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Version 2

FAQs on the notification portal for events involving laser radiation

Frequently asked questions
on the notification portal for events involving laser radiation

Contents

1 General information

Since 1 June 2019, events involving laser radiation in Switzerland have been subject to the Federal Act of 16 June 2017[1] on Protection against Non-Ionising Radiation and Sound (NIRSA) and the associated Ordinance of 27 February 2019[2] (O-NIRSA). From 1 December 2020, events involving laser radiation must be reported to the Federal Office of Public Health (FOPH) via the electronic notification portal for events involving laser radiation. This document aims to answer some common questions on the notification portal for events involving lasers and to provide instructions on how to register and submit notifications.

1.1 Who has to report events involving laser radiation via the notification portal and which requirements need to be met?

Events involving laser equipment in classes 1M, 2M, 3R, 3B and 4 are required to appoint a qualified person to operate the equipment and report the event via the notification portal. If there is laser radiation in the audience zone,[3] the event must be reported by a person with a certificate of competence level 2. If there is no laser radiation in the audience zone, the event involving lasers must be reported by a person with a certificate level 1 (or level 2). Certificates of competence levels 1 and 2 can be obtained from the examination bodies listed in the O-NIRSA.[4]

Events involving lasers in classes 1 and 2 that emit radiation in the airspace must be reported by the event organisers via the notification portal. No specific competence is needed for such events but the notifying person is responsible for ensuring that no third parties – in particular pilots, airport staff or drivers of locomotives or motor vehicles – are dazzled.

For the operation of equipment at the events mentioned above, the provisions of the Ordinance to the Federal Act on Protection against Non-Ionising Radiation and Sound apply. These provisions are set out in section 3 of the Ordinance.

1.2 Which events do not need to be reported and what should I nevertheless bear in mind?

Anyone emitting radiation using laser equipment in class 1 or 2 in or into the open air but not into the airspace does not need to report the event. However, the organiser is responsible for ensuring that no other persons are endangered, and that pilots, airport staff and drivers of locomotives or motor vehicles are not dazzled.

Events taking place indoors involving lasers of class 1 or 2 do not need to be reported either.

Please note, however, that only fixed laser equipment may be used for all laser events.

1.3 How do I access the notification portal?

This link will take you straight to the notification portal for events involving laser radiation, where you can log in and submit notifications: Notification Portal for events involving laser radiation. Please follow

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[1] SR 814.71

[2] SR 814.711

[3] The audience zone is defined as the space up to 3m above and 2.5m laterally from the area reserved for the audience. In the audience zone, in accordance with the Standard SN EN 60825-1: 2014, the maximum permissible exposure (MPE) for the cornea of the eye shall not be exceeded.

[4] SR 814.711.31

the instructions in section 2 if you would like to create an account so you can access the notification portal on a regular basis using your login.

You'll find further information on events involving laser radiation at the following link: [Events involving laser radiation](#).

1.4   Whom should I contact if I have questions or technical problems?

If you have support issues, please contact the Federal Office of Public Health FOPH:

Radiation Protection Division
Non-Ionising Radiation and Dosimetry Section
Schwarzenburgstrasse 157
3003 Bern
+41 58 469 26 76
laser@bag.admin.ch

2 Registration and login

To access the notification portal, users can register the first time they use it, or they can submit a notification as a guest (for laser class 1 and 2 only). Once they have successfully registered, they can log in to the online portal. Section 2 describes the registration process.

2.1 How do I register?

Go to the notification portal homepage ([Notification Portal for events involving laser radiation](#)) and click on the Login symbol in the top right-hand corner (marked red in Figure 1):

Figure 1 Notification portal homepage

Carry out the following one-time registration process:

1.: Click on the **CH-Login eGovernment** (marked red in Figure 2):

Figure 2 Selection of CH-Login eGovernment

2.: Click on the action button on the right '**Create Account**' (marked red in Figure 3):

Figure 3 Create account

3.: **Register** by entering your first name, surname, email address and a password:

Figure 4 Registration

4. Once you have read the terms of use, check the box '**I accept the terms of use**' and click 'Continue'.

5.: You will receive an **email containing a confirmation code** from the eIAM Service:

Figure 5 eIAM registration code

6.: **Enter the registration code** and click 'Continue':

Figure 6 Enter registration code

7.: You have now **registered successfully**:

Figure 7 Complete registration

Click 'Continue'. You can now enter your first notification and can log in at any time (using your email address and password) to view all your notifications.

2.2   Can I submit a notification without registering?

For laser class 1 and 2, it is possible to enter a notification and submit it to the FOPH as a guest without registering. However, you will no longer be able to access this notification and if you wish to enter a new one, all the information will have to be entered again.

2.3   What are the benefits of registering?

We recommend that qualified persons with a certificate of competence level 1 or 2 register so that information that doesn't change, such as contact details and information on laser equipment, only has to be entered once. Another advantage is that registered users have access to all the notifications they have entered, and can duplicate, edit and re-submit them, and can cancel events. A notification can be saved in editing mode and be modified at any time.

2.4   How do I log in after registering?

Registered users can click on the Login symbol in the top right-hand corner of the notification portal homepage (Notification portal for events involving laser radiation) as shown in Figure 1, section 2.1, select CH-Login, and log in:

Figure 8 CH-Login

Enter your email address and password on the left-hand side and click 'Login'.

3 Submitting a notification

Go to the notification portal homepage ([Notification portal for events involving radiation](#)) to enter a notification. Registered users can click on the Login symbol in the top right-hand corner to log in (Figure 1, section 2.1).

3.1 What information about the event involving laser radiation do I need to enter on the homepage?

On the notification portal homepage, users are asked to select the type of event their notification concerns (Figure 1, section 2.1). On the basis of the selection, only the relevant notification pages with input fields will be displayed in subsequent steps. The following information on the event involving laser radiation needs to be entered on the homepage:

- Laser class of the most powerful laser that will be used
- Information on whether laser radiation will be emitted in the audience zone (the audience zone is defined in the additional information on the notification portal homepage)
- Information on whether radiation will be emitted in the airspace.

3.2 What information do I need to enter on the various notification pages?

Once you have entered all the information required on the homepage and clicked 'Next', the actual notification can be entered. There is a navigation panel on the left-hand side of the screen, showing the different notification pages so that users can see at which stage of the notification they are (see Figure 9).
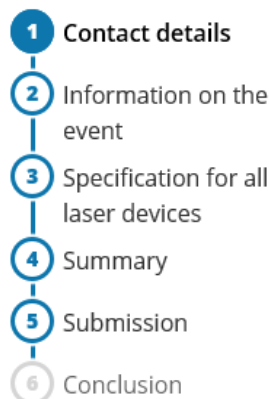
Figure 9 Titles of the various notification pages

3.2.1 Why do I have to report events involving laser equipment that emits radiation into the airspace, and what information do I need to enter on the notification portal?

Events involving laser radiation of all classes that may be emitted into the airspace must be reported to the air traffic control authority for security purposes. If you checked 'Laser radiation that could disturb aircraft' on the homepage, the notification will be automatically forwarded by email to the Swiss air traffic control authority, Skyguide. The following information is required (Figure 10):

- GPS coordinates: longitude (X coordinate east-west) and latitude (Y coordinate north-south).
- Laser beam direction azimuth (0 to 359°): 0°=north, 90°=east, 180°=south, 270°=west
- Laser beam direction elevation (-90° to +90°): 0°=horizontal, +90°=vertical. The negative figures should be used if the laser beam is emitted from an elevated position e.g. downwards into a valley (below the horizon).

Geographic coordinates

Coordinates are required if no street details are available and / or for laser radiation into the airspace

Laser beam direction

Azimuth from (0-359°)

Azimuth to (0-359°)

X coordinate (East - West)

Y coordinate (North - South)

Elevation from (-90° to +90°)

Elevation up to (-90° to +90°)

Figure 10 Information on laser radiation into the airspace or if no street details are available

3.2.2 What contact details are needed?

Depending on the type of event, the following information is required on the 'Contact details' notification page:

- Information on the organiser
- Information on the person with a level 1 certificate of competence (events without laser radiation in the audience zone)
- Information on the person with a level 2 certificate of competence (events with laser radiation in the audience zone)

Depending on the type of event, a certificate of competence level 1 and/or 2 must be uploaded. If an event with laser radiation in the audience zone is to be installed by someone with a level 2 certificate of competence and subsequently operated by someone with a level 1 certificate of competence, the information on both individuals and documents must be entered on the notification portal. All common formats (pdf, jpeg etc.) are accepted. The certificate of competence level 1 or 2 must have been issued by an examination body listed in the O-NIRSA.[5]

3.2.3 What information about the event is needed?

On the notification page 'Information on the event', the following information is required:

- Name of the event
- Details of the event location:
  - Postcode
  - Town/city
  - Canton
  - Street (if no street details are available, you can enter the coordinates instead)
- Geographic coordinates (only if there is radiation into the airspace, see section 3.2.1)
- Laser beam direction in azimuth and elevation (only if there is radiation into the airspace, see section 3.2.1)
- Date/dates of the event/events (see individual notification section 3.2.10 and serial notification section 3.2.11)
- Information on the testing of the laser equipment (date and time of the test) with optional remarks
- Calculated maximum radiation strength in the audience zone in relation to the maximum permissible exposure (MPE); by clicking the box 'The MPE will not be exceeded in the audience zone', the person with competence certificate level 2 confirms that the MPE will be complied with at all times in the audience zone. The qualified person is responsible for ensuring that this statement is true.

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[5] SR 814.711.31

Depending on the type of event, the following documents must be uploaded:
- Plan of the event location
- Description of the planned laser figures
- Document with MPE calculation

3.2.4　What do I do if my event involving lasers is taking place at different locations?

On the notification page 'Information on the event' you can add additional event locations by clicking on the button '+ Add event location' in the bottom right-hand corner. If there are additional event locations, the description of the laser elements, MPE calculation and details of the laser equipment test must be re-entered and uploaded. You can delete an event location by clicking on the rubbish bin symbol in the top right of the screen.

3.2.5　What specifications on the laser equipment do I need to enter?

On the notification page 'Specification for all laser devices', the following input fields must be completed for each individual piece of laser equipment:
- Manufacturer and type designation
- Minimal angular velocity of the radiation
- Maximum exposure time of a laser pulse on the eye (in the audience zone)
- Smallest distance of laser device from the audience zone
- Beam switch off in case of error
    - Automatic or manual switch off
    - Maximum response time of beam switch off in case of error
- Every wave length (in nanometres), including information on:
    - Maximum power output at output window (in milliwatts)
    - Beam diameter (in millimetres) at the exit of the laser device
    - Minimum beam divergence (in milliradian)
- Calculated maximum exposure in the audience zone and in relation to the MPE

You can add additional laser source properties by clicking 'Add laser beam parameter'. Additional laser devices can be added by clicking 'Add specification'.

3.2.6　What should I do in the case of validation errors?

The 'Summary' notification page consists of two parts. The top part lists validation errors, while the bottom part summarises the notification entered. On the notification page 'Summary' the system automatically checks the notification for completeness. Areas that need correcting are shown in red. Clicking on an error message takes you straight to the relevant notification page where information is missing or incorrect. The notification cannot be submitted until it is completed in full and all errors have been rectified.

3.2.7　How do I definitively submit a notification?

A notification can only be submitted when all the required information has been entered and there are no more validation errors. A submitted notification can no longer be edited, only cancelled.

Before the notification can be submitted, depending on the type of event, certain points have to be confirmed by checking boxes on the 'Submit' notification page:
- 'I am aware of my responsibilities and have herewith fulfilled my reporting obligation' (all notifications)
- 'I confirm that all information is accurate and true, and that the laser device is operated and designed according to the requirements of O-NIRSA and that no damaging emissions to the

public are generated' (Notification of events involving laser radiation in laser classes 1M, 2M, 3R, 3B and 4)

- 'I accept that the FOPH may carry out unannounced inspections of the event. I guarantee that FOPH inspectors as well as all accompanying measurement companies and members of the cantonal authorities may at all times enter the event free of charge' (Notifications of events involving laser radiation in laser classes 1M, 2M, 3R, 3B and 4)
- 'An event involving laser radiation emitted into the airspace may disturb manned aircraft. An aircraft is defined as any vehicle that flies in the earth's atmosphere, such as for example aeroplanes, helicopters or balloons. Please note that your notification will therefore be automatically forwarded to the Air Traffic Control Authority Skyguide in order that the safety of pilots can be ensured. You may be contacted by the Air Traffic Control Authority Skyguide' (Notifications involving radiation emitted into the airspace)

Below these statements there is an input field 'Remarks' which may optionally be completed before the notification is submitted.

3.2.8   Who receives a confirmation email?

The notifying person will receive an email confirmation containing a list of the data entered and a notification number. All the parties concerned will receive a copy of the email:
- Person with a level 1 or level 2 certificate of competence
- Organiser
- The enforcement authority – the FOPH
- The special flight office of the air traffic control authority, Skyguide (notifications involving radiation emitted into the airspace)
- The cantonal sound regulation enforcement authorities

The confirmation of notification is written in the language (English, German, French or Italian) you used to submit the notification.

3.2.9   How do I upload and delete documents?

On every notification page on which a document needs to be uploaded there is a button. If you press the button 'Upload certificate level 2', there is a step-by-step explanation of how to upload a document:
1. Click 'Upload certificate level 2' (you will see the field shown in Figure 11)
2. Click 'Add'
3. Either select the required document (select file and click 'open'), or drag the required document into the blue field
4. Click 'Save' to upload the selected document

Upload certificate level 2

Click on 'add' and select the required document, or drag the document into this field. Then click on 'save' in order to upload the selected document.

‹ Back   ✖ Reset   ⊕ Add   ⬆ Save

Figure 11 Upload document 'certificate level 2'

To delete an uploaded document:
1. Click on the rubbish bin symbol

'Do you want to remove the document' No or Yes? -> Click Yes.

Note: if a notification is 20MB or more, all attached documents will not be sent with the confirmation email. However, all documents are stored and visible in the notification portal.

3.2.10 How do I report a one-off event?

On the page 'Information on the event' a date can be entered for a single event involving laser radiation using the following steps:
1. Click the button 'Add event date' (you will see the field shown in Figure 12)
2. Select the date, and start and end times
3. Click 'Add'

Figure 12 Select an individual date for an event involving laser radiation

To delete a date:
1. Click the rubbish bin symbol
2. 'Do you want to remove the the following time?' – No or Yes -> Click Yes.

3.2.11 How do I report a series of events?

In the case of several successive events or events that are always the same taking place at the same or different locations (e.g. clubs, tours), a serial notification can be submitted on the page 'Information on the event':
1. Click the button 'Add series' and you will see the field shown in Figure 13
2. Select the days/weeks/months and the duration with the start and end of series
3. Click 'Add'

Figure 13 Serial notification: select several dates for an event involving laser radiation

Please note: if the events take place at different times, several series or individual dates have to be added.

### 3.2.12 How do I delete individual dates or all the dates of a serial notification?

To remove individual dates from a series:
1. Click the rubbish bin symbol next to the individual date
2. 'Do you want to remove the following time – No or Yes? -> Click Yes

To remove all dates:
1. Click 'Remove all dates'
2. 'Do you want to remove all dates' – No or Yes? -> Click Yes

Figure 14 Series: delete individual dates or all dates

3.3   Where can I see an overview of my notifications?

Registered users can access the overview page by going to the notification portal homepage ([Notification portal for events involving laser radiation](#)) and clicking 'Notifications' in the top left, and then again clicking 'Notifications' (marked red in Figure 15):
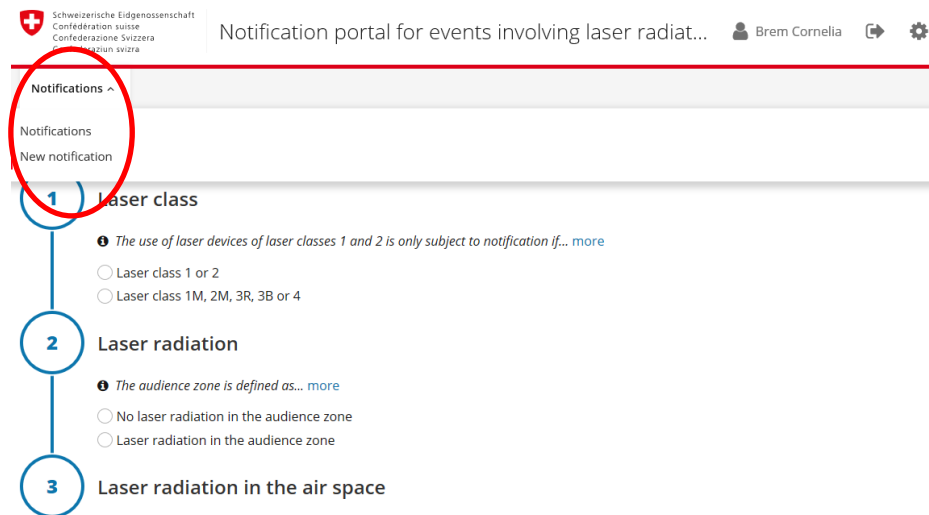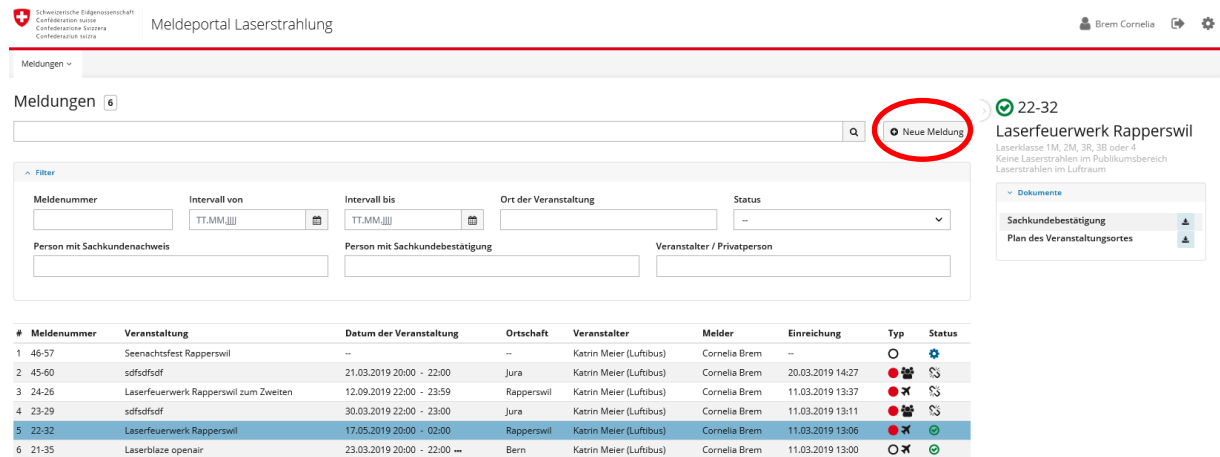

Figure 15 Homepage notification portal: switch between overview and enter new notification

4 Overview page

The overview page displays all the notifications entered by the user. The most recent notification is always shown at the top of the list by default:

Figure 16 Overview page

On the overview page, registered users can enter new notifications, and edit, submit, duplicate, modify or cancel notifications.
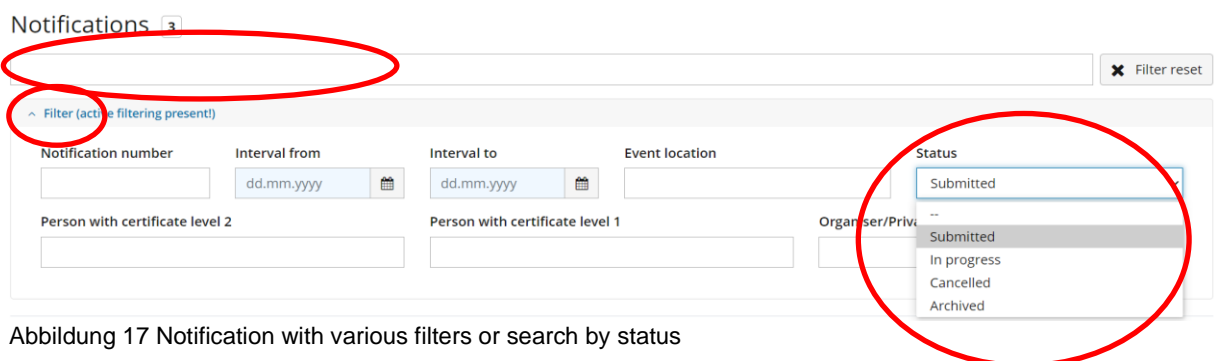
4.1 How do I get from the overview page to the homepage to enter a notification?

By clicking '+New notification' (marked red in Figure 16), you will be taken to the homepage and can enter a new notification. Or you can click 'Notifications' in the top left, and then 'New notification'.

4.2 How do I search for a notification?

On the overview page, you can either use the search field to search for a specific notification, or you can click on 'Filter' to use various filters, such as notification number, date, name or event location (marked red in Figure 17).

Notifications can also be filtered by status: submitted, in progress, cancelled or archived.

Abbildung 17 Notification with various filters or search by status

4.3 How do I open and edit a notification?

If you click once on a notification in the list, the notification is highlighted in dark blue (Figure 16). The most important information about the notification and the submitted documents are displayed on the right-hand side. The documents can be downloaded or opened. If you double click, the notification is opened and displayed and can be edited. You can then select an action from the right-hand side of the user interface. Depending on the status of the notification (submitted, cancelled or in progress), various actions can be carried out:

- Discard
- Duplicate
- Back to search
- Cancel

4.4 How do I duplicate a notification?

A notification can be duplicated and modified on the overview page:

1. Click the button 'Duplicate' on the right-hand side of the user interface
2. 'Do you want to duplicate the notification?' – Yes/No: Click Yes to confirm
3. Modify, save and submit the notification

4.5 How do I cancel an event?

On the right-hand side of the user interface, registered users can click the 'Cancel' button. Users have the option of adding a reason for cancelling the event. The notifying person, the organiser and the FOPH will then receive a message saying that the event was cancelled.

5   Miscellaneous

5.1   How do I select a language?

On both the overview page and the notification portal homepage, you can select a language by clicking the cog symbol in the top right-hand corner and selecting one of the languages from the list: English, German, French or Italian (marked red in Figure 18).
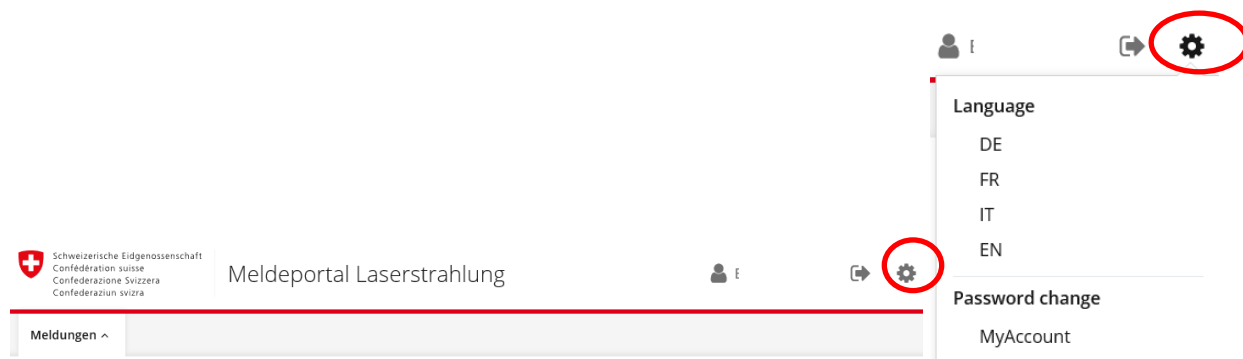

Figure 19 Language selection