

# Assessing the intensity of participation along six dimensions

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## Abstract

Existing concepts for describing and categorizing participatory processes do not capture clearly enough the differences between "more" or "less" participation. There is a diversity of ways how to consult or actively involve stakeholders<sup>1</sup>. It is important to specify whether participation is done early or late in the process, with few representatives or with the general public, or with weak or strong influence on decision-making. Only once a well-defined concept can be found for characterising a participatory process, can one effectively start discussing what kind of participation should be encouraged under certain conditions.

Therefore, a new concept to measure the intensity of a participatory process is developed by using a set of six dimensions: "activity", "equality", "transparency", "power sharing", "flexibility" and "reach". In each of these dimensions, a participatory process can attain a pre-defined high, medium or low level. The characterisation of the participatory process is visualised as a radial diagram, a so-called "intensity diagram", giving a clear overview of the main characteristics of the entire participatory process or the part of the process being focused on.

These intensity dimensions have been applied to participatory processes in five water management case studies, situated in Belgium, the Netherlands and Great Britain, in order to support the planning of such processes as well as their comparison and evaluation.

## 1 Why is a concept for measuring the intensity of participation needed?

Various approaches have been developed to systematically categorise participatory processes. However, both explicit categorisation criteria and a methodological consistency are often missing.

The well-known "ladder of citizen participation" (table 1) developed by Arnstein (1969), for example, categorises different classes of participatory processes along a gradient of power sharing. However, besides power, concepts such as fairness and openness seem to be subsumed into this categorisation, for example, when characterising a process as "manipulation". Additionally, the differentiation between "information" and "consultation" cannot be explained by power sharing, but by the direction of the information flow. Talking about power entails the questions: "Who gets power?", "...to decide about what?", and "...on which information basis?". This should be better differentiated.

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<sup>1</sup> With stakeholders we mean persons, groups or organisations that are influenced by a certain decision or have an influence on it. We exclude authorities from this definition. These can also have a stake in the issue but we want to focus on public participation, and not on cooperation between authorities.

**Table 1: Arnstein’s Ladder of Citizen Participation (Arnstein, 1969)**

Citizen control	Citizen power
Delegated power	
Partnership	
Placation	Tokenism
Consultation	
Informing	
Therapy	Non-participation
Manipulation	

The same applies to the levels of participation defined by Mostert (2003) (table 2). He builds on the levels of participation referred to in the WFD, namely “information”, “consultation” and “active involvement”. These levels describe the interaction and information flow between stakeholders and responsible authorities. Mostert (2003), however, introduced a new criterion to the list. He enlarged it to a set of five levels by differentiating between different types of “active involvement” according to the decision making power given to the public.

**Table 2: Levels of participation according to Mostert (2003, table 1)**

Level of participation	Description
Information	The public is provided with or has access to information (not genuine public participation, but the basis for all forms of it)
Consultation	The views of the public are sought
Discussion	Real interaction takes place between the public and government
Co-decision making	The public shares decision-making powers with government
Decision making	The public performs public tasks independently

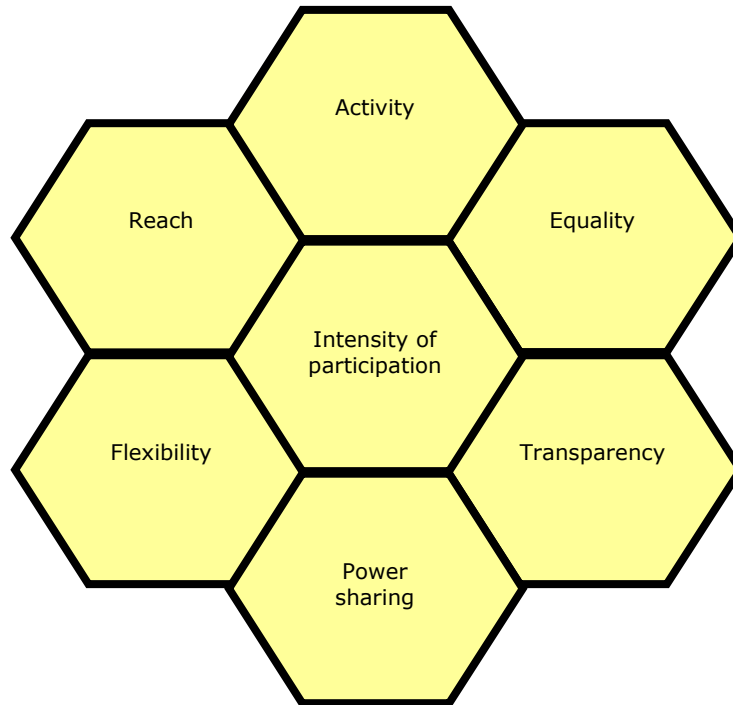
Again, there is not one single criterion appropriate to categorise a complete participatory processes. We argue that different criteria, if applied within one categorisation, should be made explicit, in order to gain consistency.

## **2 The dimensions of intensity and their representation**

### **2.1 Overview over the six dimensions**

Rasche (2005) developed a set of criteria in order to reveal the main characteristics of participatory processes. These criteria were collated from the available literature on what is deemed to be important for participation. Aspects already mentioned above are: (1) the *activity* of participation as accounted for in the WFD as well as (2) Arnstein's question of *power sharing*. Furthermore, Renn et al (1995) raise issues of (3) fairness, linked to whether or not all stakeholders have an equal chance to influence the outcome of a process (*equality*). This is also pointed out by Enserink et al. (2003) and Lawrence and Daniels (1996). The Aarhus Convention on the other hand emphasizes (4) *transparency*. Many authors (e.g. Feindt 2001, Lawrence and Daniels 1996, ÖGUT 2003, EU 2002) mention that engaging stakeholders at an early stage of the planning process is also important. This is best achieved before major decisions have been taken so that there remains a degree of (5) *flexibility in what is to be planned*. Finally, the quantity of people personally

involved in a participatory process (6) (*reach*), as mentioned for example by Lawrence and Daniels (1996), can be regarded as a criterion for the extent of participation. The six intensity dimensions of participatory processes are depicted in figure 1.



**Figure 1: The six dimensions of intensity**

Table 3 provides a brief summary of the content of each dimension as they are outlined in this paper. They will be explained in more detail in the following chapter.

**Table 3: Main questions covered by the six intensity dimensions**

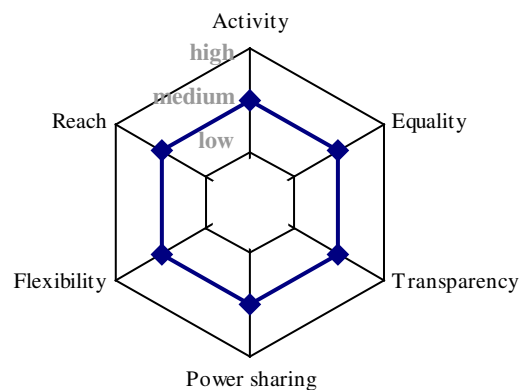
Intensity dimension	Main question covered
Activity	Do stakeholders have the opportunity to take actively part in the participatory process by uttering opinions and ideas and discussing planning options?
Equality	Do all stakeholders have equal chances to influence the output of a planning procedure?
Transparency	Are stakeholders informed about the project as well as the procedure of the planning process and decision making in a way that enables them to advocate their interests in a competent way?
Power sharing	Does the authority share power with the stakeholders by giving their opinion a formal status in decision-making?
Flexibility	Does participation take place at a time when major aspects of the project design are still open for discussion?
Reach	Is participation limited to a small group of representatives or does it involve major parts of the whole group of stakeholders?

The intensity dimensions were chosen from a wide range of potentially relevant characteristics of participatory processes. As many as possible relevant aspects are integrated in as few as possible dimensions. We believe that criteria applied in the literature for characterising and evaluating participatory processes like “open” or “democratic” can be broken down to their basic practical implications for process design, and represented by the six intensity dimensions proposed here.

## **2.2 Representation: The intensity diagram**

Each of the above defined dimensions can attain a high, medium or low level. These levels can be represented in a radial diagram, which here we call an “intensity diagram”. A generic example of an “intensity diagram” is shown in figure 2.

The diagram helps to gain a quick overview over the central characteristics of a participatory process. It is, therefore, a useful tool for comparing and categorising participatory processes.



**Figure 2: Generic example of an intensity diagram for a process in which all dimensions are set to medium**

## **2.3 A non-normative approach**

The concept of intensity of participation, as proposed in this document, is not normative, but merely a way to describe the characteristics of a participatory process. The reader should not be confused by the fact that our intensity criteria are in the literature often used in normative terms, e.g. as criteria for “good” participation (e.g. Feindt 2001, Renn et al. 1995, Chanan 1999, ÖGUT 2003, Oels 2003, Beierle and Cayford 2002). Advocates of participation argue for high activity, for high equality, etc. However, we do not claim that the more intense participatory processes are the better. There may well be cases where it is not possible, not efficient or even counter-productive to aim for the highest levels of intensity in all dimensions. The concept as it is described here should rather encourage a discussion on how intense, participation should be under which conditions.

## 2.4 Detailed description of the levels of intensity dimensions

Table 4 displays an overview of how a discrimination of levels is done from low to high in all six dimensions.

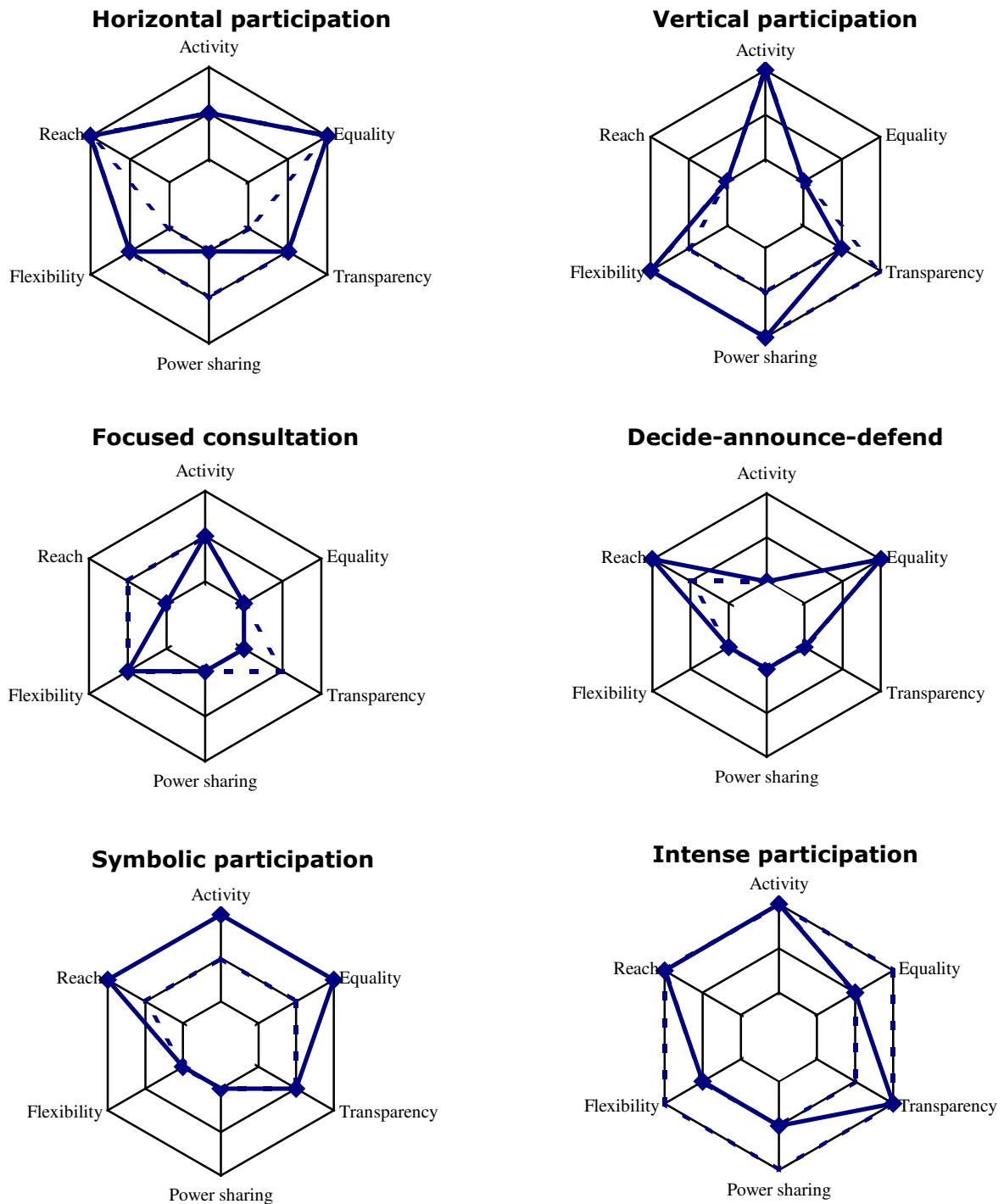
**Table 4: Definition of low, medium and high levels of intensity dimensions**

<b>Intensity dimension \ level</b>	<b>low</b>	<b>medium</b>	<b>high</b>
<b>Activity</b>	Stakeholders are only informed.	Consultation: Stakeholders are asked to give their view on the plans.	Active involvement takes place. Stakeholders with different interests meet to discuss about plans.
<b>Equality</b>	Some affected stakeholders or groups are excluded from the process.	All stakeholders are involved personally or represented by an appropriate person, but with a different degree of influence on the outcome.	All stakeholders have a similar influence on the outcome of the process. They are either taking part personally or are represented by an appropriate person. All participants have access to the same information, and their voices have the same weight.
<b>Transparency</b>	Relevant information is withheld from stakeholders on purpose.	Stakeholders are well informed, although there are some minor deficits. For example, some information is not delivered at an early stage, is not neutral or not easily understandable.	Internal: Stakeholders are at an early stage informed about all relevant aspects of the project and the process in a way that they can effectively advocate their own interests. External: The public is informed about progress and result of the participation.
<b>Power sharing</b>	Stakeholder opinions can possibly be ignored by the authority.	Stakeholder opinions have got an official status and have a pre-defined weight in the decision making. The authority will explain the reasons if the decision made deviates from the stakeholder suggestions. <sup>2</sup>	Stakeholders and authority commonly take the decision.
<b>Flexibility</b>	Stakeholders are involved only after all relevant decisions have been made.	Stakeholders are involved early enough to influence some significant questions of the project design.	Stakeholders are involved at an early stage and can influence major questions like the site location, whether the measure planned is necessary at all, etc.
<b>Reach</b>	Only a small group of stakeholders, e.g. representatives, is involved.	A number of stakeholders cannot take part personally.	All known relevant stakeholders - in public participation including members of the broad public - have got an opportunity to take part personally.

<sup>2</sup> This has been proposed by Feindt (2001, 530)

### 3 Classes of participatory process

he intensity dimensions can now be used to define and graphically represent different classes of participatory process. Six examples are given in figure 3.



**Figure 3: Graphical representation of six types of participatory processes**  
**(The continuous line shows a characteristic process of the respective type.**  
**The dotted line visualises flexibilities within the type definition.)**

Some of the examples given above are new classes of participatory process defined by Rasche (2005), others build on notions found in literature (e.g. decide-announce-defend (Enserink et al. 2003), symbolic action (Newig 2003)). Characteristics of such processes can, by drawing their intensity diagrams, be made more explicit and comparable.

### **3.1 Description of the six classes of participatory process**

#### 3.1.1 Horizontal participation

Horizontal participation allows for the consultation of many stakeholders. In projects related to public goods, this means involvement of the broad public, for example within public meetings or surveys.

#### 3.1.2 Vertical participation

Vertical participation involves a selected group of stakeholders in a very intense way in terms of activity, internal transparency, flexibility and power sharing. The majority of the stakeholders, however, is only informed about the result.

#### 3.1.3 Focused consultation

With minimal effort, only the most important stakeholders are involved in a bilateral way in order to gain from them the support or information needed.

#### 3.1.4 Decide-announce-defend

This class of participation, which is often criticised, is limited to the attempt to gain, for example in a public meeting, the stakeholders' support for a decision already made.

#### 3.1.5 Symbolic participation

Symbolic participation describes a participatory process suggesting an intense participatory process in that many stakeholders are actively involved and are supported by plenty of information. In fact, however, the result of the participation remains without influence on the decision made.

#### 3.1.6 Intense participation

As intense participation we define a participatory process allowing for a direct dialog among representatives of all stakeholder groups, giving them an opportunity to exchange knowledge and opinions on relevant questions of the process design. Participants have access to relevant information, and the results of the participation cannot be ignored by the responsible authority in the end.

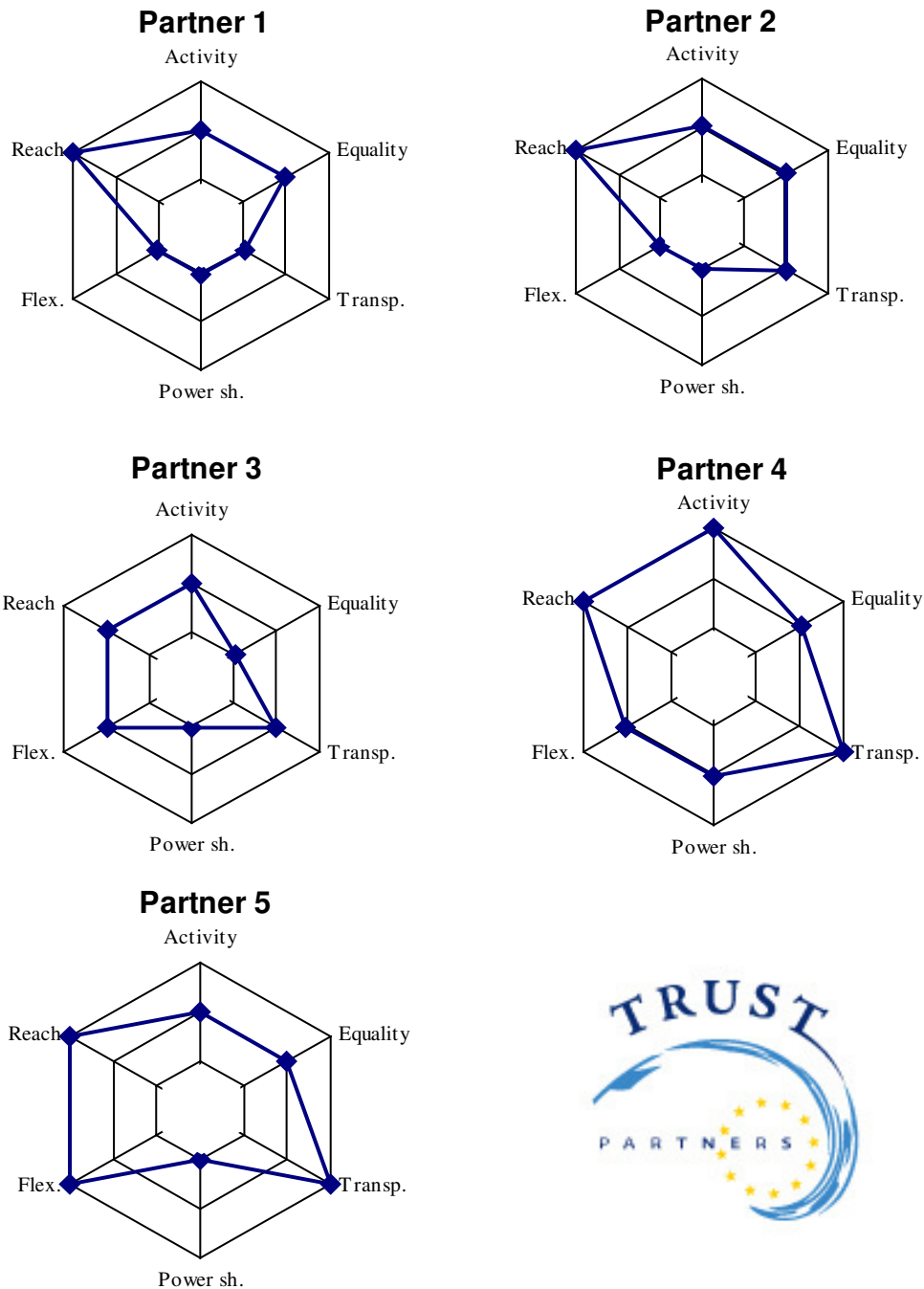
Usually, the conditions for intense participation are not fulfilled by a single participatory method<sup>3</sup> but by several methods combined in an interrelated way. One method, such as a workshop, could then allow for an active involvement of representatives of all stakeholder groups. Another method, such as a public meeting or a survey, could account for the more horizontal participation of members of the major stakeholder groups.

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<sup>3</sup> By a participatory method we mean any activity aiming at the involvement of stakeholders. One method can involve stakeholders in a nonrecurring or iterative way. Hare and Krywkow (2005) have proposed a set of participatory method classes giving an structured overview over the diversity of existing methods.

## 4 Application to five water management projects

This concept has been applied in the TRUST project by Rasche (2005). The TRUST case studies in Belgium, Great Britain and The Netherlands are examples of common practice of water management in Western Europe. Planning activities of those partners comprise upgrading of a canal stretch, design of an irrigation water supply basin, broadening of a canal, enlargement of a recreational area and upgrading of an urban park in combination with a sustainable water drainage system.



**Figure 4: Intensities of the participatory processes of the five TRUST partners as envisaged in February 2005 (according to Rasche 2005)**



Intensity diagrams have been drawn up for each of the five participatory processes. The relevant information has been gained through carrying out interviews with the respective project partners in February 2005. Intensities as displayed here show the outline of the initially intended participatory processes before any detailed professional consultation and discussion on the participatory process design took place. Participatory plans and their corresponding intensity diagrams have therefore altered as a result of the partners taking further part in the TRUST project.

#### **4.1 Description of the intensity diagrams for the five project partners**

##### 4.1.1 Partner 1: Focused consultation

Partner 1 was originally planning a participatory process that we identified as belonging to the class "focused consultation". Information is gathered from the most important stakeholder groups at an early stage in the project planning. However, no interaction with or between stakeholders in developing the project design is planned. After planning permission has been granted, a public information meeting will be held in order to inform future users about the project.

##### 4.1.2 Partner 2: Symbolic participation

Partner 2 puts great efforts into preparing their participatory process. In order to reach and inform all stakeholders as well as the broad public, 100.000 house to house papers will be distributed and a series of meetings with invited stakeholder groups has been prepared. These meetings would have generated options for an active involvement of a broad range of stakeholders. However, no time for discussion is scheduled in the agenda and major relevant decisions have already been taken prior to the first meeting. One important aspect characterising this process as "symbolic participation" is that the strongly limited influence of stakeholders on the project design is not made transparent, since documents provided to participants state that their suggestions will effectively be included in the planning.

##### 4.1.3 Partner 3: Focused consultation

The participatory process planned by partner 3 does not reach much beyond the legally prescribed public meeting. This meeting itself had already taken place prior to the assessment and, unfortunately, was poorly attended by stakeholders. Especially those stakeholders who had uttered concerns beforehand, did not attend. Bilateral meetings have been held with those stakeholders who were expected to be influential. The approach followed here is therefore of the class "focused consultation". However, at the time of the analysis, partner 3 started considering ways as to extend their participatory plan to also working with schoolchildren and increase their environmental consciousness.

##### 4.1.4 Partner 4: Intense participation

Partner 4 plans to carry out workshops in order to actively involve representatives of the three local citizens' organisations. The purpose of the workshops is to give participants an opportunity to contribute new suggestions for the design of the project such as the spatial arrangement of ponds, paths and a play ground. These suggestions are supposed to be captured in a common document which will, though with an unbinding status, enter the formal decision making process. The workshops will be complemented by public meetings and events in order to inform neighbours about the project. All in all, this participatory process is designed in a way that allows for an "intense participation" of stakeholders.

#### 4.1.5 Partner 5: Focused/horizontal participation

The participatory process planned by partner 5 opens a lot of options for organised stakeholders and also the broad public to be involved. None of those options, however, entails a discussion of the plans among different stakeholders. Discussions happen more on a bilateral basis between partner 5 and the most relevant stakeholder organisations. From early on in the process, they meet on a regular basis. Members of the broad public will be able to give their opinion via a survey and a public meeting. Potentially, they can also be involved as volunteers in the implementation of the project. This participatory process is, according to the classes defined above, a combination of "focused consultation" and "horizontal participation".

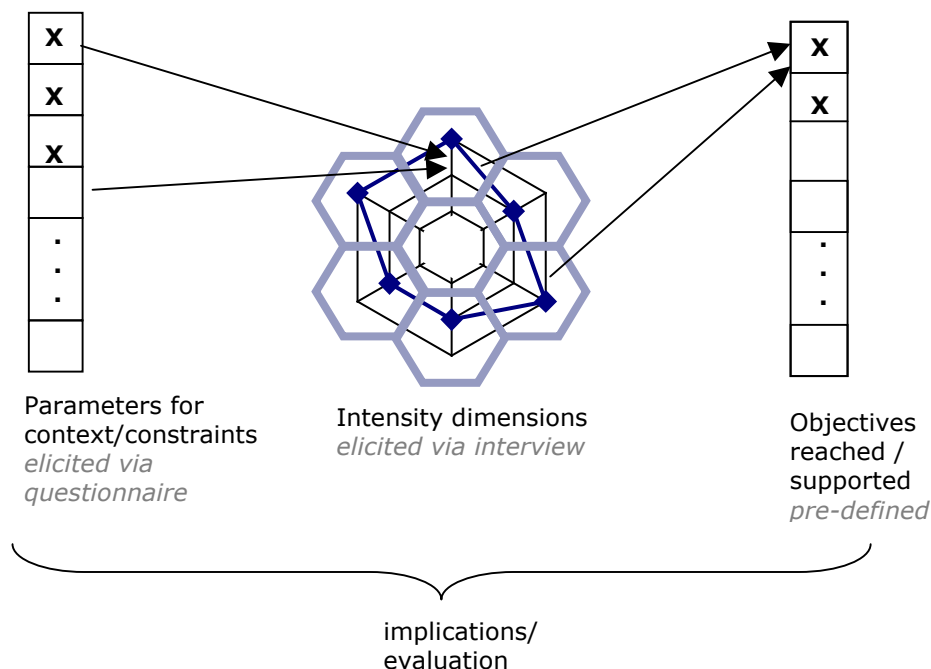
No partner was intending to adopt a vertical or decide-announce-defend process.

### 5 Application for evaluation: linking context, process and objectives

#### 5.1 Evaluating the design of a participatory plan

The design of a participatory plan is linked to the (1) objectives of the planners, and (2) the constraints under which they operate.

The objectives of a planning procedure refer to what should be achieved (e.g. development of win-win plans, increased knowledge of stakeholders, more users of the project site), and therefore what is required to initiate an appropriate participatory process. Who needs to be involved? Do planners need stakeholder's ideas? Etc. Constraints are given by, for example, legal requirements, limited human and financial resources and the available time for the project.



**Figure 5: Framework for evaluation: linking constraints, intensity and objectives and its application in the TRUST project (in italics)**

Considering the design of a participatory process in this context provides us with a framework for evaluation.<sup>4</sup> It is depicted in figure 5.

We start with a pre-defined set of objectives of a particular participatory process, given by the organisation setting up the participatory process. One can then specify the link between process intensity and the achievement of specific objectives. For example, we may assume that the objective 'development of win-win plans' can only effectively be supported by a participatory process providing for a dialogue between stakeholders (high level of activity). This dialogue must involve the requirements of all stakeholder groups (at least medium level of equality). Furthermore, a significant level of flexibility, and at least a medium level of internal transparency in order to allow for a competent dialogue is needed.

The evaluation of the participatory process is now accomplished by comparing the actual process intensity to the process intensity levels suggested by the objectives. In our example introduced above, we may discover that the process cannot reach a high level of activity.

In order to suggest improvements of the participatory process, we need to understand the reasons behind the process planning. To do this, we therefore can go back from the intensity dimensions to the context and its constraints. When consulting the process planners we might, for example, find out that the reason for not conducting active involvement is related to financial restrictions. This allows us to draw very clear conclusions about what conditions need to be changed in order to allow for an appropriate participatory process to be initiated.

Similarly, it would be possible to develop hypotheses describing the costs and dangers of specific levels of intensity dimensions.

## **5.2 Monitoring process implementation**

The framework for evaluation described in section 5.1 focuses on judging the design of a participatory plan in relation to its objectives.

If an evaluation of the participatory process is done during or after the process implementation, the intensity diagrams can also serve the purpose of monitoring the actual process implementation in relationship to the planned process design. This would extend the list of questions related to single levels of the intensity dimensions. For example, in terms of equality and reach of the process, besides asking who has been invited to participate, we can additionally ask who actually attended. To indicate transparency, besides asking whether the stakeholders potentially had access to all relevant information, we can ask whether they really have seen these.

Asking these questions will result in one intensity diagram for the participatory plan as it was designed before the process had started, and another one for the actual

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<sup>4</sup> This approach has been inspired by Hare and Krywkow (2005) who have developed a set of participatory method classes which they link to the achievement of specific objectives. They further specify which method classes support which level of participation according to the WFD, e.g. active involvement, consultation or information supply. Planners can use this structure in order to choose appropriate methods either in relation to the process objectives or in relation to certain levels of participation to be reached.

process implementation, which can then be compared. Process planning and actual implementation may diverge. Stakeholders may have not participated in the way they were hoped to. Additionally, technical, administrative or financial reasons may hinder the implementation of the participatory activities. These are questions to look into more deeply if deficits have been identified.

## **6 Options for further development of the concept**

### **6.1 Complexity of participatory processes**

The intensity diagram is a simplified model of a complex participatory process. Its application therefore inevitably implicates a partial loss of information.

Real-world participatory processes comprise of several intertwined methods, involving different target groups and taking place at different points in time. The internal process structure cannot be represented by one single intensity diagram. The combination of intensity levels of different methods within one diagram can obscure the actual impact of a single method. This can lead to false conclusions.

Depending on what findings are of interest, and whether for example, the involvement of a particular stakeholder group is examined, it might be useful to apply the intensity diagram only in relationship to this group or a single participatory method within the entire process. This, however, will require further adaptation of the dimensions. The dimension of equality, for example, loses its explanatory power if applied to only one stakeholder group.

### **6.2 Adapting the concept to other institutional settings and purposes**

The application of the intensity diagrams as described in this document assumes a participatory process that aims at a concrete decision to be taken by an authority which is also in charge of the participatory process. Changes might be necessary in order to make it applicable in another context.

Specific purposes or research questions may also give rise to further intensity dimensions or reduce the relevance of particular dimensions proposed in this document. Further applications of the concept may show how it can be adapted to different situations and tasks.

## **7 Questions for further discussion**

The intensity dimensions as they are defined here raise a number of further research questions. The dimensions should encourage scientists to discuss about which levels of intensity or which classes of participatory processes are appropriate under a variety of conditions. In order to do so, however, we need to specify our assumptions about benefits as well as costs and risks of high, medium or low levels of each dimension. Furthermore, we need to look more into the reasons for planners to shape the participatory process in a certain way. What are practical reasons for or against intense participation? What is the maximum number of people that can be personally involved? What might be institutional limits to power sharing? These are questions that need to be answered in order to draw clear conclusions, and achieve guidance for planners in their participatory management.

## **8 Conclusions**

The concept of intensity dimensions is an approach to allow one to qualitatively discriminate between different intensities of participation in a consistent and comparable way. By applying them for the planning, comparison and evaluation of participatory processes, we found out that the six dimensions (activity, equality, transparency, power sharing, flexibility and reach) are appropriate to capture and graphically represent the main characteristics of a participatory process. Furthermore, the intensity dimensions helped us to identify general classes of participatory processes: "horizontal" as well as "vertical participation", "focused consultation", "decide-announce-defend processes", "symbolic participation" and "intense participation".

When applied to the case studies of the TRUST project, the intensity dimensions proved useful in order to describe and compare participatory processes, but also to evaluate the participatory plan already at the design stage. We found out that one project partner provided for intense participation. Some restricted their participatory efforts to focused consultation. Others provided for extensive potentials for participation. By analysing each individual intensity dimension, however, we could reveal deficits according to specific dimensions such as activity, transparency or flexibility etc. This evaluation allowed us to reveal potential pitfalls. The participatory plan would for example, so designed, not meet the goals set for carrying out participation. Assigning the processes a certain intensity "class" can help to communicate the observations and implications.

We argue that, although requiring a certain degree of simplification and subsumption, the intensity dimensions provide planners, authorities, consultants and scientists with tool for process comparison and evaluation that is more lucid and expressive than any descriptive analysis.

We are looking forward to see how the concept of the intensity dimensions can be further developed and adapted to further research questions. Furthermore, with this paper, we hope to start rewarding discussions that should be highly relevant also in a political context. We intend to encourage scientists to discuss more deeply and be more specific about the following research questions: What class of participatory process is appropriate under certain conditions? What levels should be reached in the single intensity dimensions?

## **9 Acknowledgements**

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