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Internet update

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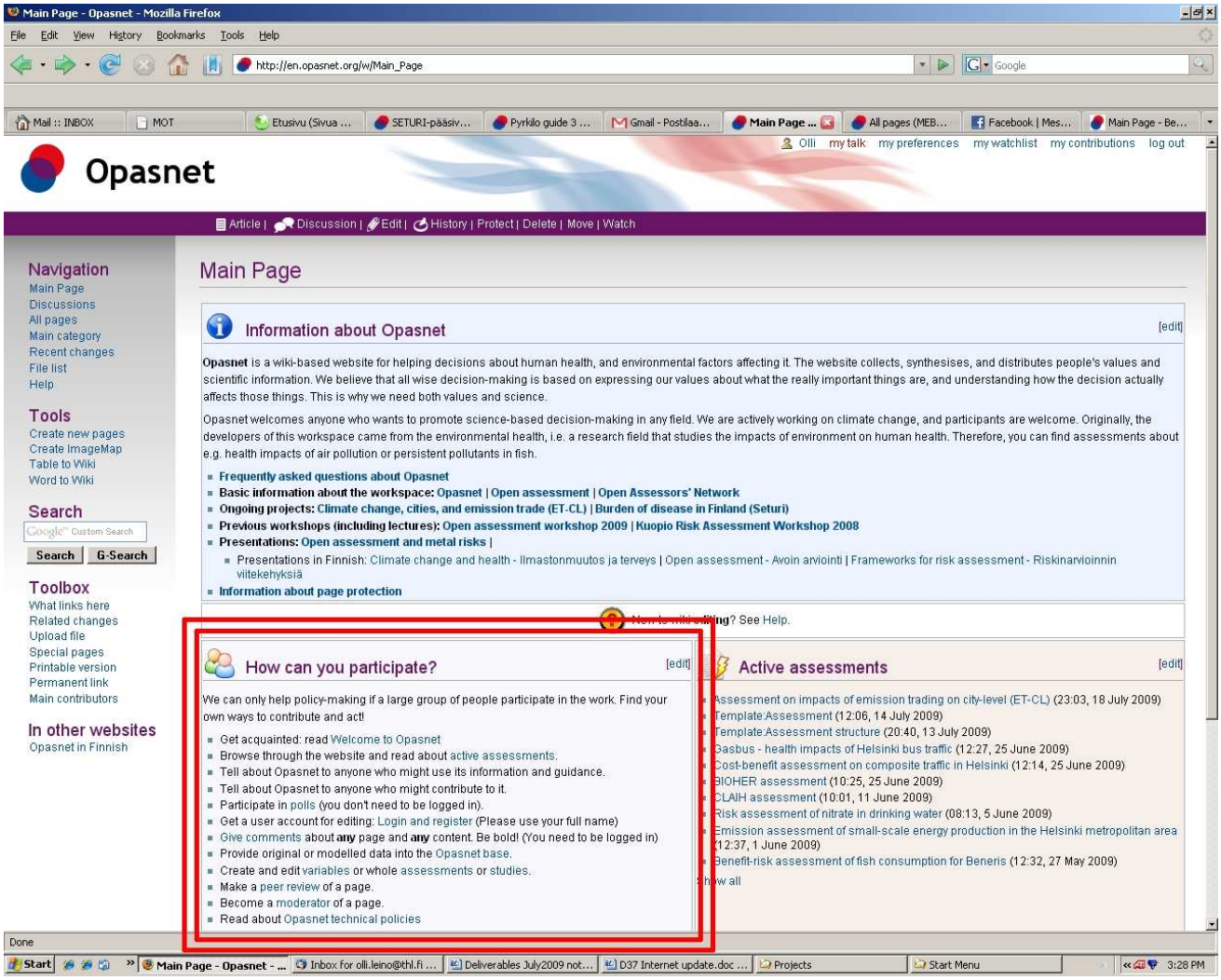
1 D37 Internet update

D37 Internet update

The *front page* of Opasnet now contains a new feature ‘How can you participate?’ This answers to a need for a fist time user how to contribute in the Opasnet and Mediawiki world. This is acknowledged as one of the important matters in creating a large user base. A screenshot below demonstrates the location of the new feature, and the content of the pages are copied to the following pages.

Picture 1. The location screenshot of the new features.



1.1 How can you participate?

We can only help policy-making if a large group of people participate in the work. Find your own ways to contribute and act! The topics of ‘ How can you participate’ are:

- Get acquainted: read *Welcome to Opasnet*
- Browse through the website and read about *active assessments*.
- Tell about *Opasnet* to anyone who might use its information and guidance.
- Tell about *s* to anyone who might contribute to it.
- Participate in *polls* (you don't need to be logged in).

- Get a user account for editing: *Login and register* (Please use your full name)
- *Give comments* about **any** page and **any** content. Be bold! (You need to be logged in)
- Provide original or modelled data into the *Opasnet base*.
- Create and edit *variables* or whole *assessments* or *studies*.
- Make a *peer review* of a page.
- Become a *moderator* of a page.
- Read about *Opasnet technical policies*

1.1.1 What is Opasnet?

Opasnet is a wiki-based website for supporting decisions about human health, and environmental factors that affect it. The website collects, synthesizes, and communicates people's values and scientific information. We believe that wise decision-making is based on both expressing our values about what the things are important and understanding how decisions affect those things. This is why we need to consider both values and science.

Opasnet is hosted by *THL* (National Institute for Health and Welfare, Finland). *The Department of Environmental Health* has a motto that also underlies the purpose of Opasnet:

> "Man must be able to breathe, drink, eat and live in the environment trusting on its safety. This is both an individual's civil right and a prerequisite for a functioning society and economy."

This is a major challenge. Firstly, we must try to ensure that the environment is safe in general. Secondly, we must provide people the means for avoiding things in the environment that put their health at risk. Thirdly, we must be alert and try to identify emerging hazards and be prepared when needed. Finally, when all this has been done, we must also manage to communicate to the people that they do not need to have unnecessary worries.

With this website, we hope to provide understanding on and guidance for environmental health issues and decision making regarding them. The issues are usually very complex and they tend to cross administrative, geographical, and scientific boundaries. Therefore information and contributions from many different disciplines and areas of societal action are needed. This website is built in a way that hopefully makes it easy for anyone to add their information and values. It is also built in a way that attempts to mimic the real world. The pages describe things that are usually real, measurable quantities. And if something affects something else, these two things should also be linked within this website. It is a challenging task to describe even the most crucial things affecting human health, but that is what this website aims to do. We have started this work by carrying out practical case studies in order to make this effort somewhat manageable.

1.1.2 How does Opasnet function?

Probably the most obvious point of comparison to **Opasnet** is **Wikipedia**, the free encyclopedia that anyone can edit. Both of them are web-based information storages and workspaces building on the idea of open mass collaboration. The main difference between Opasnet and Wikipedia is that, whereas Wikipedia is an encyclopedia, a relatively freely formatted information repository of any topic for any purpose, the purpose of Opasnet is specifically to provide information for supporting decision making by means of systematic analysis. Due to this difference, both the information within Opasnet and the use of Opasnet is somewhat more structured than they are for Wikipedia. For a more detailed comparison between Opasnet and Wikipedia as well as more information about the structure of Opasnet, see a separate page that explains *Opasnet* in more detail.

There are several possible ways of making use of Opasnet:

1. **Read** Opasnet. Browse through the pages and obtain information of your interest. A good way to get started is by following the links on *Main Page*. Another efficient way of getting acquainted with the information content is to have a look at the categories and pages belonging to different categories by following the *Main category* link in the navigation toolbar on the left hand side. One can also make word searches using the *search* text box in the navigation toolbar on the left. Opasnet is in the open internet and reading Opasnet is unlimited.

2. **Comment** Opasnet content. Every page in Opasnet has a corresponding *discussion* page. In order to be able to write to Opasnet, one needs to be registered and logged in. *Create an account* and click the *discussion* link on top of the particular page whose content you wish to comment. Then click the *edit* link on top of the discussion page and write your comment in the edit window. See *help pages* for guidance on writing to Opasnet. Opasnet recommends a formal ***argumentation*** format for discussions, but also freely formatted comments are acceptable. However, be aware that your comment may be transformed into a formal argumentation structure by some other user.

3. **Participate** in *polls*. Polls are a fast and convenient way of getting feedback or other input from users. Some Opasnet pages have user polls about specific issues, and you can simply click options or type in your brief texts that reflect your opinions. You don't need to be logged in to do this.

4. **Edit** Opasnet pages. When logged in, also the actual content pages become editable. Note that it is often recommended to write down comments on the discussion page before proceeding to edit the page itself. However if you are convinced that you know what you are doing, please go ahead and make your edits. Opasnet records a complete version history of all pages so no need to be too worried about causing any irreversible harm.

5. **Create** new pages to Opasnet. In the navigation toolbar in the left, there is a *create new pages* link that takes to a page where a name of a new page can be given and an object-type category can be chosen for the page. It is recommended that before proceeding to create new pages, one becomes sufficiently acquainted with the and their uses in Opasnet as well as the principles and methods of *open assessment*.

6. **Use** the information created in and obtained from Opasnet. The purpose of Opasnet is to provide support to decision making and thereby guide actions.

For guidance on using Opasnet, also check the links in the *How can you participate* information box on the *Main Page*.

1.2 Active assessments

Assessments are products of scientific and policy work. They are produced to inform and facilitate decision-making.

1.3 Polls

Poll in *Opasnet* is a way to get feedback from users. Some pages have user polls about specific issues, and you can simply click options that reflect your opinions. You don't need to be logged in to do this. The results of polls are stored in the *Opasnet base* as *studies*.

This feature is under development, and there are currently no polls.

1.4 Log in and register

This page contains instructions how to log in and register to Opasnet.

1.5 Give comments

Discussion is a part of an *attribute* of a formally structured *object*. In discussion, anyone can raise any relevant points about the property that the attribute describes. Discussion is organised using the *pragma-dialectical argumentation theory*[1]. A discussion usually consists of three parts: 1) the explication of a dispute; 2) the actual discussion, which is organised as hierarchical threads of arguments; and 3) the resolution.

1.6 See also

- *Discussion structure*
- *Discussion method*
- *Pragma-dialectical argumentation theory*

Interesting, but somewhat outdated text on editing discussions, argumentation structures, and argument types was archived, and can be found at [1].

1.7 Opasnet base

This page is a general description about **Opasnet Base**. For an additional description with screenshots, see an *Open Office document*. For a detailed description of its structure, see *Opasnet Base structure*.

> **Opasnet base** is a part of *Opasnet* and a storage and retrieval system for *results* of *variables* and *data* from *studies*. It is designed to be flexible enough to store information in almost any format: probability distributions or deterministic point estimates; spatially or temporally distributed data; or data with multiple dimensions. It can be used as a direct source of model input data, thus making it possible to use shared input information sources such as population data, climate scenarios, or dose-responses of pollutants. Opasnet Base can be accessed via links on variable and study pages (e.g. the metadata box), via a *web interface* and via the model *Opasnet base connection.ANA*.

1.7.1 Some uses of Opasnet Base

1.7.1.1 Storage of interpreted model results

Originally, *Opasnet base* was designed to serve as the storage for interpreted model results, i.e. *variable results*. Variables attempt to answer specific real-world questions, and their results are the current best estimates as the answers to these questions. This is different to *studies* that report the observations from a single study. Variable results are expected to be eternally improving in time, while data from a study is fixed after the study has been done and the observations made.

1.7.1.2 Storage of study results

Opasnet Base can be used to collect observation data from *studies*. A study can be a traditional research study, documented in Opasnet Data afterwards, or it can be an Opasnet study where the data is collected on a particular Opasnet page with a web form. There can be several purposes to using Opasnet Base as a data repository:

- To collect observation data to be directly and conveniently usable in interpretations of *variables* and other *objects*.
- To collectively collect information about specific cases for the purpose of conditionalizing generalised assessment models with data specific to particular cases.

However, there are some things about variables and studies that should be understood:

- The object for a collection of observations is called a *study*, while the object of interpretations is called a *variable*. As an example, a study can collect information about a population group by a questionnaire and by taking a blood sample. The study identifier is the Obj.id in the Opasnet Base.
- The object may be divided into smaller pieces along one or more *indices*. For example, the questionnaire may have 30 questions, and therefore the questionnaire data can be indexed by an index with 30 columns (or rows, depending on which way you think), one row for each question. Each column of the study object has one cell, i.e. an answer to one question. For example, if ten blood markers will be studied along with 30 questions,the study object will have 40 cells, and the index has 40 columns (30 from the questionnaire, 10 from the blood sample). The cell identifier is the Cell.id in the Opasnet Base.

- For each individual patient, there is one row of observations (in the example each 40 cells). The observation row identifier is Res.Sample in Opasnet Base.

- The actual result of a particular cell of a particular patient is located in Sam.Result in Opasnet Base (or in Res_info.Description in the case where the result is text, i.e. non-numeric).

- Each study may be multidimensional just like a variable and have indices along e.g. space, time, or sex.

- If the data is collected using an Opasnet web form, then the timestamp and username or IP will be recorded for each entry into Resinfo.When and Resinfo.Who fields, respectively. This is not needed, if the data comes from a previously performed study (which is static data in the eyes of Opasnet).

- In some cases, it might be useful to restrict the number of entries per user to one. However, this is done only at the interpretation phase where only the last entry is counted. There are no restrictions to enter new data, and therefore a user may change his/her previous entry by simply making a new entry.

1.7.1.3 Making value-of-information analyses in *Opasnet base*

Value of information (VOI) is a *decision analysis* tool for estimating the importance of remaining uncertainty for decision-making. Opasnet base can be used to perform a large number of VOI analyses, because all variables are in the right format for that: as random samples from uncertain variables. The analysis is done by optimising an *indicator* variable by adjusting a *decision variable* so that the variable under analysis is conditionalised to different values. All this can in theory be done in the Opasnet base by just listing the indicator, the decision variable, and the variable of interest. Practical tools should be developed for this. After that, systematic VOI analyses can be made over a wide range of environmental health issues.

1.7.1.4 Analysing the change in the quality of a variable result in *Opasnet base*

All results that have once been stored in the Opasnet base remain there. Old results can be very interesting for some purposes:

- The time trend of *informativeness* and *calibration* (see *performance*) can be evaluated for a single variable against the newest information.

- Critical pieces of information that had a major impact on the informativeness and calibration can be identified afterwards.

- Large number of variables can be assessed and e.g. following questions can be asked:

    - How much work is needed to make a variable with reasonable performance for practical applications?

    - What are the critical steps after which the variable performance is saturated, i.e., does not improve much despite additional effort?

1.7.2 See also

- Open Office document about Opasnet Base

- *Opasnet Base structure*

- *Opasnet*

- *Open assessment*

- *Opasnet base connection.ANA*

- *CSC e-infrastructure strategy*

1.8 Entities in Opasnet method

Variable is a description of a particular piece of reality. It can be a description of a physical phenomenon, or a description of value judgements. Also decisions included in an assessment are described as variables. Variables are continuously existing descriptions of reality, which develop in

time as knowledge about them increases. Variables are therefore not tied into any single assessment, but instead can be included in other assessments. A variable is the basic building block of describing reality.

Assessment is a process for describing a particular piece of reality in aim to fulfill a certain information need in a decision-making situation. The word assessment can also mean the end product of this process, i.e. an assessment report of some kind. Often it is clear from the context whether the term assessment refers to the making of the report or the report itself. Methodologically, these are two different objects, called the assessment process and the assessment product, respectively.

Study is an information object that describes a research study and its *results*, i.e. observational or other data obtained. The study methods are described as the *definition* of the object. Unlike traditional research articles, there is little or no discussion, because the interpretation of the results happens in other *objects*, typically in *variables* for which the study contains useful information. Another major difference to a *variable* is that the *definition* of the *study* is fixed after the research plan has been fixed and work done, and also the *result* is fixed after the data has been obtained and analysed. The *scope* of a study reflects the generalisability of the study results, and it is open to discussion and subject to change also after the study has been finished. In contrast, in a variable the *scope* is fixed, and the *definition* and *result* change as new information comes up.

1.8.1 See also

- *List of all variables* in Opasnet
- *Universal object*
- *Open assessment*
- A previous version of this page contains much of the discussion from the Intarese deliverables D17 and D18, which has been edited with a hard hand.
- *list of all study objects* in *Opasnet*
- *Opasnet base*
- *Study structure*
- *Assessment structure*
- *Variable structure*

1.8.2 References

1. Eemeren, F.H. van, & Grootendorst, R. (2004). A systematic theory of argumentation: The pragma-dialectical approach. Cambridge: Cambridge University Press.

1.9 Peer review

This page is about peer review in *open assessment*. For a full description, see the *Peer review method*. For other uses, see the *Peer review* page in Wikipedia.

Peer review in *open assessment* is a *method* for evaluating the scientific quality of the *definition* of a *variable* or an *assessment*, or the generalisability of the scope of a *study*. Technically, it is a *discussion* on the Talk page of the object. In the case of a variable or an assessment, the discussion has the following *statement*:

"The definition of this object is based on the state-of-the-art scientific knowledge and methods. The data used is representative and unbiased. The causalities are described in a well-founded way. The formula correctly describes how the result can be calculated based on the data and causalities. Overall, the information in the definition reflects the current scientific understanding and is unlikely to substantially change because of some existing information that is omitted."
In the case of a variable, the definition (the quality of content of the data, causalities, and formula attributes) is evaluated against the scope, which is fixed. In the case of a study, the scope is evaluated against the definition (i.e. the scientific work performed), which is fixed. Thus, the question is about how much it is possible to generalise from the results of a study.

Peer review of the definition (for assessments and variables)

Peer review in *open assessment* is a *method* for evaluating the scientific quality of the *definition* of a *variable* or an *assessment*, or the generalisability of the scope of a *study*. Technically, it is a *discussion* on the Talk page of the object and has the following *statement*:
"The definition of this object is based on the state-of-the-art scientific knowledge and methods. The data used is representative and unbiased. The causalities are described in a well-founded way. The formula correctly describes how the result can be calculated based on the data and causalities. Overall, the information in the definition reflects the current scientific understanding and is unlikely to substantially change because of some existing information that is omitted."

Peer review of the scope (for a study)

Study is a special kind of object in the sense that the definition typically describes a particular study that has been performed. Therefore, it is not possible to evaluate (in the sense of attempting to improve) the definition as such, because what was done was done. Instead, the interesting question is about the generalisability of the results.

Thus, the peer review of a study aims to answer this question: **"To what questions do the study actually answer reliably, based on the current scientific understanding?"**

Who can and should do a peer review?

Basically, Opasnet is applying an open peer review process in its widest sense. It means that anyone can make a peer review about anything. However, a peer review is worthless unless the readers believe that the reviewer actually is a peer, which means a person who has enough relevant expertise, usually a fellow researcher. Therefore, the following guidance is advised:

- If you need the information of a page in your assessment or other work and the page has not been reviewed yet, you should consider reviewing the page yourself before using it. Or, if you don't feel qualified, you should put some effort in finding a person who could review the page. This way, you increase the credibility of your own work, and you also help the *Open Assessors' Network* to evaluate and improve the contents of *Opasnet*.

- You can peer review a page in *Opasnet*, if you have a credible record of expertise in the area of the page. It is advised that reviewers put enough information about this on their user page (maybe a brief curriculum vitae and a list of publications).

- You should not be a major contributor of the page you review, i.e. you should not be one of those who have brought a substantive amount of scientific material to the page. Technical and linguistic edits can be done without limitation.

    - The roles of each contributor are clarified in the *Acknowledgements* of the page.

See also

- *Peer review method*

References

1. Eemeren, F.H. van, & Grootendorst, R. (2004). A systematic theory of argumentation: The pragma-dialectical approach. Cambridge: Cambridge University Press.

1.10 Moderator

Moderator is a person who takes the responsibility of a page in *Opasnet*. Usually, the moderator is someone who needs the page for his own purposes, e.g. it is a part of an assessment he is conducting. The moderator may also be someone who wants the information to be correct, because other people are using it in their own assessments. Moderator keeps an eye on the page and its edits, and improves the structure and content. He also removes any vandalism from the page. The moderator does not have any formal position or higher rights than any contributor; his respect grows from a hard-working attitude. Therefore, anyone can become a moderator simply by acting as one. The Opasnet maintenance team tries to make sure that all active pages have a moderator. The moderator is typically mentioned in the metadata box of the page.

How to sign up

You can become a moderator of a page simply by signing up for the task. Many pages have a meta-data box in the top right corner. The moderator(s), if any, are listed there. You can sign up by adding your username into the box. Click **Edit** on the top of the page (you must be logged in to do this), and find the template for the metadata box. Then add

```
|moderator = Your username
```

to the template like this:

```
{{variable|moderator = Your username}}
```

Depending on the page type, the template may be {{variable}}, {{assessment}}, {{study}}, {{method}}, {{nugget}}, {{tool}}, {{encyclopedia}}, or {{class}}. You can look for examples from existing pages, e.g. a *study*, and a *variable*.

See also

- *Discussion*
- *Help:Editing*
- *Help:Contents*
- *Help:Opasnet policies*

1.11 Opasnet policies

Use your real name

Please use your real name in your user account. Feel free to browse through pages anonymously without account but if you want to make contributions to Opasnet you need to have a user account.

Suggested format for user name:

- (first name) (last name)
- (last name), (first name)
- (first name) (second name) (last name)
- and so on

How to use different wikis

This chapter was moved to *Opasnet structure*.

Deleting pages

Only Sysops can delete pages. You can propose a page to be removed by adding template **{{remove|(reason why this should be removed)}}** top of that page.

This page has been suggested to be removed.

Reason: This is only an example

(please note that only sysops can remove pages)

Naming new pages

There are few basic guidelines which are good to keep in mind while naming articles:

- Use descriptive names
- Names can consist of several words
- Numbers and spaces are allowed
- Do not use special characters like # < > [ ] | { }
- Names are case-sensitive
    - mediaWiki is same as MediaWiki but not same as mediawiki
    - Capitalization matters after the first letter but not in the first letter

Locking Analytica files for editing

It is possible to checkout Analytica models for editing.

1. First go to Analytica file description page and choose *edit* from upper toolbar
2. Place a template template:checkout into description
    - Code: **{{checkout|--~~~~}}**
    - This also adds automatically your signature
3. Download file and make your editing
4. Upload modified version of file into system (overwrites old version, old version also remains in the database)
5. Remove template so next one can start editing the model