The Nuclear Safety and Security Online User Interface NSS-OUI platform
Learn by Do It Yourself

Contents

1. ACCESS to NSS-OUI ................................................................. 2
2. BROWSE PUBLICATIONS .......................................................... 4
3. BROWSE OVERARCHING REQUIREMENTS OR OVERALL RECOMMENDATIONS .................. 9
4. GLOSSARY RELATIONSHIP .................................................... 14
5. FULL TEXT SEARCH ............................................................... 16
6. ADVANCED SEARCH ............................................................... 16
7. RELATIONSHIP SEARCH ......................................................... 19
8. FEEDBACK COLLECTION INTERFACE .................................... 22
9. FEEDBACK ON THE SYSTEM ................................................... 22
1. ACCESS to NSS-OUI

How to find it?

Go to the IAEA Main page: https://www.iaea.org

Select Resources and then Safety Standards

Then you find a direct link to NSS-OUI on the right-hand side of the main page. Click on it.

You can do the same by selecting Resources and then the Nuclear Security Series with the similar access to NSS-OUI:
You arrive to the NSS-OUI Welcome page with a link to the *brochure* on how to benefit from the system. Right-click on the link to open it in a new tab.

The Welcome page also includes a link to this *self-learning tool*.

On top of the Welcome page, you find two main functions: Browse and Search

![Home Browse Search](image)

These functions are all publicly available and there is no special need to be registered in Nucleus to access these. The browse functions makes you navigate from one publication or one part of a publication to the next relevant one, in a step by step approach. The search functions helps you finding all relevant publications or part of a publication for a specific topic and in a selecting context if you wish so.
2. BROWSE PUBLICATIONS

Let’s start with Browse publications. It displays the list all publications in the hierarchical order, SF, GSR, SSR, GSG, SSG and the same for the NSS Series.

There is a “radio” button to switch what you wish to appear on top of the list: the safety standards or the nuclear security series:

Display Safety Standards first  Display Nuclear Security Series first

In any list, clicking on a title provides a short description of the publication. For example scroll down and click on SSR-2/2 (Rev. 1). A box displays the objective of the publication.

Of course as we have many publications, you can search for specific terms like “waste” or “site” in the search window and click on search (This searches words in the titles of the publications):

Search Publications
waste
Search

In some cases, like “transport” or “instrumentation” you find publications in both series. If you have selected to display the Nuclear Security Series first, then these are the ones that will be on top of the list or vice-versa if you have chosen to display the Safety Standards firstly. If you search “vital area” then you find NSS No. 16. Note that the number is also searchable. For example, the famous guide on periodic safety review SSG-25. Just type SSG-25 in the search window:

Search Publications
SSG-25
Search

SSG-25: Periodic Safety Review for Nuclear Power Plants

Click back on browse publications to list again all.

Go to SSR-2/2 (Rev. 1) and there is an icon in the description box to open the whole publication:

Then you will see three parts in the window:

- The left part is the Table of content (TOC). Hover over an item displays the complete title (note that there is a trick: if you go to the bottom of the TOC and select the last item then, you force downloading the whole file)
- The middle part is the text of the publication in black characters, which includes relevant references complemented by relationship notes in blue for relations with the safety standards or security guidance or in olive for relations with other categories of publications
The right part is the space for the feedback interface. This is explained at the end of this note and is reserved for authorized users.

When you scroll down, the whole text will be uploaded step by step until you reach the very bottom of the html page. Only then you have access to the whole text and you may use the “CTRL+F” (or the equivalent function for tablets and smartphones) to search the text.

There is a way to force the system downloading the whole page at once: in the TOC, use the “lift” to go to the end of the TOC and select the last item. The system will then upload the whole html page and direct you to that last part of the text. From there you may go back to the very beginning by using the “lift” on the right-hand side of the page or using “CTRL Home”.

Read a part of SSR-2/2 (Rev. 1) and then find the relevant guides sometimes very detailed like below § 4.32:

See also:
NS-G-2.4 The Operating Organization for Nuclear Power Plants, para. 5.12 to 5.16
NS-G-2.14 Conduct of Operations at Nuclear Power Plants, para. 5.21 to 5.25 and 7.15 to 7.17

You may copy/paste the pub number back in the browse publications page to search for it and open it like NS-G-2.14:

Search Publications
NS-G-2.14
Search

Back to SSR-2/2 (Rev. 1). At the very bottom of the page you find some links:

Print page will print the html version and the relationship blue and olive notes
Publication page will lead you to the actual publication and its translations if available

For documents that are superseded, like NS-G-2.11, the access will be kept, using the publication page button although the text of NS-G-2.11 is not any more accessible with NSS-OUI (because we don’t want it to be again searchable as it is superseded). We also indicate that it is relevant now to read SSG-50.

If, in the “version of this publication” box, you select the version number 5, you then have access to the NSS-OUI html version of NS-G-2.11 before it was superseded, including the relationship note. Clicking on “Go back” on that version will send you back to the version 6.
There are two interesting other cases:

1) GSR Part 7. Not only it provides information on the relevant guides, for example GS-G-2.1, GSG-2 and GSG-11. But also like for the requirement 2, links to the EPR manuals, like EPR-Public Communication: Just right-click on the link to open it in a new tab.

2) SSR-6 for the transport regulation: Download all first. The Advisory Material accompanying guide SSG-26 provides specific guidance for specific paragraphs of SSR-6. Also SSG-26 is a very long file with 450 pages. So we have decided to insert hyperlinks to facilitate the navigation from SSR-6 to SSG-26. For example § 307 on compliance assurance. This links directly to the content of SSG-26 at the right place.

When you click on this link you arrive directly in the section 3 of SSG-26 and straight at the relevant parts with para. 307.1 to 307.9. As this opens in a new tab, selecting back the tab for SSR-6 leads you back to the Requirements publication.
Cross-references within SSG-26 are also inserted as hyperlinks when the reference is made to another section of SSG-26, like in para. 302.1 (e) to make faster the access to its content.
How to use the **footnotes**? They are indeed hyperlinks that work both way. Open NS-R-3 (Rev.1), load it completely and go to the scope section. The footnote 3 lead to the end of the page with the corresponding text. Clicking again on the number three leads you back to the text.

What means **responsive design**: Different display for tablets and smartphones, with “hamburger”. Hamburger for the Menu and TOC. Try it by reducing the size of the browser window:
3. BROWSE OVERARCHING REQUIREMENTS OR OVERALL RECOMMENDATIONS

You access the suite of Overarching Requirements available in GSRs followed by SSRs.

Clicking on one title opens a box providing the bold shall statement of the selected overarching requirements, like req. 4 of GSR Part 1 (Rev. 1) on independence of the regulatory body. Then clicking on the icon leads you directly inside GSR Part 1 (Rev. 1) straight at the place of that requirement.

As there are many OR, the titles and the bold shall statements are searchable, using the search window at the top of the list:

For example, search operating experience:

You may then choose the req. 24 of SSR-2/2 (Rev. 1). Click on it and open it with the icon. This leads you straight to the requirement 24 and associated requirements and then it tells you that the relevant guide is SSG-50. You may then copy this number and paste it in the search window in the Browse publications page to access it.
Open the file and you will see that the terms that are defined in the Safety Glossary are underlined with a dotted blue line. Clicking on any of these terms will open a pop-up window with the corresponding definition. When such terms have several definitions in the Safety Glossary, the one that is valid for the publication (SSG-50 in the example) is selected.

The glossary integration is addressed in page 13.
Go back to the Browse Overarching Requirements tab and search monitoring. You find several results and you see that this time it searches not only the titles but also the text of the bold shall statements.

If you then select the last one, SSR-5 Requirements 21, again you arrive straight inside SSR-5 and you find the text of the requirements, some additional references as well as information in relationship notes on which paragraphs of the guides for Near Surface Disposal SSG-29 (7.1 to 7.5) apply as well as which paragraphs of SSG-14 for Geological Disposal apply (6.60 to 6.64).
If then you go to SSG-29 by Browse publications, use the TOC to find monitoring (you may use CTRL F and type monitoring to quickly find it):

You then find the relevant guidance and indeed receive the information that, in addition to the 5 paragraphs 7.1 to 7.5, there is a complete safety guide SSG-31 on Monitoring and Surveillance of Radioactive Waste Disposal Facilities. You also find a link to a relevant Safety Report, the No. 35.
This cannot be found in the publications. It is only through the relationship notes in blue or olive that you can navigate this way and find the relevant publications or parts of publications.

For the Nuclear Security Recommendations and for the Transport Regulations, we have created an equivalent system with overall recommendations. Select the menu “Browse Overall recommendations), search for example “information security”. NSS No. 15 para 4.5 to 4.9 is one of the answer and when you open it, you find a link to the implementing guide NSS No. 23-G.

Information Security

4.5. The State should define the national policy on sensitive information and assign responsibilities to the various competent authorities for information security related to systems for detection of and response to a criminal act, or an unauthorized act, with nuclear security implications involving the use of any nuclear and other radioactive material out of regulatory control. This should be derived from and integrated with other policies of the State on information security.

4.6. The State should specify what nuclear security information could be misused by a possible offender and therefore should be protected. In particular, the information on the detection and response systems and associated procedures should be properly protected.

4.7. When defining the national policy on sensitive information, consideration should be given to ensuring that law enforcement personnel, other responders and personnel of the competent authorities have access to sufficient information to perform their duties.

4.8. The national policy on information security should detail what and how information regarding detection and response systems and protocols will be shared with other States, particularly neighboring States and relevant international organizations. The exchange of information with other States on nuclear security events is covered in Section 7.

4.9. Each competent authority should have an information security policy and should establish the rules for protecting the confidentiality and integrity of sensitive information and for the dissemination of such information to other competent authorities within and outside the State on a need to know basis. The competent authorities should ensure that all relevant personnel are trained in procedures for information security.

See also: NSS No. 23-G, Security of Nuclear Information
4. GLOSSARY RELATIONSHIP

We now have a new html interactive version of the safety glossary: This is part of a new IAEA Knowledge Organization System server available here: https://kos.iaea.org/iaea-safety-glossary.html

If you select a letter, like the letter A, you find a suite of terms. From each of these terms you may further navigate to other sub-terms or related terms, like authorization then licence, then licensee and then “person or organization”.

You may use the search window on the top right, type control to quickly find a defined term, for example search “control” and select “regulatory control”.

This can now be used as metadata to search terms that are defined and make a link to their definition.

As an example, we have tagged GSR Part 1 and SSG-50 with defined terms. The example of SSG-50 was covered above, page 9.

For example, Browse publications, select GSR Part 1 (Rev. 1) and then you see that terms that are underlined are defined. Clicking on these terms creates a pop-up window with the relevant definition and associated notes.

A key advantage is that, when for a term there are several definitions in the glossary, the one used for the tagging is the relevant one for that publication. An example is the definition associated with the term “graded approach” in the context of GSR Part 1, i.e. the definition number 1 from the glossary, as follows:

Requirement 1: National policy and strategy for safety
The government shall establish a national policy and strategy for safety, the implementation of which shall be subject to a graded approach in accordance with national circumstances and with the radiation risks associated with facilities and activities, to achieve the fundamental safety objective and to apply the fundamental safety principles established in the Safety Fundamentals.
In the near future, after full integration with the new server, we will progressively tag more publications (the Safety Requirements and the most recent Safety Guides first) with the Safety Glossary. This will also later on include security related terms.
We have three search modes:

5. FULL TEXT SEARCH

The first is a full text search. Just type a word or sequence of word. When you insert this within quotes, it looks for exact matches. For example, “computer security perimeter”. This search mode works for very specific words or sequences of words otherwise it would result in too many answers. It is also useful to find where existing references or relationship notes are made to a publication that is superseded so that we may update all these by mentioning the newly issued publication. For example, searching for NS-G-2.11 results in identifying all instances for which we would mention that it is superseded by SSG-50.

6. ADVANCED SEARCH

Then the second and probably the most efficient search mode is the Advanced Search. You can search by topical areas (by subject) and filter optionally by type of publication or by contextual elements (target audience, lifetime, types of facilities and activities).

For example, select the branch “Commissioning and operation of NPPs, …”, then the branch “operation” and then the topic “ageing management”. Then go to the bottom of the page and click on search.

You find the relevant requirements and guides or parts of these requirements and guides.

Again, by selecting an item in this list of results, you go straight into the publication at the relevant place, like “NS-G-2.4 on The Operating Organization for Nuclear Power Plants - Plant operation management programmes - Management of ageing”.

If you choose to go back in your browser using the left arrow on the top left, you can refine your search, for example selecting “research reactors” in the list of facilities and activities and search again. Now you only find the requirements and guides for research reactors.

Please note that selecting several items in the same category (topical areas, type of facilities and activities, …) will work with the “or” logic. Selecting elements in different categories, like one topical area and one type of facilities or activities will work with the “and” logic.

There are two different icons in each search criteria category:

- 🗂 indicates that there are sub-elements that you can access to by clicking on the icon.

- ⌚ means there are no sub-element.

If you search the branch “Safe disposal of radioactive waste” and select the topic “monitoring programme at a disposal facility” then you find again SSR-5 Req. 21, SSG-31, SSG-14 and SSG-29, but also RS-G-1.8 that is an old guide that did include recommendations for the monitoring of disposal in
its section five starting with § 5.41. But then we have also added the information that SSG-31 is now relevant. So, we have made voluntarily explicit relationship in SSR-5 to the guides 14 and 29 to SSG-31, but not to RS-G-1.8. However, the relationship remains as an implicit one for us in the future to consider its revision for maintaining consistency. This is one of the main differences between the browse functions and the search functions. The browse functions only provide you with the relationship notes for what we have decided to make explicit because they do provide valuable additional information.

In the list of search results, icons in front of the individual elements indicate the type of result:

- for an overarching requirement or
- for an overall recommendation

- for a complete publication, in red for a Safety Requirements or in dark green for a Safety Guide, light blue for an implementing guide or orange for a technical guide

- for one part within a publication with the same colour code

Note that you can now search the search criteria in the list of topical areas. For this click on the button “Expand All”:

This opens all branches and you may then use CRTL F (or the equivalent function for tablets and smart phones, generally available after selecting a three dots icon ) to insert a word for searching it in the ontology, like for example “monitoring” and scroll down until you find the topical area you wish to search for.
7. RELATIONSHIP SEARCH

The third mode is more for the Secretariat. It is called “Relationship search” and it searches all relationships for one specific publication. For example, for SSG-14:

The 2018 version of NSS-OUI provides the following results:

You may then apply filters, like de-selecting some topical areas or some types of publications. You may for example keep only the Safety Guides.
You may also, with the 2018 version of NSS-OUI, display the list of topical areas and then select those for which you wish to search existing relationships like Radiation protection in the post closure, scope of the safety assessment and monitoring programmes. This restrict the search results and you find among the results SSG-31 and RS-G-1.8 for monitoring and SSG-23 for safety assessment. However, the filtering is too strong as it eliminates some publications that do have other relationships not displayed in the “Details” column.

The Relationship Search visualizes relationships between publications. It can query all implicit relationships based on common tags (Topical Areas). It is meant for use particularly by the IAEA Secretariat staff to maintain consistency when revising existing publications.

You may then use the filters to refine your search, by specifying the types of publication or the topical areas for which you search the relationships.

<table>
<thead>
<tr>
<th>To</th>
<th>Relationship Type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS-G-6.1</td>
<td>Tag</td>
<td>Monitoring programmes at a disposal facility</td>
</tr>
<tr>
<td>WS-G-5.1</td>
<td>Tag</td>
<td>Radiation protection in the post-closure period</td>
</tr>
<tr>
<td>SSG-23</td>
<td>Tag</td>
<td>Scope of the safety case and safety assessment</td>
</tr>
<tr>
<td>SSG-31</td>
<td>Tag</td>
<td>Monitoring programmes at a disposal facility</td>
</tr>
<tr>
<td>RS-G-1.8</td>
<td>Tag</td>
<td>Monitoring programmes at a disposal facility</td>
</tr>
</tbody>
</table>
The 2019 version (currently under test) will solve the issue and provide the results in a more advanced manner:

For each publication found, by clicking on the publication number or the arrow, the system will provide the list of common topical areas that can then be filtered in a correct manner.

For example, for NS-G-2.1 on Fire Safety in the Operation of Nuclear Power Plants, you may choose to display the list of topical areas and then select the ones you would like to use as filter, like here in the example “Fire safety”. This will then restrict the list of results to those that have implicit relationships for that topical area:
8. FEEDBACK COLLECTION INTERFACE

Finally, the feedback module. This is only for staff members and members of the Committees and the CSS that need to be registered in nucleus and be granted with a special access right for this.

Here are some tips for using the NSS-OUI system to send feedback.

1. Please use either Internet Explorer or Chrome to open the welcome page (https://nucleus-apps.iaea.org/nss-oui/)
2. Sign in with the User ID and Password (on the top-right of the page)
3. Select the publication you would like to comment through the Browse Publications mode and open it
4. Click the comment icon “” at the top right of the page and then click on the “Enter Feedback” link to start the feedback module.
5. This generates “+” icons for:
   a. general comments on the whole publication
   b. comments on a section or sub-section
   c. comments or proposals for individual paragraphs
6. Click the “” button to add comments. The “Proposal” tab, available when a paragraph is selected, opens a box providing the original content and you can modify the text directly. The system will show the difference automatically in the “compare” tab of the proposal. After you finish editing the comment, please click the “save” button. Don’t press the “submit” button, that will allow you to modify your comments later or even the next day.
7. You can click on the “” button to write and save another comment in the same paragraph. Then the total number of comments will be incremented.
8. After inserting all your comments and proposals, please click the “Submit all feedback” button on the top right of the page.
   Once you press the “Submit all” button. All your feedback will be in a new submission.
9. If you wish to come back another time to insert another set of comments, you can still open the file, enter the feedback module and enter new comments and proposals. If you click on the total number shown in the interface you may see your previous comments, but you cannot edit them.

9. FEEDBACK ON THE SYSTEM

Use the “contact us” link that is on the bottom right in every page to provide us comments on the NSS-OUI platform itself.