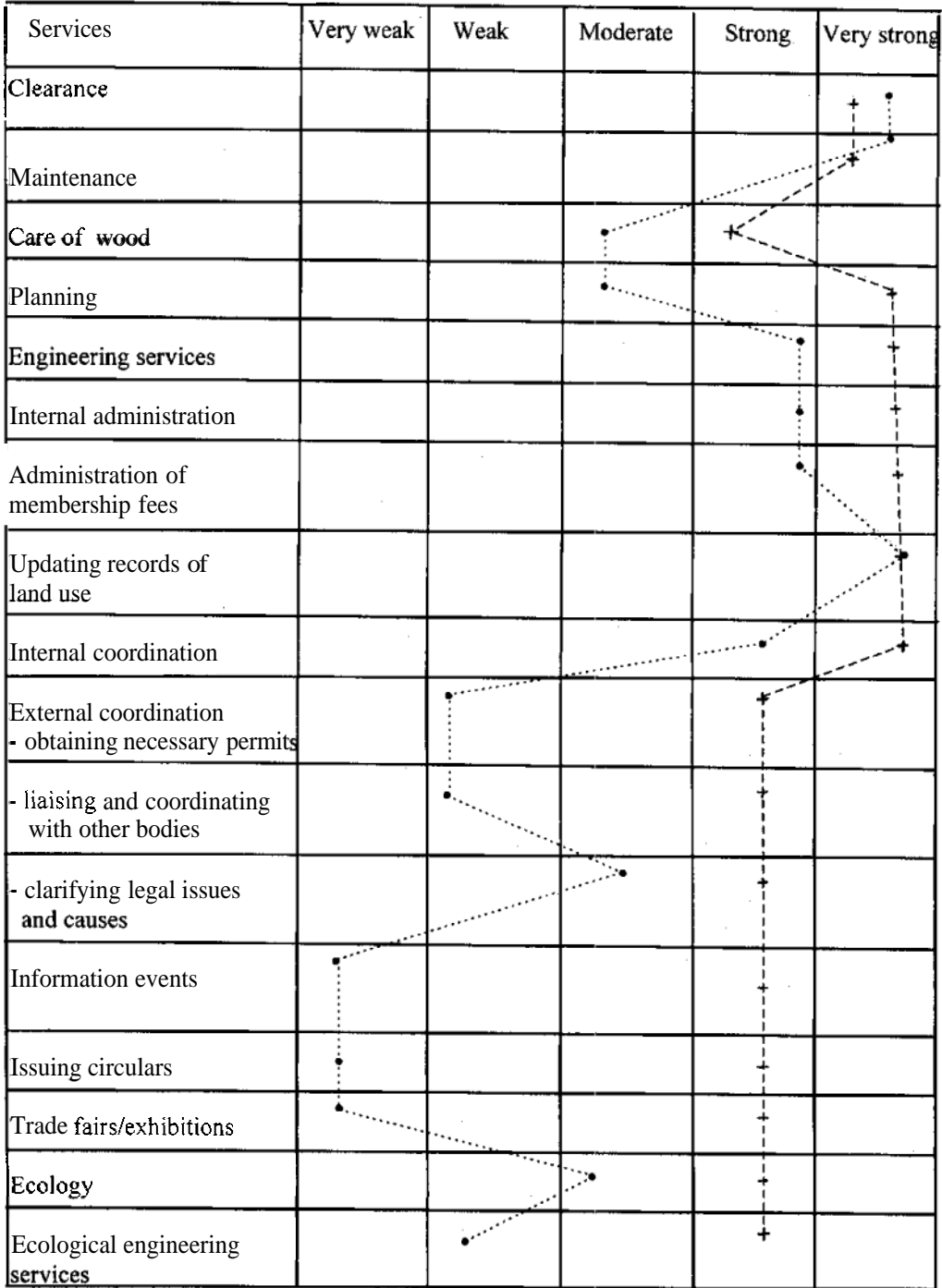
In the present case, two areas were classed by participants as being particularly difficult: i) services provided by the Nienburg Association to the permit-issuing authorities in conjunction with approval procedures (Table 7), and ii) services provided by the Association vis à vis other institutions in the fields of external coordination, liaison and coordination with other legal entities (Table 8).

Table 6. Range of services provided to Maintenance Associations in general and the Nienburg/Weser Association in particular.

Service	MEMBERS association	UMRELLA association	Environment													
			Private enterprises	Autonomous	Independent conservation associations	Farmers' Association	"Obstructors"	Consultant/ Authorities	Banks	Neighbor Associations	Holders of water rights	Communities	Regional and national authorities (railways, post office, etc.)			
1. Economic inputs 1.1. Services in the strict sense	Fees and other financial services	- Engineering services (technical/economical/ecological) - Force account work	Subsidies	- Engineering services - Maintenance services	- Consultancy services*	None	None	None	None	None	None	None	None	None	None	
1.2. Organizational services	Information services	- Information services - PR services	None	None	Information services	None	None	None	Information services	None	None	None	None	None	None	None
2. Coordination services	Obligation to tolerate*	Administrative services	None	- Authorizations - Permits - Support for obligatory measures	None	None	None	None	None	None	None	None	None	None	None	None
3. Representation services	Representation of interests	Representation of interests	Representation of interests	None	None	None	None	None	None	None	None	None	None	None	None	None

* Denotes problem areas.

Figure 7. Services provided by the Nienburg/Weser Maintenance Association: Analysis of strengths and weaknesses.



Note: • Associations in general.
 + Nienburg Association.

Table 7. Problem analysis 1: Services provided by maintenance associations (in general) to permit-issuing authorities—approval procedures.

Problems at service provider level	Problems at service recipient level	Problems at the interface
* Inadequate ecological knowledge	* Dubious interpretation of legal terms	* Inexact definition of legal terms
* Lack of resolve when pushing through the interests of the Association on legal issues	* Exerting party political influence on the (interpretation of) legal terms	* Inappropriate ideas on ensuring future cooperation/ compromises
	* Political pressure exerted by conservation associations	* Need to improve communication
	* Lengthy and complex decision-making processes	
3. Improve communication with the conservation authorities and associations (step up and improve public relations work, hold information events and run discussion groups).		
4. Improve communication in the political sector (chance to act as consultants for committees).		

Problems at service provider level	Problems at service recipient level	Problems at the interface
* Inadequate knowledge of cable protection regulations	* Different positions and interpretations of legislation within conservation associations	* No clear division of responsibility
* Failure to take account of regulations governing utilities	* Cooperation pursuant to "56" Conservation Act does not work	* Same communication problems with representatives of the conservation associations
* Cooperation pursuant to "56 Conservation Act does not work	* Overstretched authorities (deadlines)	
Proposed Solutions/Recommendations		
1. Transparent directives.		
2. Establish a basis for discussion of ecological matters (impart knowledge and involve ecological experts).		
3. Improve communication with conservation associations (see problem analysis 1).		

The problem analysis allowed participants to identify weaknesses on the side of the provider of services of which they had not hitherto been so poignantly aware. It emerged, for example, that the inadequate ecological expertise of the Association's representatives worked against its efforts to obtain relevant permits.

It was also possible to develop proposals to tackle the various problems with a view to improving services, tackling the problem of operation directly (the solution proposed for the problem outlined above was to organize ecological training for the Association's staff, or harness external expertise in the person of consultants). The problem analysis also allowed participants to distinguish between problems they could influence and those they could not influence (e.g., long and complex decision-making processes on the part of the recipients of services or "political pressure from conservation groups").

All in all, the problem analysis made the decision makers more aware of the importance of the so-called "software" sector (better legal training, improved communication with external organizations and marketing) for the work of the Association.

Step 6. Identification of the Association's Internal Service Program

Before the workshop, the Director of the Bremen, Lower-Saxony and Saxony-Anhalt Water Association Federation had pointed out that problems arising between the "voluntary" and the "official" sectors of the water associations not infrequently impede the work of these bodies. For this reason, it was decided to define the internal service program of the Association in addition to the range of services provided to external clients (Table 9). The internal service program of the Association comprises the services provided by the various units within the organization (1. members/committee, 2. board, 3. office) to both other units and bodies outside the Association.

In the case of the Nienburg Association, this procedure made it possible to localize exactly the main problems between the voluntary and the official sectors within the scope for internal services. The main problem area proved to be the preparatory work performed by the office for board decisions. A special problem analysis was then conducted for this field.

Step 7. Problem Analysis 3

In general terms, problem analysis 3 is closely akin to analyses 1 and 2, as described under *Problem Analyses 1 and 2*. The problems are reviewed at three levels: i) problems involved in providing services, ii) problems involved in accepting the service, and iii) problems involved at the interface.

The exact review of the various levels of provision of services focused on "preparatory work for board decisions," which allowed participants to examine the problem from every angle. It emerged that the voluntary representatives felt that they were being bypassed by the secretariat and overstretched by their "superior knowledge" and the "completed staff work" for board decisions (Table 10). By highlighting this more "psychological dimension," it was possible to perceive the true importance of the problem, which was not generally discussed openly and frankly, and to develop potential solutions, which could defuse the conflict (e.g., modifications to the scheduling and involving voluntary members at an earlier stage, etc.).

CONCLUSION AND COMMENTARY

At the workshop described here, the service interaction analysis was tested, taking one association as an example. The objective of the workshop was to record and analyze the services provided by and for the Nienburg/Weser Maintenance Association.

Table 9. Range of services within Maintenance Associations.

	Members/committee	Board	Office	Association (general)	Environment
Members/committee		Monitoring Issuing directives Determining the economic plan and the fee structure Discharge	Support for the director	Elections, personnel decisions (in the voluntary sector) Approving the statutes,	Information* Making decisions of the association transparent*
Board	Reporting* Information* Drafting the statutes Making decisions of the association transparent, publicity work for the cause of the association*		Drawing up the code of procedure	Representing the legal position of the association vis a vis the outside world Association decisions Collecting fees (formally)* Hiring staff Monitoring the office Making the decisions of the association transparent	Information inputs* Representing the association in legal issues Making the decisions of the association transparent*
Office		Preparatory work for board decisions* Executing the decision of the board Consultancy Information inputs		Executing all decisions of the board* Administration inputs PR work* Observation of developments in the environment* Operational inputs	PR work* Information inputs

*Denotes problem areas.

Table 10. Problem analysis 3: Services provided by the office to the Board— Preparation of Board decisions

Problems at service provide level	Problems at service, recipient level	Problems at the interface
* Time lost as a result of coordination problems	* Overstretched (deadlines)	* Coordination of deadlines
* Too much time spent recording and presenting legal and other directives in a transparent way; too little time for other work	* Increasingly time-consuming work and increasing responsibility under civil and criminal law	* Increasing complexity of tasks as a result of legal and other directives
* In some cases inadequate training in view of the increasing complexity of the work	* Reduced decision-making authority because of excessive preparatory work for board decisions	* Occasionally, activities of volunteers are not discussed with full-time staff (and vice versa)
* Partially incorrect understanding of the role of the service provider	* Possible detrimental effect of conflicts of interest on decisions	* Special importance of good personal relations
* At times, personal topic-related preferences have too much influence	* Partially incorrect understanding of the role of the service provider	* Power politics sometimes stand in the way of a free flow of information * Sometimes, lack of clarity and acceptance of different roles

It proved possible to spotlight precisely those (difficult) aspects of the provision of services, which are frequently neglected because of their intangible nature, e.g., consultancy, coordination and PR work. The workshop made it clear that these areas must be subjected to an analysis and planning procedure that is at least as detailed as the classical, or "hardware" sectors (in this case clearance, repair, maintenance). The service interaction analysis also allowed participants to discuss possible solutions for these "sensitive" areas, immediately after the problem analyses, which tackled not only the operations involved, but also the service recipient level and the interaction, or interface of the two sides.

The workshop demonstrated that the service interaction analysis is a valuable instrument to launch a discussion of services provided and the problems arising in this context. The instrument is also a good way to start to analyze important inner organizational problems systematically. Finally, the SIA allows both "internal" and "external" participants—where external participants attend the workshop—to clarify their roles within the overall network of relations.

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