



Human Impact Assessment

<http://info.stakes.fi/iva/EN/index.htm>

## **Human Impact Assessment (HuIA) as a tool of welfare management**

Tapani Kauppinen and Kirsi Nelimarkka

STAKES (National Research and Development Centre for Welfare and Health)

Training material

September 15, 2004

## Contents

What is human impact assessment? .....	4
Why assess impacts in advance? .....	4
Statutory advance assessment	4
Voluntary advance assessment	4
HulA can be split up into stages .....	5
Minor assessment	5
Major assessment	5
Stage 1: Necessity and organization of assessment	6
How do we know when assessment is necessary?	6
Organizing assessment	7
Example of recognizing the need for assessment	7
Stage 2: Acquisition and supplementation of information	8
What do we have to remember?	8
How do we acquire the information?	9
Examples of information acquisition	10
Stage 3: Impact recognition and limitation	12
What do we have to remember?	12
How do we identify the impacts?	12
Examples of identifying impacts	14
Stage 4: Formulating and describing alternatives	17
What do we have to remember?	17
How do we formulate the alternatives?	17
Examples of formulating alternatives	18
Stage 5: Assessing impacts and alternatives	20
What do we have to remember?	20
How do we assess alternatives and impacts?	20
Examples of assessing impacts and alternatives	22
Stage 6: Reporting	26
What do we have to remember?	26
How do we report on assessment?	26
Examples of assessment reporting	27
Stage 7: Monitoring	29
What do we have to remember?	29
How do we monitor impacts?	29
Examples of monitoring	31
Glossary .....	33
Sources and further information .....	34
Appendix 1. Forms of advance assessment .....	35
Appendix 2. Advantages of applying advance assessment .....	36
Appendix 3. Checklist for minor assessment .....	37

To the reader

This material presents the basis for and methods of human impact assessment (HuIA). It is intended for use in basic training and supplementary training for those who are actively engaged in the welfare sector. The material may naturally also be used in other forms of training too. Some of the material has been tested at a working conference of the TEJO project on local structure and management in promoting health on September 15, 2004.

In this material, HuIA is described from the voluntary assessment viewpoint, assuming that the people carrying out the assessment are experts from the municipal welfare sector. The use of statutory advance assessment was presented in the Stakes Aiheita series no. 8/2003 (*Käsikirja Ihmisiin kohdistuvien vaikutusten arvioinnista* [Human impact assessment manual]) and in the Ministry of Social Affairs and Health guide 1/1999 (*Ympäristövaikutusten arviointi, Ihmisiin kohdistuvat terveydelliset ja sosiaaliset vaikutukset* [Environmental impact assessment, health and social impacts]).

The material presents the principles of HuIA and gives some examples of assessment at different stages. The material is backed up by the STAKES website ([info.stakes.fi/iva](http://info.stakes.fi/iva)), which gives more information, examples and methods. The websites mentioned here are mainly in Finnish. Some material in English is available at <http://info.stakes.fi/iva/EN/index>

This material may be freely used and applied as long as the source is acknowledged.

## What is human impact assessment?

The purpose of human impact assessment (HuIA) is to generate advance information on the impact of a project, plan, programme or decision on human health and well-being.

Impact assessment is a tool for planning and decision-making. It can help find new perspectives and alternative solutions. In contrast to traditional evaluation research, human impact assessment is predictive, examining the impact of decisions that are still at the planning stage.

HuIA includes both social impact assessment (SIA) and health impact assessment (HIA). In some countries, gender impact assessment and health inequalities assessment are also performed, but in Finland they are often integrated with HuIA (Appendix 1).

Advance impact assessment can be approached from different angles. According to one view, advance assessment is an information-based technical process focusing on the problems of quantitative information, expertise and the reactive approach. On the other hand, advance assessment can also be seen as a value-based discussion process emphasizing qualitative information, the examination of inter-administrative impacts and the participation of the people subject to the impacts in the assessment. In practice, advance assessment often lies somewhere between these two extremes. In principle, HuIA is closer to the latter of these two viewpoints, since the politics of the decision-making process are also reflected in the assessment.

## Why assess impacts in advance?

HuIA may be performed on either a statutory or a voluntary basis; using HuIA, decision-making can be developed so that it is more inclusive and aware of the possible impacts.

### ***Statutory advance assessment***

Advance assessment is a statutory requirement in the preparatory work on certain plans, programmes and planning schemes for the physical environment and in land use planning. There are provisions on these in the Act on Environmental Impact Assessment Procedure (468/1994), the Land Use and Building Act (132/1999) and the EU Directive on the assessment of the effects of certain plans and programmes on the environment (2001/42/EC).

### ***Voluntary advance assessment***

Voluntary advance assessment is used in preparatory work on plans, programmes and decision-making in municipalities, sub-regions, provinces and at the national level. HuIA is applied in many areas, including the implementation of welfare strategy, drawing up strategies on caring for the aged, disabled policy programmes, designing regional well-being health centres and neighbourhood improvements (see Kauppinen and Nelimarkka 2004, etc.). It is a key tool in welfare management.

The Health 2015 Finnish national health programme emphasizes the expansion of health impact assessment to cover the preparation and reassessment of all policies and activities. This is pointed out in the Government Programme and mentioned in the EU Treaty of Amsterdam.

Advance impact assessment is useful in situations where it is necessary to react to the need for change or to a specific course of development. For example, if a worrying trend emerges in a welfare scenario, advance assessment can be used to find the best way of dealing with it. Advance assessment can also be used to influence the future and seek ways of arriving at a desired future situation. It helps in finding partners who need to be involved in planning and implementation (see also Appendix 2).

## **HuIA can be split up into stages**

HuIA can be described as a process that includes certain specific stages (Necessity for and organization of assessment; Acquisition and supplementation of information; Impact identification and limitation; Formulating and describing alternatives; Assessing the impacts and alternatives; Reporting; and Monitoring). The stages may overlap to a certain extent as they progress, and it is possible to return to any stage if necessary. Some of the stages, such as collecting information, may form part of the day-to-day work of the municipality or sub-region involved.

Whenever a decision is made, it is necessary to consider whether it is likely to have a significant impact on people's health and well-being. If there is no impact, or the impact is already known, assessment is not required. In any other case, it is worth carrying out HuIA to a major or minor extent.

### **Minor assessment**

Minor, or restricted, assessment is suitable for situations that require rapid reaction, when assessment has to be carried out during a single meeting and the impacts are not of major importance (see Importance of impact, stage 3). Assessment can be performed by one expert alone (in consultation with others) or by a presenting official in conjunction with a content expert. The presenting official should have some knowledge of HuIA methodology, and it is the job of the content expert to identify the impacts. The agenda for a minor assessment might be in accordance with Appendix 3, for example. In reporting on minor assessments, the form in the third example case can be used. Minor assessment may be sufficient on its own, or it may indicate that a major assessment should be initiated.

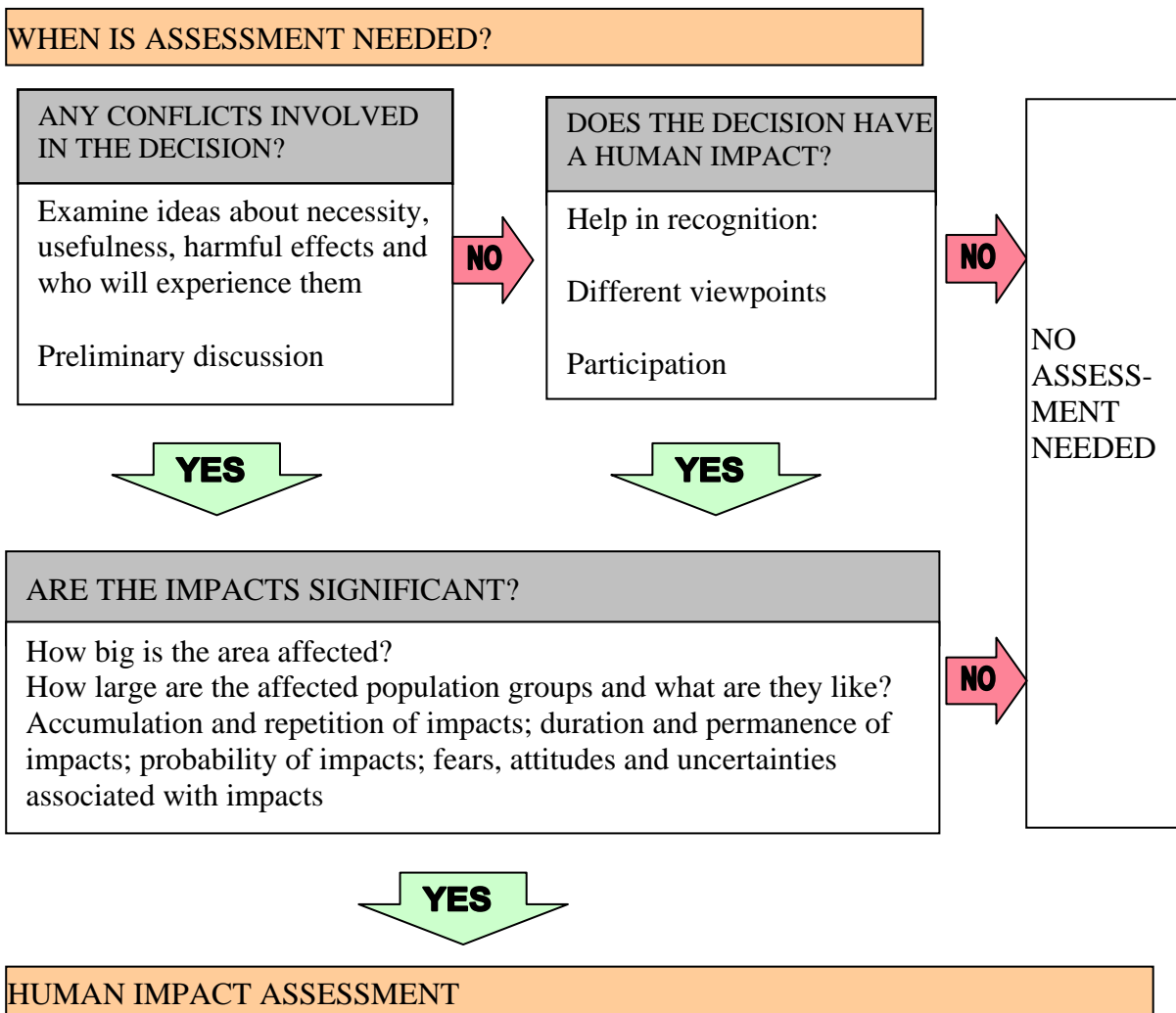
### **Major assessment**

A major, or full, assessment is indicated if it appears that the decision will have an important impact on people or the community, or if the decision is a contentious one. The assessment can be carried out by an existing inter-disciplinary working group or one set up specifically for the purpose of the assessment. In this material, the various stages are discussed from the perspective of major assessment, but their content can be reduced to suit the situation. Statutory assessments are often major assessments.

## Stage 1: Necessity and organization of assessment

### How do we know when assessment is necessary?

A specific model has been developed which can be used for determining whether HuIA is necessary (Fig. 1). By interviewing experts and people who are subject to the impacts, you can make a preliminary assessment of the potential impacts and their importance and of any conflicts which may arise.



**Figure 1. Model for determining the need for HuIA**

Another way of starting off is first to identify the issue or the problem you want to develop using advance assessment (i.e. recognizing the need for change). Tools that can be used for recognition include *Teemaseula* (theme screening), worry zones, the HUOMIS barometer, panel discussions,

indicators, barometers, scenarios, weak signal recognition, scanning the operating environment, and joint recognition of subjects.

## **Organizing assessment**

At the beginning of the assessment process, it is worthwhile to draw up a plan of work that details the progress of the assessment, its timetable and its responsibilities. The agent carrying out the HuIA may be an individual official preparing a decision, a working group drawing up a programme, or a consultant hired specifically for the assessment. Whether the assessment is carried out by one or more people, it is important that various sectors of the administration and groups of people who are subject to the impacts (clients, personnel, local residents, different population groups) can take part in the assessment.

Reaching targets, identifying inter-administrative impact chains and finding ways of alleviating unfavourable impacts also call for cooperation among different parties. Key parties should be invited to the first assessment meeting; after that, participation is at their own discretion.

Decision-makers should at least be aware of how HuIA is conducted. At best, they should take part in the process by participating in the activity of working groups, by defining the targets for the decisions that have to be examined and by taking part in the value debate in conjunction with decision-making.

### **Example of recognizing the need for assessment**

#### **Example 1**

**The need for carrying out assessment in municipalities has manifested itself in (Järviö 2004):**

- **the financial situation in a municipality, making it desirable to examine the impacts of different alternatives in advance;**
- **the municipal economy and the potential for finding a cheaper way of implementing a specific activity;**
- **long-term examination of impacts resulting from proposed decisions;**
- **comprehensive examination of specific issues;**
- **providing elected officials with a broad-based perspective on issues that have to be decided**

## ***Stage 2: Acquisition and supplementation of information***

### **What do we have to remember?**

At the various stages of advance assessment, we need information about the current situation, alternatives and impacts. Collection of information tends to be of the greatest importance at the beginning of the assessment. Material collected previously can also be used in assessment. Generally, further information is acquired throughout the assessment.

Information about the desired future. i.e. the targets of the plan or decision, is also needed. Setting out the targets supports the value debate by indicating at the start of the assessment what is wanted and by showing at the end of the assessment what is sufficient. When defining targets, it is important to take into account targets at the national level (e.g. the Health 2015 national health programme), the local level (e.g. the municipality's Balanced Scorecard [BSC], conclusions of welfare scenarios) and within the relevant administrative sector. As the assessment proceeds, it is important to know how the impacts affect different groups of people, how they experience the impacts, and how unfavourable impacts can be alleviated and favourable impacts strengthened.

Information is required on:

- things that can be measured, e.g. population figures (using statistics);
- values, e.g. the goals to be achieved by the decision (using strategies and interviews);
- experience, e.g. field workers' understanding of the problems and the solutions (using worry zones or other feedback systems).

At the start of the assessment, it is essential to find any characteristic features of the area or community and any special local features which influence the recognition, evaluation and assessment of the impacts. At the start of the assessment, the following information is needed on the people and the community, among other things:

- population and living conditions;
- health, habits and life-management skills in different age groups;
- effectiveness of services from the perspective of different age groups;
- relative living conditions within the community, social and cultural values;
- occupation structure;
- land use and housing;
- state, quality and characteristics of the living environment.

Analyzing the information helps in identifying the impacts and in assessing their importance and effect. When performing this analysis, it is worthwhile to consider how the situation differs from the average situation in the municipality and in the country as a whole. It is important to register transparently the sources of baseline information and to evaluate its reliability and shortcomings.

## How do we acquire the information?

Often, not enough is known in advance about the community that is subject to the impacts or about its values. One way of gathering the relevant information is to proceed in three stages:

- **Use the documents** to find out about the special characteristics of the people who are subject to the decision (e.g. population data for the area, environment and culture; are there more children or old people than usual in the area? What sort of values do local residents have?) Methods include experiences (your own and others'), welfare scenarios, documents, statistics and indicators. Use the material to compile a preliminary list of missing information, different groups of people and the possible impacts of the decision on them.
- **Carry out a round of interviews** to gather information on the kind of people affected by the decision and what they think about it. Interview employees, residents and clients until no further new information emerges.
- **If necessary, carry out a more extensive questionnaire survey** or a round of phone interviews to gain an idea of the extent of support for various opinions and what their supporters are like.

Methods of collecting information include welfare scenarios and programmes, statistics, indicators, documents, questionnaires, interviews, area and theme screening, worry zones, cooperation groups, media analysis and observation. In more extensive plans and programmes, questionnaires and interviews can be replaced by expert panels and Delphi Technique. Methods suitable for different stages of assessment are presented on the STAKES website at [info.stakes.fi/iva](http://info.stakes.fi/iva).

## Examples of information acquisition

### Example 1

In one municipality, the goals of different actors were collected as a basis for a strategy for the care of old people. Client quality was achieved with a municipal questionnaire, personnel registered the goals of their own work, and elected officials registered their goals at a seminar of their own. Some of the goals were shared, while others may be in conflict with each other.

	Client quality	Personnel quality	Municipal quality
Wide range of services	X	X	X
Removing sense of insecurity	X	X	
Living at home possible	X		
Central availability of services	X	X	
Increased use of volunteer work	X		X
Flexible, comprehensive service hours			X
Preventive work			X
Targets of work known, future under control			X

### Example 2

In Hämeenlinna, information was collected with the worry zone method. The method was used to identify how worried personnel were about their clients. The *worry grey zone* is an area where a member of staff can no longer manage alone, and controlling the situation calls for cooperation with others involved in the matter.

#### Level of worry estimated by social worker

Social workers' evaluations of 20 of their clients were collected as expert data. Social workers put their clients into zones using a scale ranging from 'no worries' to 'client in immediate danger'. As well as a breakdown of clients, the cause for worry was entered separately:

Zone A = no worries 7%	Zone B = minor worries 47%	Zone C = worry grey zone 35%	Zone D = worry grey zone 11%	C + D = crisis zone 46%

### Example 3

The Oulunkaari sub-region and the municipality of Vaala used advance assessment in the construction of a sub-regional model for promoting welfare and health in social welfare and health care services. Leading up to this, the situation of the social welfare and health care sector and the effectiveness of the service system in each municipality was investigated. The compatibility of social welfare and health care information systems and their use of IT applications, and availability in the private sector and third sector were also surveyed. This material was collected during municipal visits through themed interviews with municipal leaders (n=7), leading social welfare and health care officials (n=33) and leading municipal elected officials (n=18) over three months. A service structure study was also conducted on municipal social welfare and health care services, using the national recommendations as a benchmark.

### ***Stage 3: Impact recognition and limitation***

#### **What do we have to remember?**

It is often easy to identify many of the potential impacts. Because of limited resources, only a few of the impacts can be selected for assessment, however. The most important impacts should be chosen from the list of identified impacts.

Any impact involving a conflict is worth including in the assessment. The impacts perceived as important by different groups may reveal fears and misinformation about the decision. Such conflicts, fears and prejudices have to be taken into account when planning participation and interaction.

#### **How do we identify the impacts?**

Impacts can be identified from the viewpoint of different population groups or health and well-being factors by charting threats and opportunities or by using targets. Identification can be done on the basis of group discussion, as expert work and by using feedback from different groups of people. A number of things can be used to help in identification, including impact networks, checklists and client, personnel and researcher views of the most likely impacts. Impacts can be identified:

- through different population groups (gender, age, socio-economic status, profession);
- by identifying areas or periods of time (place of residence, planning area, target area, current generation, future generations);
- by health and well-being factors (various checklists);
- through targets (targets set by various actors).

The following focusing process can also be used for identifying human impacts:

- **Educated guesswork:** The assessors gather information on the likely impacts from various sources (by interviewing key persons and using checklists, research, indicators, trends, questionnaires and expert networks).
- **First round of inspection:** The preliminary list is inspected together with a personnel member, the assessment group or experts.
- **Second round of inspection:** Further input from people subject to the decision (clients, personnel, residents), for example through questionnaires and interviews.

The following table (Table 1), in which measurable and non-measurable pros and cons (advantages and disadvantages) are entered in parallel, can be used in identifying impacts. The information in the cells should not be compared according to any set pattern, nor should it be reduced to ratios or factors. The purpose of the table is to bring out the relationship between the pros and cons. Evaluating pros and cons is the job of the decision-maker. The method can be applied, for example, to contentious matters where there is a fear that decisions will be made behind closed doors from the viewpoint of one party only.

For a given solution	Non-measurable advantages	Measurable advantages	Non-measurable disadvantages	Measurable disadvantages
To the individual				
To the group				

**Table 1. Examining pros and cons**

The importance of the impacts can be analyzed by answering the following general questions. However, it is important to identify the impacts in various ways using different methods and to consider important matters linked with this particular decision separately:

- Will the impact cause death, injury, sickness or any other physical or mental disorder?
- How likely is it that the impact will occur? Is it possible to evaluate all unlikely risks too?
- What is the population subject to the impact like (number, structure)? What population groups will be subject to the impact? Are the population groups subject to the impact particularly sensitive (e.g. children or old people)?
- How long will the impact last (years, months or days)?
- How does the subject group see the pros and cons? Does the community see the disadvantages as being of such magnitude that those who can will move elsewhere?
- Are the impacts irreversible, and what are the chances of alleviating them? Can compensation be made for negative impacts, or will the residents just have to adapt?
- Is the impact part of a more extensive chain or network of impacts and thus important? Will the decision have a knock-on effect or a cumulative impact?
- Are there any conflicts connected with the impacts?

The significance of the impacts can also be examined by charting the various parties' estimations of the degree of acceptability or importance of the impacts. However, we must remember that degree of importance cannot be determined directly on the basis of the number of parties identifying the impact. Some impact chains may be such that they can only be identified by experts.

## Examples of identifying impacts

### Example 1

The impacts of implementing a welfare strategy in Kajaani were identified from the viewpoint of different age groups, personnel and different sectors of the administration. The viewpoints of the strategy work carried out in Kajaani were used as the basis for the breakdown.

#### Impacts of the implementation of a welfare strategy in Kajaani:

##### Impacts

- on children
- on people of working age
- on old people

##### Impacts on personnel:

- management depth
- ability of personnel to cope

##### Other impacts:

- impacts in other areas (technical, education, etc.)?

##### Cost impacts:

- specification of costs
- can it be supported within basic services

### Example 2

In the planning of a sub-regional health centre for Oulunkaari and Vaala, the impacts were identified on the basis of the project targets.

#### Impacts of the Oulunkaari sub-regional health centre:

- Securing access to high-quality services for local residents
- Promoting the welfare and health of local residents
- Organizing, producing and jointly using specialist services
- Division of duties in special competences, specialization and consultation possibilities
- Role of companies and organizations in the service system
- Social welfare and health care services management and its development
- Service productization, improvements in cost calculation and statistical competence
- Social welfare and health care service information systems
- Design and introduction of online services and telecommunications applications
- Developing smoothly flowing service structures and care chains
- Developing the division of duties between doctors and nurses
- Strengthening an attitude to work that promotes health and prevents illness
- Welfare and competence of employees at work

Example 3			
Identification of impacts of procedures of the Kerava employment unit on the basis of factors affecting client well-being.			
	2.0. No action model	2.1. A more rehabilitative / personal model	2.2. A model concentrating on employment
<b>CLIENT</b>			
<b>Life situation</b>	<ul style="list-style-type: none"> <li>- client given as suitable a job as possible, taking into account his/her personal needs and resources</li> <li>- client given some support and aid in coping with working life</li> </ul>	<ul style="list-style-type: none"> <li>- more time spent on getting to know the client, his/her strengths and weaknesses, and on how to choose a suitable job</li> <li>- enables solutions that are more personal and take into account the different areas of the client's life</li> </ul>	<ul style="list-style-type: none"> <li>- the possibility of directing the client to an unsuitable job increases, e.g. the job is too demanding, causing stress and thus adding to the client's problems</li> <li>- the responsibility for coping in the job and problem-solving is left to the client</li> <li>- at first, things such as complying with working hours may present problems</li> </ul>
<b>Motivation</b>	<ul style="list-style-type: none"> <li>- clients who have experienced disappointments in job-seeking may be motivated again when they realize that they can find work</li> <li>- in addition, individual support in solving practical problems creates faith in one's own capabilities</li> </ul>	<ul style="list-style-type: none"> <li>- more time and resources are invested in the issues mentioned in the previous section (No action model)</li> </ul>	<ul style="list-style-type: none"> <li>- without any support, everyday activities may be too difficult to cope with alone, and motivation is lost</li> </ul>
<b>Impacts on family</b>	etc.		
<b>Relationships</b>			
<b>Income</b>			
<b>Health</b>			
<b>Self-esteem</b>			

#### Example 4

The impacts of different courses of action can be compared using winner/loser analysis. When analyzing traffic planning in the Helsinki Metropolitan Area, the benefits were considered from the viewpoint of different population groups and different areas (Juslén 1998):

<b>Most important winners in transport policy action</b>		
<b>Theme</b>	<b>Winners in private car policy</b>	<b>Winners in public transport policy</b>
<b>Age structure</b>	<b>Adults</b>	<b>Children, young people, old people</b>
<b>Family structure</b>	<b>Families with children</b>	<b>Single-person households</b>
<b>Income</b>	<b>Those with high incomes, especially in areas of single-family houses</b>	<b>Those with low incomes in all areas</b>

## **Stage 4: Formulating and describing alternatives**

### **What do we have to remember?**

It is useful for an assessment to have alternative models for resolving the issues. Discussing alternative methods clarifies the targets of the participants and shows how these targets can be reached in a concrete way. The alternatives that are to be assessed can be formulated in such a way that each alternative embodies an individual viewpoint or the demands of a specific group of people. This makes it possible to deal with the conflicts associated with the decision. One way of identifying and creating alternatives is to produce scenarios describing the future. This helps to look at different visions of the future in connection with one's own work and the issue that has to be decided.

It is useful if one of the alternatives is the no-action model, i.e. a vision of what would happen if no action were taken. The no-action model pictures current developments continuing unchanged and is used in assessment as a benchmark. The need for change can be justified by the poor results of maintaining the *status quo*; then again, the no-action model can demonstrate that the current course of action is the best one.

### **How do we formulate the alternatives?**

Alternative scenarios can be constructed for example by applying the futures table method.

- **Collect different viewpoints** for instance by recording participants' suggestions, by considering ways to alleviate unfavourable impacts, by incorporating conclusions of analysis of the current operating model and by taking up the fears and imagination of the participants ("what if...?").
- **Group the viewpoints** by first giving them headings and then dividing the contents under the different headings, or by grouping the contents first and then giving the groups descriptive headings.
- **If necessary, group together** similar contents or similar headings.
- **Finally, check** that the original views are included in the alternatives, that the viewpoints are described fairly and that there is a description of what happens if no particular action is taken (the no-action model).

In formulating alternatives within a municipality, help can be found for example in the following (Järviö 2004):

- examples from other municipalities;
- information obtained from the Internet and the literature;
- questionnaires circulated in the municipality to determine the wishes and views of the people subject to the decision;
- experience and expertise that people have through their own work (officials, personnel);
- information received for the assessment through local residents' participation;
- statistical information from the same municipality.

## Examples of formulating alternatives

### Example 1

#### 1) Starting a discussion:

- Family-based model vs. diagnostic (sickness-based) services model
- Networking vs. organization as an operating model
- Is the sickness-based model more difficult to network?
- If there are many sub-sectors in one unit > large sub-sectors should be divided up into smaller sectors for easier management
- Centralized services vs. local services > centralized services can be brought nearer to people, or people have to go farther to get to them

#### 2) Initial outlines:

Differences between models	Sickness-based Local/Region/Province	Family-based Local/Region/Province
Large network model	Alternative 1	Alternative 2
Small network model	Alternative 3	Alternative 4

#### 3) Models gradually become more focused

The formulation of alternatives for the Kajaani welfare strategy progressed gradually as a focusing process. Preliminary alternatives were outlined on the basis of discussion. Later, similar alternatives were combined, and descriptions of the models became more focused.

#### 4) The models for the implementation of the Kajaani welfare strategy were described using BSC themes (effectiveness, service capacity, etc.).

	<b>Model 0</b>	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>
	<p>A model sectored according to the law</p> <p>The system offers special services required by law in sectors divided into areas of expertise</p>	<p>A sector-based combination model</p> <p>The system offers services required by law mainly divided into areas of expertise or as a community-based service</p>	<p>A client-based combination model</p> <p>The system offers special services required by law as a community-based service</p>	<p>A client-based model</p> <p>The system offers services required by law as a community-based service</p>
<b>Effectiveness</b>	<p>Statutory approach creates clientships</p> <p>Expertise outside community</p> <p>Quantitative indicators</p>	<p>Community-based approach, some expertise in the community</p>	<p>Community-based approach, more expertise in the community</p> <p>Qualitative indicators</p>	<p>Community-based approach, expertise in the community</p> <p>Qualitative and quantitative indicators</p>
<b>Service capacity</b>	<p>Provincial and national services</p> <p>Differentiation of strong specialist expertise</p> <p>Reductions in broad-based services</p>	<p>Provincial and national services</p> <p>Experts work in the area</p> <p>Narrow range of local services / number of parties specified</p> <p>Services more or people move</p>	<p>Local services</p> <p>Local services provide help, sub-regional services provide specialist expertise</p> <p>Services move or people move</p>	<p>Local services</p> <p>Experts work in the area</p> <p>Weaker specialist expertise</p> <p>Narrow range of local services / number of parties specified</p> <p>Numbers suffer at the expense of quality (service available at specific times)</p>
<b>Personnel</b>	etc.			
<b>Processes and structures</b>				
<b>Economy</b>				

## **Stage 5: Assessing impacts and alternatives**

### **What do we have to remember?**

The comparative analysis methods used in HuIA often provide an opportunity for describing a wide range of highly diverse impacts. These comparative analysis methods are based on the fact that there are different opinions in the community. Thus, there is not necessarily one single ‘correct’ or ‘best’ alternative; each alternative has its favourable and unfavourable impacts. The ranking of alternatives depends on the scale of values and on the viewpoint.

### **How do we assess alternatives and impacts?**

In comparative analysis of the alternatives, tables can be used for working and reporting, with an estimated impact recorded for each combination of impact theme and alternative, tabulated by row and column (Table 2). Impacts should not be added up by assigning them point scores or converting them into costs.

The assessment often involves subjective matters, conflicting goals and insecurities, and thus it is worth treating and describing each impact in its most characteristic way. In this example, one group of impacts consists of the costs or financial savings incurred by each alternative. The second group of impacts consists of other impacts that can be measured, such as the number of children taken into care or the number of old people living alone. The third group of impacts consists of other impacts that cannot be measured in financial terms or expressed in numbers. They should be expressed in words.

	Alternative A	Alternative B	Alternative C
Impact X	EUR 30,000	EUR 50,000	EUR 80,000
Impact Y	25	10	5
Impact Z	Increased sense of insecurity, less willingness to take responsibility	Sense of insecurity unchanged, less willingness to take responsibility	Reduced sense of insecurity, more willingness to take responsibility

**Table 2. Specimen summary table for assessment**

Detailed descriptions of impacts and their justifications must also appear in the assessment report. Describing impacts in a way that is characteristic of them makes their justifications public, while deciding between them is left to the decision-makers. When describing and assessing the impacts of different alternatives, we have to consider how negative impacts can be alleviated and positive impacts strengthened.

One way of describing impacts is to specify targets for each activity and to examine how the targets will be achieved in each alternative (activity-target analysis). Targets may be qualitative or

quantitative, and attaining them can be described in ways that are characteristic of the targets themselves.

Assessment of impacts and alternatives:

- Use tables to help in assessment
- Describe quality and cost impacts separately
- See how the impacts correspond with the set targets
- List ways of alleviating unfavourable impacts

Public presentation of the targets listed for measures lays the groundwork for a discussion on values. For example, is the target to maintain the *status quo*, to improve situation or to slow down its deterioration? In addition to attaining targets, we have to remember to describe undesirable impacts too. Sometimes the drawbacks of a proposed decision may be greater than its benefits.

## Examples of assessing impacts and alternatives

### Example 1

An advance assessment was carried out on the alternative locations for a cabin planned for Runosmäki in Turku. The assessment was summarized in a table (part of which appears below), and the alternatives were compared on the basis of their respective impacts.

Object of impact	Impact	Alternative 0 (no new cabin)	Alternative 1 (proposal by the young people)	Alternative 2 (proposal by the working group)
People other than local inhabitants in Runosmäki	Public image of the area	Public image of the area will become less positive	Public image of the area will improve	Public image of the area will improve
Children (under school age)	Tidiness of the playground	The playground will be less littered, but there will probably be more littering around the children's day care centre	Increased littering around the playground	Increased littering around the playground
Young people	An out-of-the-way place for young people to gather in the evenings	The situation will remain unchanged; greater numbers of young people will gather in the 'centre' of Runosmäki when the Youth Centre is closed	The new cabin will be situated as proposed by the young people themselves; all will be well, the cabin will be used actively by the young people	No major difference was found between this Alternative and Alternative 1; the only minor disadvantage is the cabin's location somewhat deeper in the forest
Social sector work/services	Social problems from young people's point of view  Social problems from local inhabitants' point of view	Ill-being among the young will increase without suitable places for them to gather; may increase the need for social services  Possibly perceive their environment to be more peaceful, cause fewer conflicts in the area	A common place for the young people to gather may help to prevent social problems  May cause a feeling of unease in local inhabitants and indirectly slightly increase the need for social services	A common place for the young people to gather may help to prevent social problems  May cause some feeling of unease in local inhabitants; no major impact on social services
Health sector work/services	Accidents	No impact	No impact on the absolute number of accidents, but the geographical focus will be closer to the cabin	No impact on the absolute number of accidents, but the geographical focus will be closer to the cabin
Police	Disturbances	The situation	The cabin will be	The cabin will not be

		remains unchanged; young people will look for a new place to gather, and disturbances may occur there	used by the young people; others will avoid the jogging track and the Piiparinpolku pathway	used by the young people; the situation will remain unchanged OR The cabin will be used by the young people; fewer disturbances
Real estate department	Repairs and related costs, construction	Cost savings, but there may be more vandalism elsewhere as the young people have no place to meet	The cabin can be built after finding an alternative that will satisfy both the inhabitants and the young people; the location also has to fulfil technical requirements	Approval by the Environmental and Land Use Planning Committee required if the cabin's location differs essentially from the previous one
Maintenance company	Maintenance of the near environment	No impact	Possible reports by local inhabitants of disturbances	Possible reports by local inhabitants of disturbances

### Example 2

The impacts of the disability policy programme in the Province of Southern Finland were examined from the viewpoint of the individual, the community and society as a whole. The idea was that the programme would provide information from different viewpoints and for different readers. The scenarios, written from the individual's perspective, described the impact on the disabled and their immediate circle if the targets were not attained. The descriptions from the viewpoint of society as a whole highlighted the cost impacts of not attaining the targets.

<b>OBJECTIVE</b> EQUALITY AND INDIVIDUALITY	
Example: Potential for independent mobility for the disabled	
<b>NOT ATTAINING THE OBJECTIVE FROM THE INDIVIDUAL'S POINT OF VIEW</b> A man of 40 suffers a cerebral haemorrhage, as a result of which his mobility and functionality are drastically reduced. Previously active in his free time, he is now virtually a prisoner in his own home. This prompts feelings of loneliness, uselessness and depression. His disability is so severe that he can no longer drive a car because of medical limitations (visual field alterations). Without transport and an escort service, he is completely dependent on home help and on whatever transport and escort help his family can provide him. He would like to meet his friends, go to the shops and pursue hobbies independently, but without adequate transport this is not possible. Rehabilitation is slower	<b>NOT ATTAINING THE OBJECTIVE FROM SOCIETY'S POINT OF VIEW</b> Providing transport services improves equal opportunities for the disabled to lead their lives and contributes to the requirement of equality enshrined in the Constitution. Inadequate transport services translate into further costs for local authorities and central government through increased use of services. An immobilized person requires home help and home care. The need for mental health services and rehabilitation will increase. Doctors and medication will be required more frequently. Reduced capacity to act may lead to a need for more expensive services (e.g. service housing). If a transport service in a medium-size city costs EUR 111.90 per year and the cost of 24-hour service housing is EUR

when independent movement is constrained.	134,550 per year, it is obvious that investments in preventive transport services are financially viable.			
Measures...				
Example 3				
In the planning of a sub-regional well-being health centre for Oulunkaari and Vaala, alternatives were compared on the basis of how well they attain the set targets (part of the table appears below). The comparison table includes the conditions and justification for attaining the targets.				
Alternative models	'Municipal model'	'Local model'	'Sub-regional model'	'National model', Social sector and Health 2015 recommendations
Set targets				
Attraction of municipality and sub-region				
Ensuring the availability of services				
Diversity of services	<ul style="list-style-type: none"> <li>- if resources are adequate</li> <li>- because there is a comprehensive system of services at Utajärvi</li> <li>- no, because the unit is too small</li> <li>- if the population base persists and experts remain</li> </ul>	<ul style="list-style-type: none"> <li>- because limited resources can be used more efficiently</li> <li>- because municipal service systems complement each other</li> <li>- because the unit is big enough</li> </ul>	<ul style="list-style-type: none"> <li>- if sub-regional boundaries do not present a problem</li> <li>- if distribution of special expertise can be secured</li> <li>- because there are more options</li> <li>- because it confirms experts will stay</li> </ul>	<ul style="list-style-type: none"> <li>- small steps towards these targets</li> <li>- broad-based and wide-ranging</li> </ul>
Success of graduated care				
Availability and professional competence of specialists				
Quality of services				

Economy of services, cost-effectiveness				
Well-being and health-promoting impacts of services	- because residents are known - no, because the unit is too small	- because the client has access to special expertise	- because we can participate in extensive programmes, e.g. DEHKO	- if other targets are attained

#### Example 4

The environmental impact assessment report on the Marja railway line (2001) presented the pros and cons of different alternatives for the track routing in table form. Here is an example of the advantages and disadvantages of Alternative B.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>- Zoning of more housing in the area is justified</li> <li>- Will allow stations at Lapinkylä, Viinikkala and Aviapolis</li> <li>- Lapinkylä station will bring more throughput to the line than in Alternative A</li> <li>- Most of those living in Lapinkylä will be within reach of a rapid railway link</li> <li>- The feeder station for those coming from Seutula and Riipilä is easily accessed</li> <li>- Lapinkylä station will reduce the need for feeder parking at Kivistö station</li> </ul>	<ul style="list-style-type: none"> <li>- Splits the forest area at Koivupää, which has high value in terms of nature and leisure</li> <li>- The beautiful landscape between Lapinniitty and Koivupää will suffer</li> <li>- The landscape in the Vantaanjoki river valley will suffer because of the two separate but fairly close transport routes (the railway line and the Tikkurilantie motorway)</li> <li>- The diagonal line across the river valley is worse than the routing that runs at right angles</li> <li>- The line will run close to the residential area to the east of Koivupää and create an obstacle between the housing and the Vantaanjoki valley</li> <li>- Lapinkylä station calls for high-density development, but it is unlikely that commercial services will be attracted to the area, as they are centred around Kivistö station</li> <li>- Slow orbital traffic</li> <li>- More expensive than Alternative A by FIM 50 million and more expensive than Alternative C by FIM 90 million; if high-density development is zoned for Lapinkylä station, the construction costs will be offset by the increased throughput of the line</li> </ul>

## **Stage 6: Reporting**

### **What do we have to remember?**

Reporting on the results of assessment is of major importance, because the purpose of the assessment process is to produce information to support decision-making. In assessment reports, impacts and the background to them should be presented as clearly, graphically and understandably as possible. As well as presenting a written report, it is always worthwhile to present it and discuss it orally.

### **How do we report on assessment?**

A summary of an assessment can consist of:

- impacts and attainment of targets in table form;
- pros and cons described;
- evaluations described;
- winners and losers described.

The results of the assessment are submitted to the decision-makers, who use the assessment material they have received to choose an alternative for the next planning stage. The report may be included in presentation material, planning or decision documents (e.g. the welfare programme), or it may be a separate assessment report. Reporting also covers the distribution of information to different parties during the assessment process.

The language and concepts used in reporting should be kept clear and general, so as to be understood by as many people as possible. Sources of information and methods used should also be specified.

On the basis of descriptions and assessments of the impacts, readers should be able to form their own opinions without having to delve too deeply into the principles or theory of the assessment methods. The assessor or the assessment group does not need to present a 'best' alternative; evaluating the alternatives and ranking them is up to the decision-maker.

## Examples of assessment reporting

### Example 1

A social impact assessment form (see illustration) was developed in Jyväskylä for planning purposes. On the form, the impacts are divided into those affecting the planning area and those affecting the impact area, as these often differ from one another. The last column is for entering the parties who have cooperated on the issue. A separate form (not shown) was created for identifying and assessing the threats and opportunities connected with the implementation of the plan. These forms assist in assessment reporting and can be attached to the plan as part of the legend that goes with it.

#### Social impact assessment form

Planning area:

Description of baseline situation in the area:

Planning goals:

Area affected:

Particular uncertainty factors:

Impacts to be assessed	Impact and subject		NOTE!	Cooperation
	Planning area	Impact area		

Can the implementation of the plan result in adverse social impacts?

Yes    No

(if yes, fill in the form dealing with the threats and opportunities connected with implementation of the plan)

### Example 2

The environmental impact assessment report on the Marja railway line (2001) presented a set of conclusions on cases in which each alternative routing might be a good choice.

#### Conclusions

Alternative A is a good choice if it is deemed to be important

- to have a rapid link between eastern and western Vantaa;
- to cause minimal adverse impact on the landscape of the Vantaanjoki valley;
- to preserve the forest area to the east of Koivupää;
- to keep the Lapinkylä area as an area of predominantly small houses and thus to retain the existing social structure.

### Example 3

The forms can be used to support municipal decision-making (committees, municipal council and municipal board).

#### **MODEL FOR ADVANCE ASSESSMENT OF MUNICIPAL DECISIONS**

The presenting official fills in the form together with content experts, if necessary, and appends it as a justification for the proposal.

<b>Item</b>
<b>Presenting official</b>
<b>1. Proposal</b>
<b>Impacts of proposal</b>
<b>2. What would the impacts be if nothing were changed?</b>
<b>3. Alternative proposal</b>
<b>Impacts of the alternative proposal</b>

## Stage 7: Monitoring

### What do we have to remember?

During the monitoring stage, the way the predicted impacts materialize is followed, as are any unforeseen impacts caused by the decision. When monitoring plans and programmes, whether or not the programme targets are attained can also be verified. Monitoring should take into account cumulative and indirect impacts which were not necessarily foreseen in the assessment itself.

Monitoring improves the quality of impact assessment. It can be used to show whether the impacts were correctly assumed in the assessment and whether it has been possible to alleviate their unfavourable effects. Monitoring helps to improve the assessors' level of expertise and brings out those factors that should be given more attention in the assessment process. It provides information for updating repeated plans or programmes and is the start of a new information gathering process.

### How do we monitor impacts?

A monitoring plan can be drawn up, showing:

- What is to be monitored; e.g. changes in level of service, changes in population size and structure, exclusion, participation in community activity, etc.;
- How often to monitor; e.g. once, at set intervals, once during the council's period of office, continuously by a specific official, etc.;
- Who is responsible for monitoring; who carries out the monitoring and who supervises it; e.g. officials, public opinion, etc.

Type of monitoring	One-off monitoring	Continuous / repeated monitoring
Author/subject		
Individual, client, local resident, subject of impact	- discussion/feedback - residents' questionnaire interviews	- repeated client/resident questionnaires - letters to the press - feedback from local residents - client feedback
Official, service provider	- monitoring studies - questionnaire/barometer for officials or service users - observation	- welfare scenarios - statistics - indicators - budget follow-up - annual reports

**Table 3. Ways of implementing monitoring.** Monitoring may be divided up according to repetition and responsible party, for example.

It is worth considering ways of carrying out monitoring from the point of view of both the people subject to the impacts and the expert or official (Table 4). Another way of differentiating between types of monitoring is based on continuity. This is rather a nebulous dividing line; the same

methods and sources of information can be used in both one-off and continuous monitoring, the only difference being the number of times the monitoring is carried out.

It is also worth separating the monitoring of impact assessment from continuous, often statutory, official monitoring carried out in municipalities, for example. Of course, the information obtained from other forms of monitoring may also be used in impact monitoring. Using evaluation studies is also useful.

## Examples of monitoring

### Example 1

The realization of assessed impacts was monitored in Luvia and Riihimäki. For example, in Luvia it was decided to introduce the municipal supplement to child home care allowance as an experiment for a fixed period of one year after the advance assessment, in order to determine what the actual impacts would be. During the year-long experiment, questionnaires were used to determine the need for and impact of the municipal supplement on those receiving it. The questionnaire was used to investigate whether the forecast impacts were realized and to find out what kind of unforeseen impacts resulted from the use of the municipal supplement. The questionnaire showed, for example, that introducing the municipal supplement had no impact on the number of new taxpayers moving into the municipality. Nor did the questionnaire bring to light any major issue not foreseen and taken into account in the advance assessment. However, on the basis of the monitoring questionnaire, it was impossible to calculate how much the municipal supplement reduced the costs of day care. It could be shown from the questionnaire that less than one third of the children receiving the municipal supplement would have been cared for at home anyway, whether or not they had received the supplement (Järviö 2004).

In Riihimäki, the realization of the advance assessment conducted on the introduction of the municipal supplement to child home care allowance is currently being monitored. The introduction of the municipal supplement is being monitored in the notifications section of the basic security committee agenda. The figures given in the advance assessment for the number of municipal supplement users have proved to be fairly accurate. On the other hand, the number of day care places freed up has turned out to be different from the figure given in the assessment. Monitoring is being performed for at least a year, after which it should be possible to say with some confidence how the impacts set out in the advance assessment have materialized and what kind of unforeseen impacts have appeared (Järviö 2004).

The monitoring of the emergency duty system at health centres in eastern Häme was carried out by collecting information on the impact of the experiment on the number of clients. 'Unnecessary' emergency visits were reduced to some extent, as expected. In addition, a questionnaire was circulated to clients and personnel. The client questionnaire was given to all clients coming to use the emergency duty services from Joutsa and Hartola throughout the duration of the experiment. The personnel questionnaire was aimed at health centre personnel in Heinola, Sysmä and Hartola at the beginning and the end of the experiment. Both clients and personnel took a favourable attitude to the experiment, and the feedback received from them was positive. Thus, the anticipated negative impacts on clients and personnel do not appear to have materialized. Since the emergency duty model was only at the experimental stage, monitoring also provided information on how the model could be further developed before the final decision.

### Example 2

In eastern Häme, consideration was given to ways of alleviating and strengthening the impacts of rearranging emergency duty services at health centres. Part of the monitoring table is shown below.

<b>IMPACT compared with present situation</b>	<b>WAYS of alleviating/strengthening impacts</b>
<b>Individual's point of view</b>	
<b>Longer journeys, different connections</b>	
<b>Discretion on whether to seek treatment ('open house' no longer available)</b>	<b>Information campaign to influence attitudes</b>
<b>Sense of insecurity increases</b>	<b>Launch phone counselling service</b>
<b>Employee's point of view</b>	
<b>Doctors less tied up with emergency duty More free time, better capacity to cope with work Emergency duty more feasible</b>	<b>Centralization of emergency duty</b>
<b>More time spent by nurses in counselling and advising patients on the phone</b>	<b>Launch phone counselling service</b>
<b>Municipality's point of view</b>	
<b>Rationalization of use of emergency duty services, reducing number of 'unnecessary' visits</b>	
<b>Patient transportation costs increase in small municipalities, challenges to transport capacity</b>	<b>Draw up comprehensive instructions on how to manage patient transportation in various situations</b>

## Glossary

**Advance assessment** is carried out before a project, plan or programme is implemented. The idea is to assess the feasibility of the proposal from the social, economic and environmental viewpoints. The usefulness and yield of the proposal are also examined; how the proposal responds to the set targets within the framework of available resources. See also **monitoring**.

**Vulnerable population groups** are groups that have a low tolerance for change. Consequently, impacts may be more important to them than to others. Vulnerable population groups have to be identified separately in each case, but they may be children, the elderly, the sick, the disabled, the unemployed or ethnic minorities, for example.

**Human impact assessment (HuIA)** is an advance assessment of the impacts of a decision on health and well-being. It includes social impact assessment (SIA) and health impact assessment (HIA).

**Indicators** condense large masses of information in different databases into a form that is easier to handle and to understand.

**Planning** means land use planning which specifies where housing, jobs, service, traffic, green areas, conservation areas and other functions and areas are to be located. When a plan is drawn up, important direct and indirect impacts, including the impacts on people and the living environment, must be assessed.

**Empowerment/Inclusion** is a matter of supporting participation so that citizens are fully able to take part in community functions. Inclusion increases the ability of people to influence issues that affect them.

**Monitoring** is assessment that takes place after a decision has been implemented.

A **scenario** is an account of a desirable or an undesirable future and the justification for why it may happen. A scenario is also a manuscript for shaping the future.

**Social impact assessment (SIA)** is the identification and assessment of the impacts of projects or activities on people's living conditions and comfort.

**Strategic environmental assessment (SEA)** is a comprehensive, systematic, articulated process for advance assessment of policies, plans or programmes and their alternatives.

**Health impact assessment (HIA)** is the identification and assessment of the impacts of projects and activities on people's health. 'Health' has to be understood in the widest sense in such an assessment. The assessment has to take into account the impacts on physical health and the impacts on mental and social health.

**Environmental impact assessment (EIA)** is a process which identifies and assesses in advance the impacts of a proposal on people's health, living conditions and comfort, on nature, on the built environment and on the use of natural resources, and the interaction between all these.

## Sources and further information

### Sources:

State Provincial Office of Southern Finland (2003). *Erilaisuus on normaalia. Etelä-Suomen läänin vammaispoliittinen ohjelma vuosille 2003-2006*. (Difference is normal. Province of Southern Finland disability policy programme 2003-2006.) Etelä-Suomen lääninhallituksen julkaisuja 2002.

Järviö, Niina (2004). Vapaaehtoinen Ihmisiin kohdistuvien vaikutusten arviointi – apuväline kuntien hyvinvoinnin toteuttamiseen sosiaali- ja terveystoimessa. (Voluntary human impact assessment — a tool for implementing municipal well-being in social welfare and health care.) Manus, August 20, 2004

Kauppinen, Tapani and Nelimarkka, Kirsi (2004). Ihmisiin kohdistuvien vaikutusten arviointi Terve Kunta -verkoston kunnissa. (Human impact assessment in municipalities belonging to the Healthy Cities network.) Stakes, Aiheita 18/2004.

### Further information:

[info.stakes.fi/iva](http://info.stakes.fi/iva)

[info.stakes.fi/iva/EN/index.htm](http://info.stakes.fi/iva/EN/index.htm)

## Appendix 1. Forms of advance assessment

Assessment terms related to health and well-being in Finland:

- Social Impact Assessment (SIA)
- Health Impact Assessment (HIA) is understood in a narrow sense as environmental health impact assessment or more generally as assessment according to a broad concept of health
- Gender Impact Assessment (GIA)
- Human Impact Assessment (HuIA)

The types of assessment listed above may be used independently, or they may be integrated into Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA), or land use planning.

In addition to the above, the following terms are commonly used elsewhere:

- Health Inequalities Impact Assessment (HIIA)
- Community Impact Assessment (CIA)
- Poverty and Social Impact Analysis
- Sustainability Impact Assessment (SIA)
- Integrated Impact Assessment
- Cumulative Impact Assessment

## **Appendix 2. Advantages of applying advance assessment**

Potential advantages of applying advance assessment:

- increases and improves information on human impact assessment;
- helps to choose the best solution;
- helps to boost favourable impacts and to prevent and alleviate unfavourable impacts;
- promotes conciliation between conflicting viewpoints and goals;
- increases interaction;
- acts as an instrument for commitment and inclusion;
- supports empowerment of different groups of people;
- improves the status of vulnerable population groups (children, the disabled, old persons, etc.).

## Appendix 3. Checklist for minor assessment

Minor (restricted) assessment is suitable for situations requiring rapid reaction, when assessment has to be carried out at one meeting, for example. The assessment can be carried out by a single expert acting alone (in consultation with others) or by a presenting official together with a content expert. The presenting official should have a grasp of HuIA methodology, and the job of the content expert is to identify and assess the impacts.

### 1. Necessity for assessment

Are there any conflicts associated with the proposed decision?

Will the decision affect people?

Are the impacts significant?

Does the decision require comprehensive examination?

### 2. Acquiring and supplementing information

Use documents to familiarize yourself with the special features of the matter.

If necessary, collect information and experiences from others working on the matter.

### 3. Identifying the impacts

Collect information from different sources on the likely impacts.

### 4. Describing the alternatives

Have different viewpoints been taken into account in drawing up alternatives?

Have all the alternatives been described fairly?

### 5. Assessing the impacts and alternatives

Use tables to help in assessment

Describe qualitative impacts and cost impacts separately

How do the impacts equate to the set targets?

### 6. Reporting

Make sure the decision-makers know the results of the assessment.

### 7. Monitoring

Describe how the realization of the impacts will be monitored, how often and by whom.