



WILDFIRE MANAGEMENT TELEGRAM CHATBOT

USER GUIDE FOR PROFESSIONAL USERS

V 2.1

SAFERS CHATBOT DESCRIPTION

AIM

The SAFERS (Structured Approaches to Forest Fire Emergencies for Resilient Societies) chatbot is a tool running on mobile devices that enables fast and effective bidirectional communication between deployed responders, field forces, control centres, and citizens.

On-field forces shall be allowed to use such tools easily without hindering their normal operations on the field. Meanwhile, **decision-makers** operating at control centres shall understand the situational picture, including the status, the performed activities, and the current location of all deployed personnel. Moreover, thanks to the reception of specific geolocalised multimedia reports generated through the chatbot, decision-makers can quickly **assess the impact of ongoing emergencies or natural phenomena** along the three critical phases of the emergency management cycle: the early warning, the emergency response, and the post-event phase.

BENEFITS & VALUE

The SAFERS Chatbot:

- is based on **Telegram**, a mobile app that is easy for any user and does not require installing other apps.
- is a messaging **tool** that allows professionals and citizens to communicate with the control centre.
- enhance the **coordination on the field** by localising field forces in real-time.

TECHNICAL REQUIREMENTS

- The SAFERS Chatbot can be used on Android or iOS mobile devices.
- The **Telegram** messaging application is required to be installed.
- It is also possible to use the chatbot via the **Telegram Desktop application** with limitations, sharing the unavailability of the location sharing.
- To allow the exploitation of all chatbot's functionalities, enabling GPS from your device settings is recommended.



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1. Installation and Setup

The SAFERS Chatbot is accessible through the Telegram messaging application.

To install Telegram on your mobile device:

1. Search, download and install the Telegram messenger.

- for Android devices from the [Play Store](#)

- for iOS devices from the [Apple App Store](#)



2. Open and set up Telegram using your phone number. In case you have problems, you may refer to this [tutorial](#).

3. Setup the Chatbot: from the Telegram main screen, click on the magnifying lens at the top right (Figure 1, nr. 1). This will open a search bar where you can enter text. There, enter the text “**SAFERS**” (Figure 1, nr. 2). The SAFERS Bot [test] will appear in the results. (Figure 1, nr. 3). Click the row to join the channel.

4. To start using the SAFERS bot, click on the “**START**” button at the bottom of the screen (Figure 1, nr. 4). This will send the command “/start”, and the bot will ask you to log in.

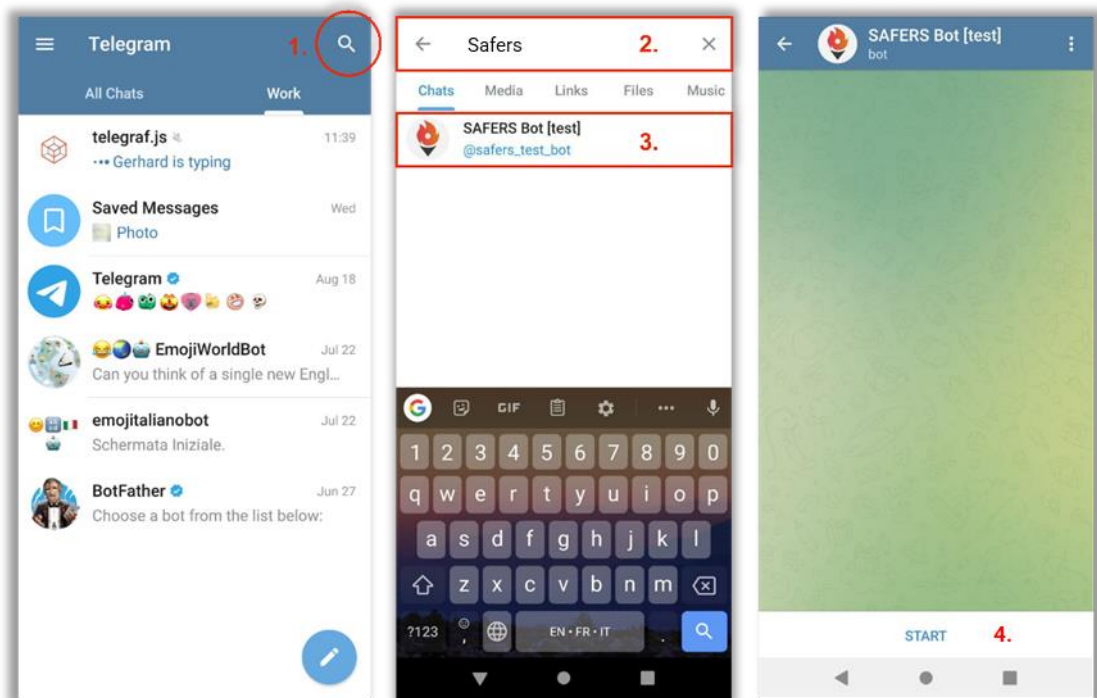


Figure 1 - The SAFERS chatbot setup

2. My account and access

To use the chatbot, every user must register for the service.

- After the /start command, click the “Login” button (Figure 2).



Figure 2 - Login button

- In the following dialogue box, you will receive the link to the login page. Click “OPEN” (
- Figure 3).

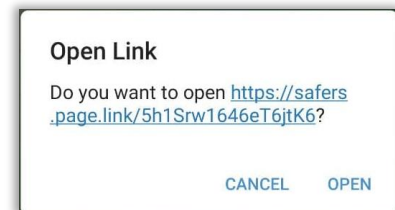


Figure 3 - Login link

If you have already an account:

- Fill in your credentials and **Submit**.

If you do not have an account yet:

- Tap the command **Create an account** (bottom-right)
- In the next screen, Create your credentials (email and password) and **Register**.

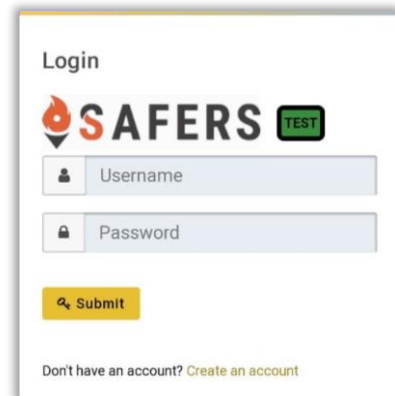


Figure 4 - Login form

 A screenshot of a register form titled "Register". It has three input fields: "Email *", "Password *", and "Confirm password *". Below the fields is a yellow "Register" button.

After the confirmation message, a quick **tutorial** describes the SAFERS Bot’s scope and usage.

- Click **OK** to start using the bot.

IMPORTANT TIP

In order to provide a robust overview of the in-field situation to the control centre, enable the GPS on your device settings.

SAFERS allows to update your status and live location when relevant.

3. The Start menu

Four main functions are offered in the Start menu (Figure 5)
At any moment, you can return to the beginning and display this menu by typing `/start` directly in the text line.

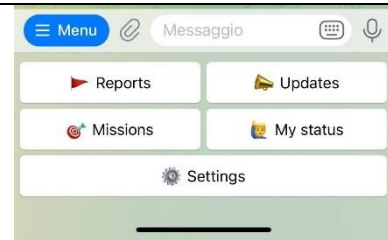


Figure 5 - Start menu

The Start Menu functionalities are:

- **Reports:** here, you can create new Reports and read Reports created by other users containing information and media (photo, video, text, audio).
- **Communications:** here, the messages created by the SAFERS control centre for users in a specified area are shown.
- **Missions:** here, you can access the list of the Missions and tasks set by your Organization and update the mission status according to the actual situation.
- **My status:** use this command to update your operational status and inform your Organization if you are busy or available for eventual operations.
- **Settings:** here, you can set your preferences for the SAFERS chatbot.

4. The quick commands

The SAFERS Bot offers a menu, always available near the text field, that includes a list of quick commands, working as **shortcuts** to some functions.

IMPORTANT

They will appear in the language set in the device settings
(and not in the language set for the SAFERS Bot).

The quick commands can also be launched simply typing them in the text field, as shown in the following:

`/start:`

to open the Start menu (or the Login if you are not logged in).

`/logout:`

to **Logout** from the Bot (if you are logged in).

`/changelanguage:`

to **change** the chatbot language, among the available options.

`/tutorial:`

to receive the tutorial about the SAFERS chatbot's main functionalities and way to use it.

`/mylocation:`

to see on a map the last location you've sent, if any.

`/myprofile:`

to know the information related to **your profile**: name, email, organization and role.

`/about:`

to know more about the **SAFRS project**.

/updates:

to open the **Updates** menu of the chatbot

/settings:

to open the **Settings** menu of the chatbot

/reports:

to open the **Reports** menu of the chatbot

5. Reports

One of the primary functions of the SAFERS chatbot is to exchange information from the field with the control centre and other in-field agents.

In the **Report** section, you can see the list of Reports created by you or other users, reading the provided details and attached media.

- create and send reports, attaching data and media content.

IMPORTANT TIP!

Your reports will be visible only inside your organisation.

A SAFERS Report contains the following information:

- The preview of attached media (if any), such as photos, video, and audio files.
- The date of creation
- The source (if created by professionals or citizens)
- The Event reported (selected by a given list)
- The Report status (if notified or not to the Control Centre)
- The location you can see in Google Maps.
- The number of media attached (if any)
- The text description added by the author
- Measurements, referring to quantitative/qualitative details.

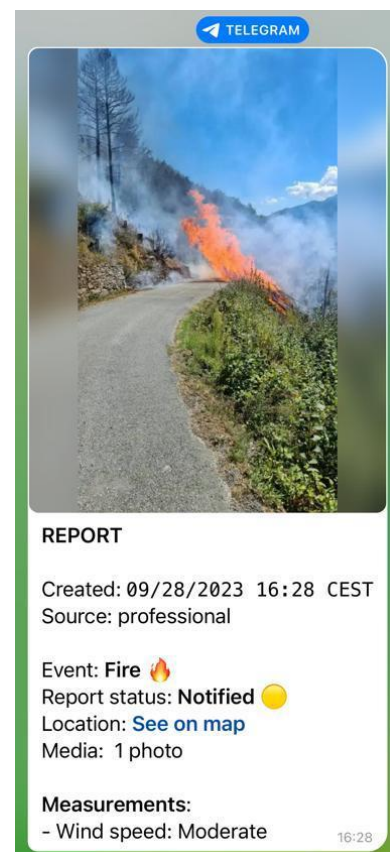


Figure 6 Report details card

1.1. See Reports

Having authorised the SAFERS Bot to use your location, you can see the report concerning your area.

From the Start menu, tap Reports. In the following menu, you can select:

- **“See all reports”** to open the list of Reports created by users belonging to your Organization.
- **“See my reports”** to open the list of Reports you created.

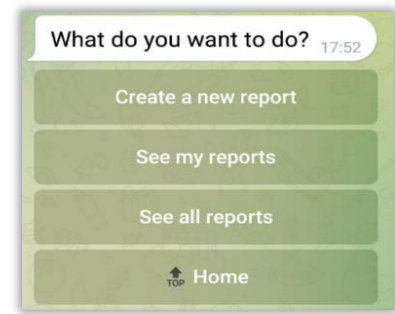


Figure 7 - Reports options

In both lists, Reports are organised in blocks of 3 Reports. Use the arrows to browse them.

- to go back and forth one block of 3 reports at a time.
- to jump respectively at the beginning or end of the list.

Each button corresponds to one Report and shows the Report's date and hour of creation and its description (an example in Figure 8).



Figure 8 - Reports pages

1.2. Report creation: the quick procedure

To quickly start creating a new Report:

- You can **type the description of the situation you want to report directly in the text field** (Figure 9, nr. 2).
- You can record an audio message activating the microphone command near the text field (Figure 9, nr. 3).
- You can also start to create a report **from a media**.
Tapping the Clip command (Figure 9, nr. 1), you can:
 - **Select the Gallery** to add stored photos and videos and create new ones (Figure 9, nr. 4).
 - **Select Position** to add your position or move the pin on the map to set the location the Report refers to (Figure 9, nr. 5).

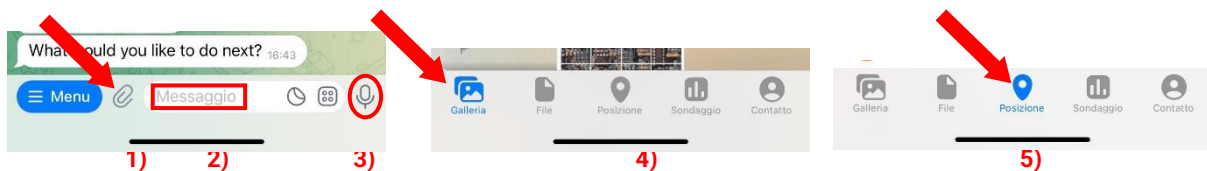


Figure 9 – Commands to attach media and location to a new Report.

- After adding content, the Bot asks you how to proceed. **You can either discard the content or proceed**, following the instructions to complete the Report with the missing informations



Figure 10 – Quick Report Creation

1.3. Report creation: the guided procedure

From the Start menu, tap Reports and “**Create a new report**”. Follow the instructions in the message and use the buttons to add the following Report Details:

- the **Hazard*** the Report is about.
- the **Location of the event***, you can add, tapping the Clip command (Figure 9, nr. 1), select the Location and attach your location or indicate the event location on the map (Figure 9, nr. 5).
- Eventual **additional parameters** (according to the event selected)
- **You can add a description** by typing it the in text field bar and sending it.
- **You can also add media (Photo, Video, Voice note)** by tapping the Clip command (Figure 9, nr. 1) and then Gallery (Figure 9, nr. 4).

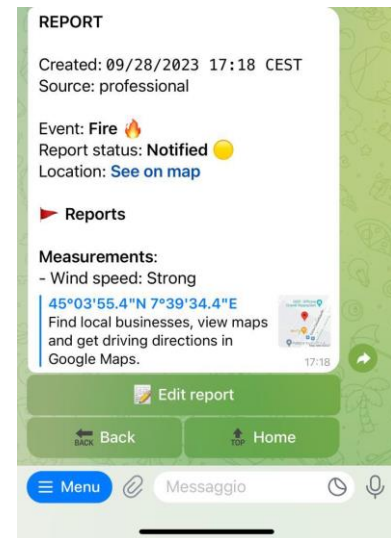


Figure 11 - New Report draft

IMPORTANT TIP!

To send a new Report, it is mandatory to **Add a Location and either a Description or a Media.**

THING TO KNOW ABOUT THE REPORT CREATION

- The Hazard initially selected can be modified by clicking “**Edit hazard**”. It will open a menu where the previously hazard chosen is marked (✓), and the new hazard can be selected among the ones in the menu.
- Concerning the media, **Photos, Videos, and Voice notes**, many files can be attached to a Report.
- When a new media is added, it is possible to remove it if the Report has not been already sent by clicking on the “**Edit media**” button.

1.4. Report creation – additional details

The Report creation procedure allows you to provide additional information.

- The “**Add details**” button opens a menu displaying the possible additional content **for the specific hazard previously selected**.
- The details may concern **Measurements, Damages, Effects** and **People**.

Note that only one type of additional detail can be added for each Report.

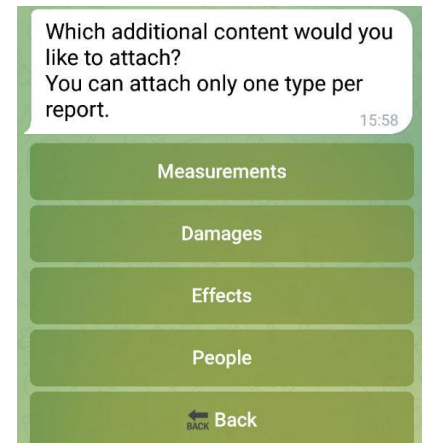


Figure 12 Add content menu.

Report creation > Additional details > MEASUREMENTS

The “**Measurements**” button opens a submenu that shows all the possible measurements that can be added **for the specific hazard previously selected**.

- Click the measurement you want to add.
- According to the type of data, you’ll be asked to:
 - Digit numbers in the message bar if the measurement has to be numerically expressed.
 - Or write a label if the parameter requires a description.

As an example, in Figure 13, the two kinds of measurements are added for a Report related to **Fire** (numerical measurement for **Flame height**), and they are then visible in the details card in the bottom-right image.

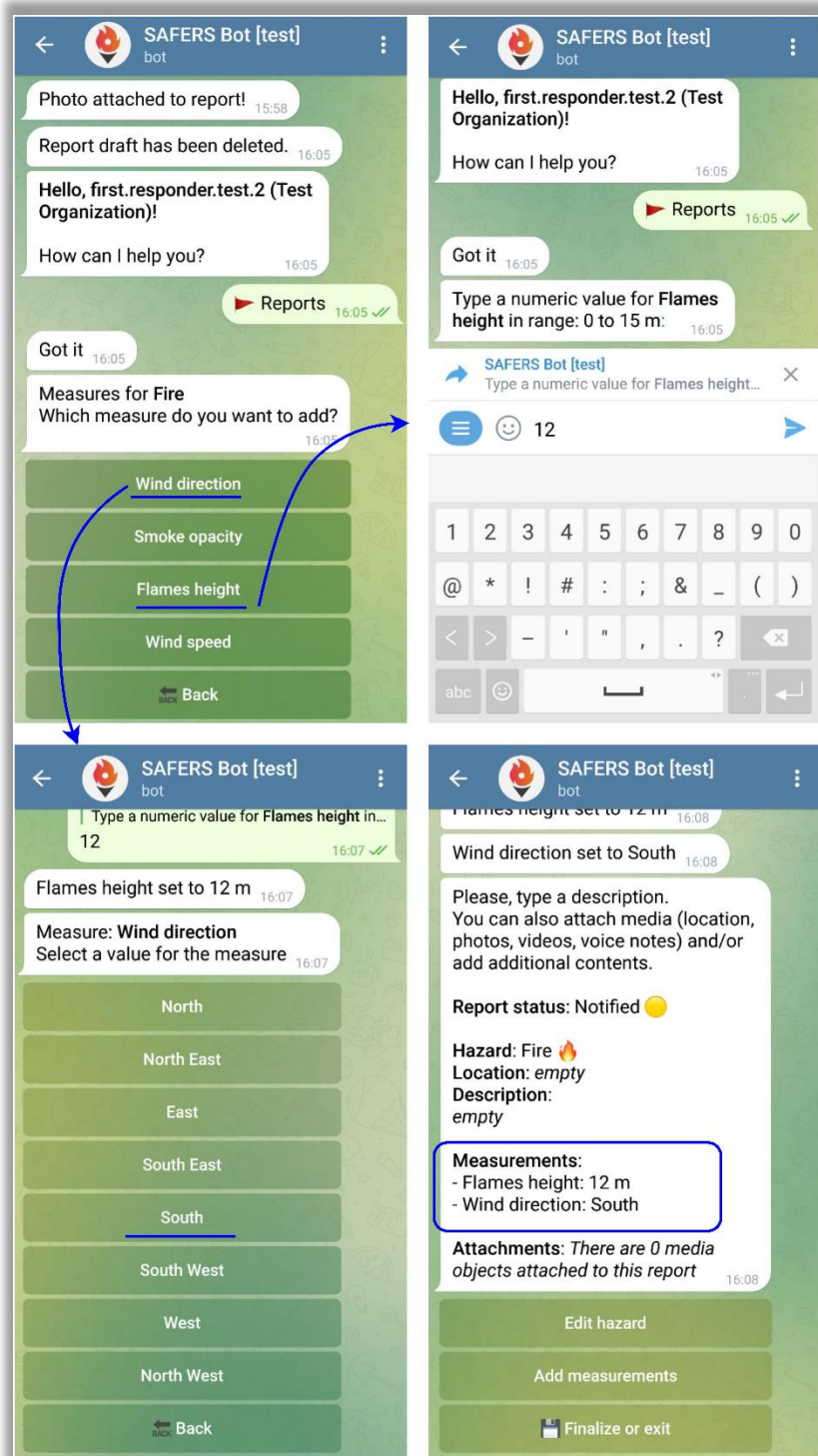


Figure 13 - Add measurements example

Similarly, it is possible to add details about **Damages** specifying the **damage severity**, about **Effects** specifying the **degree** of each effect, and about affected **People**, communicating how many people are in each category of affected people (e.g., **Injured**, **Missing**).

1.5. Finalize a Report or Exit

One Report can be sent once the mandatory information has been added.

Required information includes the event **Location** and either a **Description or one Media** among Photo, Video, Voice notes.

Once described the situation to be reported is, tap **"Finalize or exit"** and select one of three possibilities:

- **Send report:** to submit the report.
The chatbot check if the mandatory information are added and sends the report to the control centre. A successful message will notify the correct submission.
- **Save draft and return to the start menu:** the report can be saved as a draft to be modified later.
- **Delete the draft and return to the start menu:** to delete the draft.

1.6. Edit a draft Report

In case of draft Reports, it is not possible to create and send new Reports.

SAFERS allows to edit draft (if any):

When trying to create a new Report.

In this case SAFERS Chatbot asks either to:

- **"Complete draft now"** and eventually submit the Report
- **"Discard draft and create new report"**.

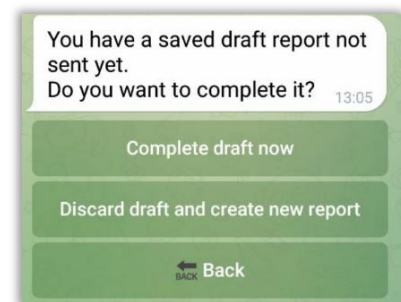


Figure 14 - Edit draft

When accessing the lists "All Reports" and "My Reports"

In this case,

- **Access the Report's details** and tap **"Edit report"**.

Once entered the draft, the Report is shown, follow the instructions in the message and use the buttons to as in the Report creation: **the guided procedure**.

At the end, tapping **"Finalize and exit"**.

- **To send the Report to the control centre**, tap **"Confirm changes"**. A message will confirm the success of the action.
- **To delete the draft**, tap **"Discard changes and create new report"**.

6. Missions

The SAFERS chatbot includes a section dedicated to **Missions**.

THE MISSIONS

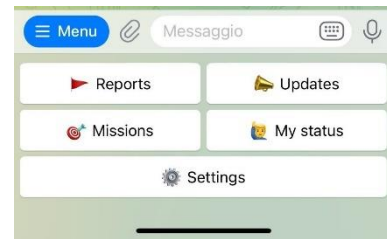
are site-specific activities required and assigned by the control centre to the in-field agents, according to their location and operational status.

When the control centre sends you a Mission... → NOTIFICA PUSH?

You can enter the Missions from the Start menu. You will display the **list of Missions created by your organization**.

The list is organised in blocks of 3 Missions (page). Use the arrows to browse them.

- ◀ ▶ to go back and forth one page (3 missions at a time).
- ⏪ ⏩ to jump respectively at the beginning or end of the list.



SAFERS Bot Start menu

Each button corresponds to one Mission and shows the **date and hour of creation** and a short description.

A coloured dot informs you about the mission status (Figure 15), that are:

- **Mission created** by the control centre
- **Mission taken in charge** by you
- **Mission completed/closed**

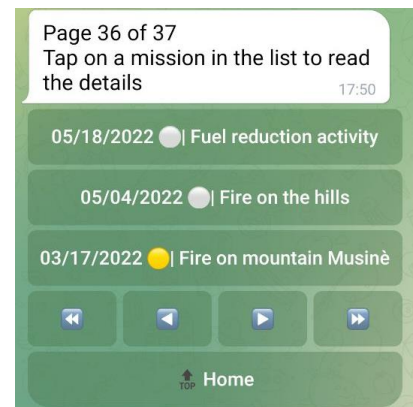


Figure 15 - Missions list

Tapping one Mission button, its details are shown (Figure 16). Every Mission indicates:

- A **Title**, that is the short description of the Mission
- The **Starting date**
- The **End date**
- The **Mission Status**
- A detailed description, concerning the assigned **tasks**
- The **Scope**
- The **Location** you can check following the link on Google Maps.

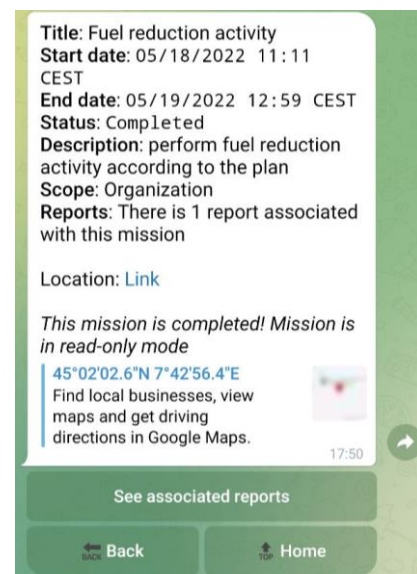


Figure 16 Mission's details

1.7.Handle a Mission

According to the Mission status, different actions will be offered (Figure 17).

You can:

- **Take in charge** one Mission. Only Missions in status **Created** ● can be taken in charge.
- Change the status of the Missions, according to the situation.
Missions in status **TakenInCharge** ● can be **marked as completed** or can be **left**.
- See the completed Missions ○.

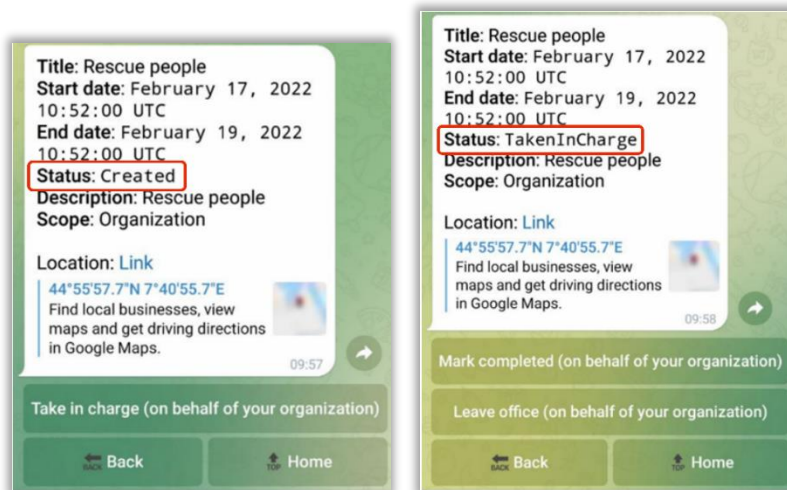


Figure 17 - Changing mission's status

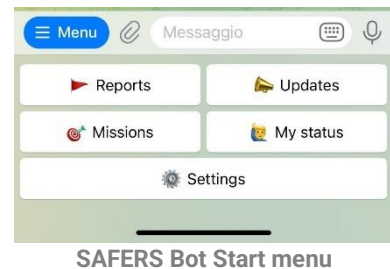
IMPORTANT TIP!

The SAFERS Bot does not allow to create and delete Missions.
Only the control centre can create, assign, and delete Missions.

7. My Status

Through the SAFERS chatbot, every professional user can send updates on their Operational Status to the control room.

From the Start menu, tap My status.
You can select among 4 options (Figure 18)



SAFERS Bot Start menu

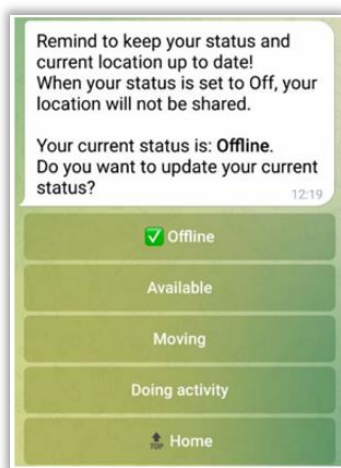


Figure 18 - Operational status

- **Offline**
Set this status when you are **not involved in activities**.
- **Available**
Set this status when you are currently not doing an activity but **available to be involved** in one.
- **Moving**
Set this status **when approaching the mission area**.
- **Doing Activity**
Set this status when you are **busy** with one activity.

When selecting **Available, Moving or Doing Activity** status, you're also requested to **share your location via the SAFERS chatbot**.

1.8. Doing activity

When setting your Status as **"Doing activity"**, you are also asked to **provide some additional data**:

- **the hazard the activity is related** and
- **the type of activity you are involved in**.

For instance, if "Earthquake" is selected, the options "Rubble removal" and "Plant reconnaissance" are provided. If "None" is selected, the available options are "Surveillance" and "Assistance to the population".

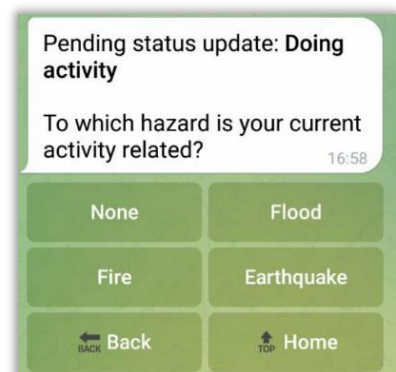


Figure 19 "Set my status" - Doing activity – Select the hazard

1.9. Share your location

IMPORTANT TIP!

Enable the GPS from your device settings.

Share your location via the SAFERS bot is important to keep the control centre informed, support the Missions assignment and receive relevant Updates.

When your operational Status is Available, Moving, or Doing Activity, the SAFERS Bot periodically ask you to share your location.

To send your location:

- Tap the Clip command, near the text field (Figure 9, nr. 1)
- **Select Location** in the bottom bar (Figure 9, nr. 2)

Here you can

- **Share your current position** (Figure 9, nr. 3) or
- Share your live location in real time **for a certain period of time** (Figure 9, nr. 4) and set how long you intend to share the position.

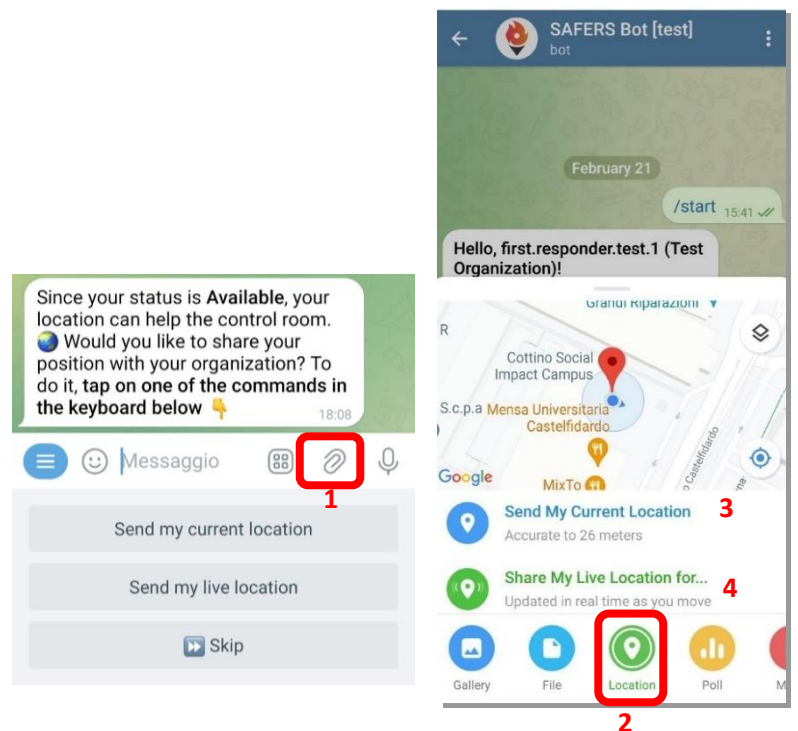


Figure 20 - Sharing location procedure

In alternative you can skip this step by clicking on "Skip" button.

You can share your location whenever you want, even if it is not requested by the chatbot.

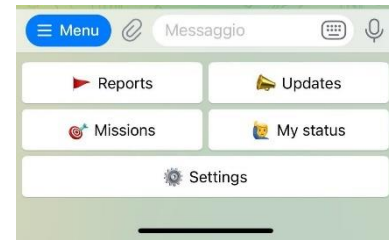
To provide your location:

- click **directly on the clip** icon
- select the attachment type 'Location'
- then choose whether to send your current or live location.

8. Updates

Through the SAFERS chatbot, you can receive **updates and communications** sent by your organisation send to the in-field agents, according to their location.





The SAFERS Updates are available from the Start menu.



SAFERS Bot Start menu

The Updates are organised in blocks of 3 (Figure 21).

Use the arrows to browse the pages.

-   to go back and forth one block of 3 content at a time.
-   to jump respectively at the beginning or end of the list.

Each button corresponds to one content and shows the Report's date and hour of creation and its description (an example in Figure 8).

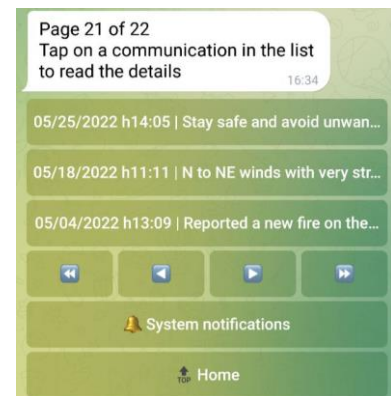


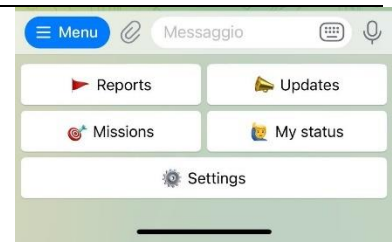
Figure 21 – Updates list

1.10. System notifications

From the list of the Updates, you can access the System notifications, that may inform you about system availability or updates.

9. Settings

You can set some personal configurations and preferences to improve your SAFERS bot experience. The SAFERS Bot settings are available from the Start menu.



SAFERS Bot Start menu

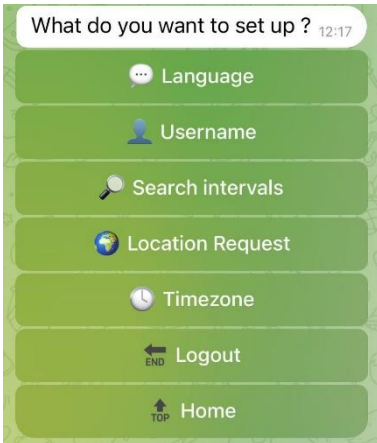


Figure 22 - Settings menu

- Entering the **“Language”** option, you’ll find the current language marked with a green check (✓). Tap on the desired language to change it.
- Tapping **“Username”**, you can set a new username, just typing the desired one in the chat. It can also contain emojis 😊

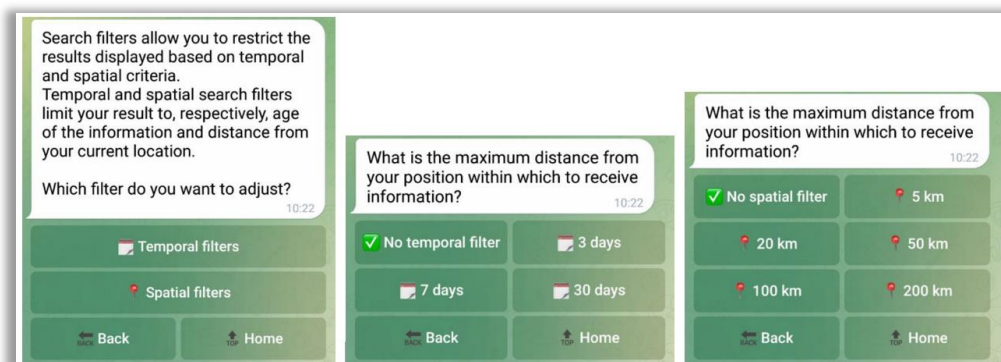


Figure 23 - Change language



Figure 24 - Change username

- **“Search intervals”** allows you to manage the temporal and spatial filters (Figure 25, nr. 1).
 - The **Temporal filters** set a time window for searching and displaying Reports, Missions, and Updates. You can select the **number of days before and later** the search date (Figure 25, nr. 2).
 - The **Spatial Filters** allow to set an **Area of Interest** in Km from your current location(Figure 25, nr. 3). It filters Reports, Missions, and Updates you will receive, accordingly.



1)

2)

3)

Figure 25 - Search filters settings

- The “**Location request**” allows you to select how often you want to be reminded to share your location.

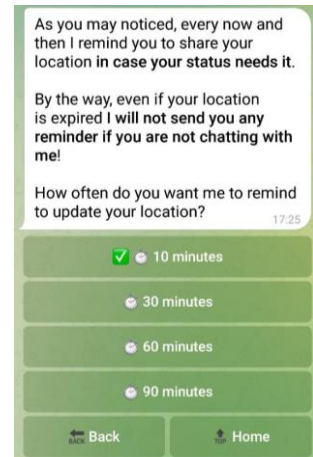


Figure 26 - Location request

- You can finally “**Change timezone**”
- And “**Logout**” to exit from the SAFERS chatbot.

1.11. Logout

To exit from the SAFERS Bot, You can

- Enter the Start Menu and select Settings
- As an alternative, you can type and send the command “/logout” directly in the text bar.

In both case, to complete the procedure, open the link in the dialogue box that will appear and confirm the log out (Figure 27).

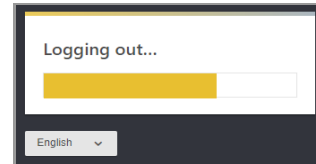
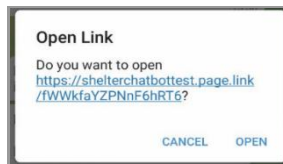
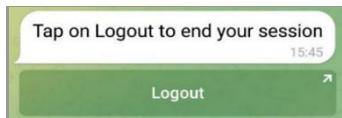


Figure 27 Logout

Structured Approaches for Forest Fire Emergencies in Resilient Societies
SAFERS
<https://safers-project.eu/>
Horizon 2020 H2020-SC5-2018-2019-2020
Proposal n. SEP-210597754

