



How to... design an NREN website

Best practices in usability

The guidelines listed below can be used as a checklist next time you change design or content on your website. The recommendations should apply to all NREN sites, but there surely will be exceptions, where you find that your site differs from the other sites.

Accessibility

- **The site should comply with the demands in the W3 charter**

The W3c validator can be found at <http://validator.w3.org>. This validator can only be used for html and xhtml sites. Tools for validation of sites in other languages can be found at: <http://www.w3.org/QA/Tools/>

Guidelines for evaluating the accessibility of your site can be found at <http://www.w3.org/WAI/eval/Overview.html>

- **Use unique titles for every page**

Unique and meaningful titles make it easier for the user to identify relevant content and navigate, and makes it more understandable in a search result from search engines. For users using screen readers the unique title is essential. The page title is also used as default when the user bookmarks the page.

A page title on the homepage should include the NREN name and a description of the site. For other pages think of words describing what the user will find on that page.

- **Every non-text element should have a text equivalent**

The text equivalent should give a reasonable explanation of the content of the picture, graphical representations of text, animation/audio/video and describe the purpose of it to screen readers. Text equivalents should be regarded as user interface elements, not a statement from the website.

- **All information must be available without colour**

It is important that information is not communicated through colour alone; the same information must be available through content or marking.



Navigation

- **All pages must include a clearly visible link to the homepage**

It is not sufficient to include a link to the homepage in the breadcrumb trail only.

As a supplement to the clearly visible homepage-link make sure that the logo on your website serves as a link to the homepage too.

- **Provide access to the main menu from all parts of the site**

The user should have easy access to all central parts of the website no matter what page he is looking at. Users seldom enter a website via the homepage; they follow links from search engine results pages or links from other sites. If there is no access to the main menu from the page at which the user arrives, he has no chance of discovering other relevant content on your web site.

- **Use the menu to clearly indicate where a specific page belongs**

It is important that the user can easily decide where a specific page belongs in the website structure. Otherwise he will be completely lost if he reaches the page from a search engine: If there is no indication in the menu he is prevented from having a look at related items within the same sub-menu.

- **Avoid opening new browser windows**

Opening a new browser window disables the back-button, which is the normal way users return to previous sites. Users often do not notice that a new window has opened, and will get confused when the back-button is greyed out.

- **Give the content a usable date**

Without dates on news articles and other types of content on the website, users have no idea whether the information is up-to-date. Make sure that the “Last updated” date shows the day the real content was written/revised, not a misleading date for fixing a typo or changing a picture.

Text formats

- **Write for the net**

- Make sentences short and precise
- Use bulleted lists and highlight keywords to help users understand the content
- Label sections, in order to let the user scan the text
- Start with the conclusion – a lot of text is hidden below the visible content of the screen

- **Only use PDFs for printing material**

NREN websites contain a lot of information, and it might be tempting to use graphically attractive PDFs for some of the text. However you should only use PDFs when the user is likely to print the material. Information which the user is likely to read on-screen should be presented on real web pages in order to keep the possibility of navigating the text.



- **Do not use animations to attract attention**

Animations should only be used in the rare circumstances when it actually helps explaining something more clearly to the user. Usability studies show, that users tend to ignore anything that looks like an advertisement, including elements that look like banners and pop-ups.

- **Avoid “pogosticking”**

Pogosticking is the act of jumping up and down the hierarchy of the site, repeatedly hitting the back-bottom to move to the next item on a list. The users who pogostick the least are the most likely to succeed in making the necessary decisions. Read more about pogosticking:

<http://www.uie.com/articles/galleries/>

Provide sufficient information on the first level in order for the user to make the correct choice or make the list of choices available on the next level as well.

Design and search

- **Design should be consistent across the site**

Avoid using page designs that differ significantly. It makes the user doubt if he is still on the same website. Subtle changes require the user to re-examine the interface to find central features.

- **Design should be flexible for all monitors**

Monitors are getting bigger, but we tend to forget, that some of our users might have smaller monitors. Your design should work on all sizes of monitors. Plenty of advice for using flexible designs are available using a Google-search.

- **Search results should offer sufficient information to allow the user to make informed choices**

- It must be clear which word(s) the user searched for
- It should be easy to perform a new, improved search if the user discovers a spelling mistake or something similar
- The list of results should not only contain the title of relevant pages but also an excerpt showing the context in which the search string appears.

Content

- **Make it clear to the user, what the purpose of your site is**

Use the first few lines of the body text on your home page to explain to the user who you are. What makes your site different compared to other sites providing similar content (eg. other ISP's)

- **Offer direct access to topics of special interest**

Users are goal-oriented and have limited time. They are looking for a specific answer and the faster they find it the better they like the site. Often users go back to a website to find a recently featured event/article, which they first found on the homepage, so it might be a good idea to keep a reference to a well-visited page on the homepage for a while.



- **Inform about problems**

As internet service providers we sometimes experience problems on our network. It is professional user service to provide information about maintenance or failure of the network on the website. (In case of major net breakdown, of course our users will not be able to read the information – and we will probably not be able to publish the information.)

- **A sitemap on the homepage is a concise introduction to your site**

A sitemap on the homepage is a straightforward and efficient way of presenting the website content and of providing easy access to any topic the user is looking for.

- **Include general contact information on the home page**

A great many users use the internet as a directory – they are looking for phone numbers and addresses.

Make information available to the uninitiated

- **Acronyms and abbreviations must be explained**

We do have a lot of acronyms and abbreviations in our business, but not all our users are familiar with them.

- **To foreigners it is very helpful with extended English versions**

Translations are useful for your TF-PR or TERENA colleagues, but also for foreign students, visiting lecturers and other occasional visitors.

- **Avoid organizing material according to your own organisation**

Information should be organised according to topics that are relevant and logical to the user. The information architecture should not reflect how you organise things in the NREN.

- **Use cross-linking**

Use cross-linking to help the user find information which is categorized in a different way to what he expected. Cross-linking is when you can find specific piece of information by using different entrances. Cross-linking is about finding out what the user might be looking for where and how.

- **Using an alphabetic index or directory**

If you decide to use an alphabetic index or a directory then use as many synonyms as possible. It should be you guessing what word the user might look for, instead of the user guessing which word you have used.

More guidelines for designing your website:

User Interface Engineering (Jared Spool): <http://www.uie.com/>

Useit.com (Jakob Nielsen) <http://www.useit.com/>