Innovations in Communications

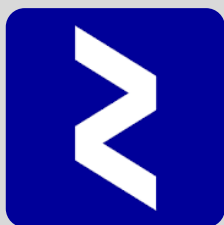# ASIGN PRO USER MANUAL

## Version 1

Welcome to the ASIGN Server User Manual!

This manual goes over how to set up the field collection tool ASIGN PRO, its main features and how to use them

Additional manuals are available to guide the use of the complimentary ASIGN Server.

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If after reading this manual you have any further questions regarding the use of the ASIGN PRO , please contact us at contact@ansur.no
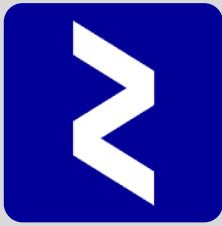
1. SYSTEM COMMUNICATION FLOW OVERVIEW

ASIGN PRO is a smartphone application that runs both on iOs and Android, free to download on the iTunes Store and Google play. The data collected through ASIGN PRO including photos, videos, text, and assessment forms can be automatically sent on to the ASIGN Server through WiFi, 3G/4G or satellite.

The ASIGN Server interface in turn receives the data. The purchase of ASIGN PRO includes a personal ASIGN online Server.

ASIGN Online is easily accessible through any online web browser to manage and analyse the data as well as to communicate back to the ASIGN field application users.
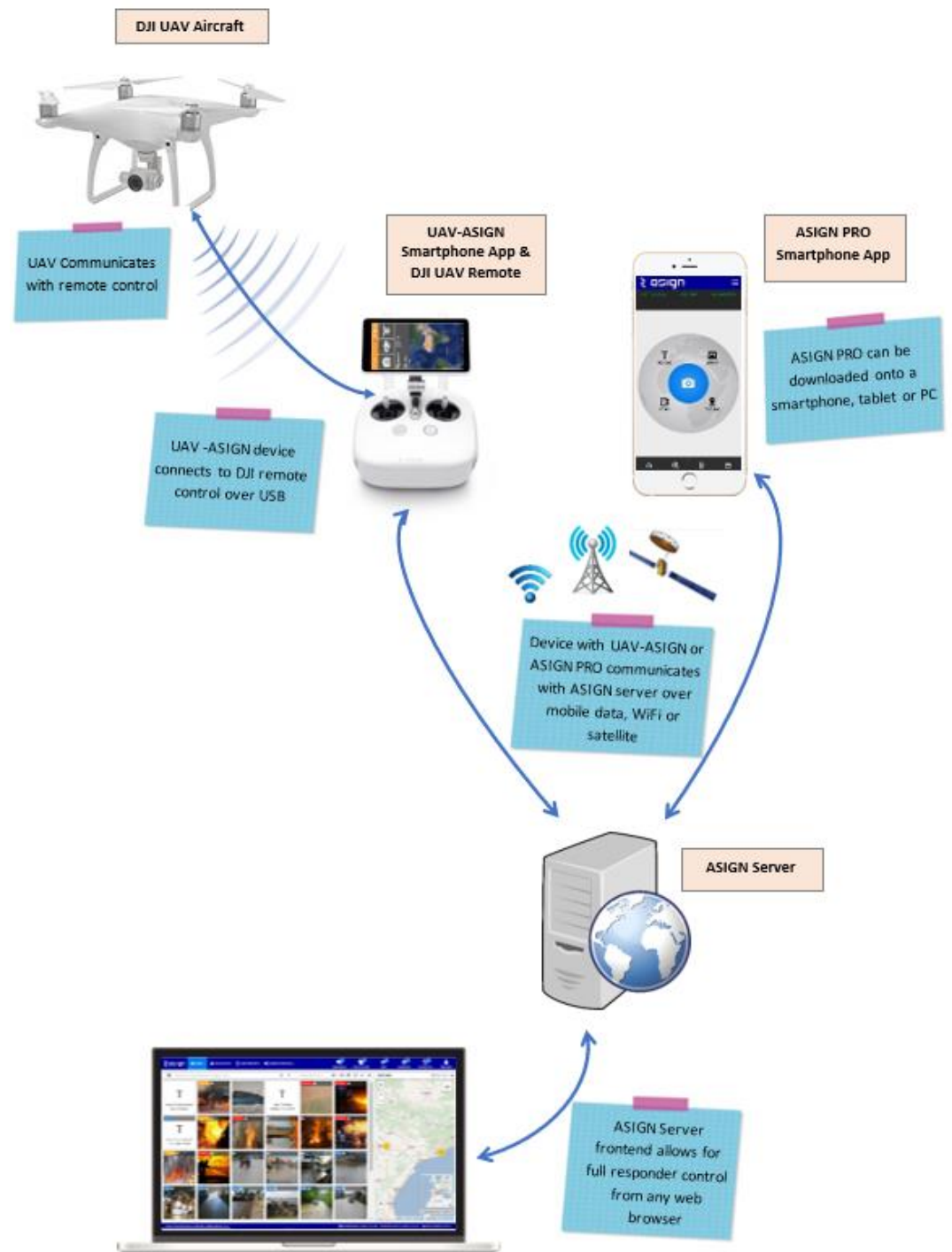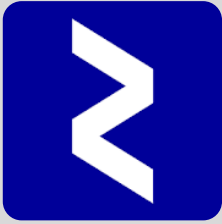
2. ASIGN PRO SMARTPHONE APPLICATION OVERVIEW

ASIGN PRO comprises the following features:

- Camera feature for photo and video capturing
- Text Messages
- Forms
- Media Library
- Tracking
- Live Mission Stream
- Geo-Alerts
- Live Import
- Collections
- UAV Mode
- Import from professional cameras and GoPros
- Menu button to log in/out and edit settings

To access the second line of features (UAV Mode and import) on the ASIGN PRO main screen, click and slide the bottom features bar up.
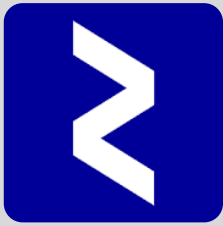
2.1 LOGIN

Before using any of the app features, you must login to your ASIGN PRO server by tapping on the menu (☰) button in the top-right hand corner.

This shows the settings panel from where you may log in with your username and password, plus select the server which you are using. If you are using the main ANSUR server, under 'server host' type in asign.ansur.no

Once logged in, you should see the mission you are active in on this tab. On the main page, check the 'Connection Server Status' icon at the top is green to make sure that the connection to the server has been established.
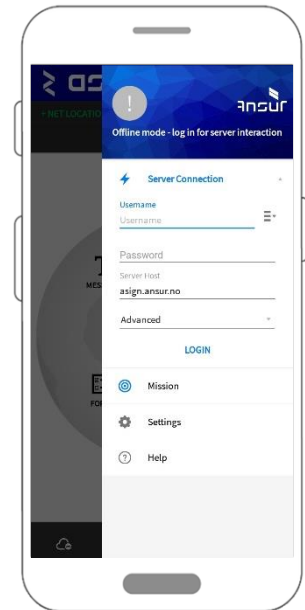
2.2 CAMERA

Using the camera feature you can take and send geo-tagged photos or video with your smartphone. In the bottom row of the feature there are controls to switch between video/photo modes, and a settings button that when tapped brings up extra controls to configure autofocus and flash.

Once a photo is taken, a dialog box will appear, allowing you to add a caption, record and attach a voice caption, set the photo or video's priority level, and then "Send" or "Discard" the photo.

If "Automatic data communication" is switched off in the Settings feature, you'll also have the option to "Save" the photo to your library without sending it straight away to the server.

Note that you can select in what quality you want to send the preview of the photo to the ASIGN Server, as will be explained under Section 3, 'Settings'. You can also select to send 'Regions of Interest' in full quality to highlight certain aspects within a photo, as will be expanded upon under section 2.6 'Library'.

2.3 TEXT

Use the Message feature to send geo-tagged text messages to the server. Here you can see your current location details and enter multi-line text to be sent.
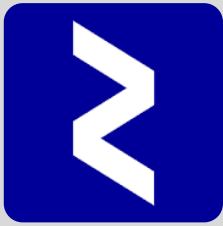
2.4 TRACKING

Tracking enables the user to use their phone as a tracking device and to send the track back to the ASIGN Server, with all the photos and videos taken on the track shown on the route map. This feature can be used, for example, to ensure user safety or for increased field coordination. To enable tracking, select it on the main screen and turn the function 'On' and name your new track. Select how often the application should record your location, and how often it should send that information to the server. If on foot, the recording interval can be larger as distance is travelled slower than for example by car. The intervals in which the tracking data is sent can be made larger as well if tracking is not particularly urgent or if batter longevity is a concern. Once finished tracking, turn the tracking function 'Off' again. To see your previous tracks, select ´Track history' at the bottom of the screen. Selecting a track will show the route taken and the observations collected on that route and will also allow you to share the track onwards through email or other applications installed on the smartphone.
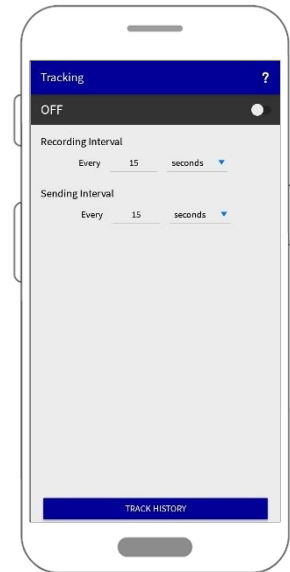
2.5 FORMS

Two types of forms will be available – assessment forms and collaborative reports. Assessment forms can be filled out by one individual as often as they may want. A collaborative report on the other hand allows for several people to work on one report at the same time and can only be filled out once by the user, although they can later edit their answers after submission. Collaborative reports enable several teams or individuals to work on different sections of the same report, in a sense like passing around a piece of paper which can be filled out by multiple people but compiled into one resulting document.

2.5.1 Assessment forms

Select the Assessment form you want to submit and fill out with the relevant data. The forms may have sections that are required or not, that necessitate an input in a certain format (e.g. numeric, email, phone number, etc.) or will also allow you to take and attach pictures or select them from your ASIGN library.

2.5.2 Collaborative reports

When a new Collaborative Report becomes available, field users will be informed of this by an automatic push notification on their smartphone. Once this notification arrives, the form will be available to fill out both online and offline.

Fill the report out, clicking 'Save' to save the report without sending it, while 'Send' both saves and sends the report to the ASIGN Server and makes it available for other team members to see as well. By clicking send, if the user is online, the report will be sent instantaneously, if offline, the application will send it automatically once connection has been established.

After you have submitted answers to a report, you can edit this report by selecting it a second time. Clicking the collaborative report a second time will show both the user's own contributions, plus that of the other users. The users can edit both their own and their teammates inputs (if they have an Operator or Administrator account) or add more details to their report. Some questions may require a comment for clarification as to why the answers are being edited. A field user can always however see (or delete) their own complete report within the 'Library', swiping over to or clicking on the header 'Reports'.
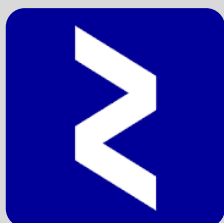
2.6 MEDIA LIBRARY

The Library feature allows you to view all observations stored in ASIGN PRO. Observations are saved under type, and you can click or swipe over to 'Photo', 'Text', 'Video' and 'Reports'.

Tapping on an observation of your choice brings up a context menu for further action. For all observations you can:

- View
- Delete
- Send to your ASIGN server if unsent
- See the location on a map

For non-text or form observations, you can also:

- Send photo regions of interest (ROIs) directly to the server
- Set category, priority, and caption
- Correct the location if required
- Export to device photos to phone
- Share
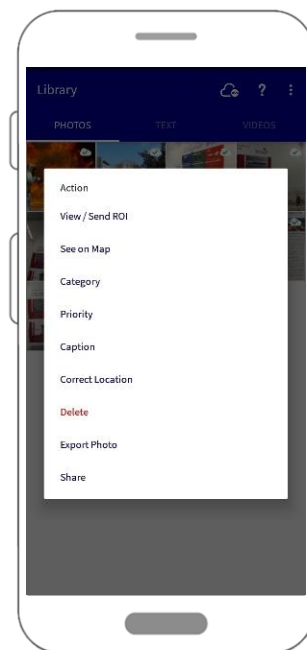
2.6.1 Sending a 'Region of Interest' (ROI)

To save bandwidth and send observations quickly when networks are constraints, photos sent with ASIGN PRO from the field to the server are sent in ´web quality´. This means that the receiver of gets a low-quality version of the original photo in which one can see what is happening, but if the photo would be zoomed into, it would look pixelated.

To keep full precision capabilities and concentrate bandwidth on where it matters, in case there is a particular area within the photo that should be highlighted to the ASIGN Server, you can select a ´Region of Interest´ from the ASIGN PRO application and send it in full precision. One is also able to pull a ´Region of Interest´ from the ASIGN server side, but in the field one may better be able to judge what is of interest and needs to be seen in full precision.

To send a ´Region of Interest´ (ROI), tap on the picture from which you want to send a ROI in your library, and select 'Send ROI'. Tap ´Send ROI´ again and draw a box on the screen over your ROI. To draw a different ROI box, simply tap on the screen again and draw a new box. Once you have selected the ROI you want to send, click ´Send ROI´.
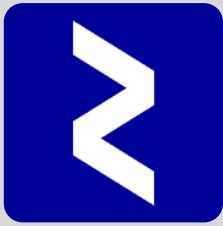
2.7 LIVE MISSION STREAM

The Live mission stream feature enables field users to see the observations their colleagues within the same mission have been submitting. This includes pictures, videos, texts and tracks, providing the field team a better common operational picture. What makes the live mission stream particularly useful when in the field is that, similar the sending of data, the ASIGN PRO application can receive data even when in low bandwidth situations.

To use this feature, select 'Live Mission Stream' and turn it On. The observations within your screen will be divided into 'Last 24 Hours' and 'Older'.

To view the details about an observation, clicking on the observation will bring you to the information panel which will show who sent it, when, and from where. You can also select to navigate to the location in which the observation was taken, which will open your smartphones map application.
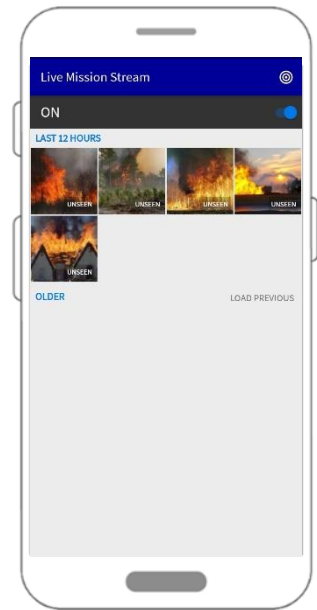
2.8 GEO-ALERTS

The Geo-Alert function warns users that they are entering a dangerous or exiting a safe zone. To enable this function so that you are warned if approaching such zones, go to 'Geo Alerts' and slide the 'Off' button to 'On'. When entering dangerous or exiting safe zones according to your GPS coordinates, you will now get a notification alerting you on the status of the zone.

You can also configure how often ASIGN PRO should detect your location changes by selecting 'Check Intervals'. There are 3 interval checking options for you to choose from – Low, Medium and High intervals, with location detection occurring from every 5 seconds to 1 minute. Select depending on your current priority, whether it is to be informed as quickly as possible if you are entering or exiting a danger zone, or if the phone battery should be used sparingly for this activity.

Within the Map, you can see the zones that have already been placed by the online ASIGN Server users. Select to 'Check Updates' to check if any new geo-alerts have been placed by the ASIGN Server.

You can also create your own Geo-Alerts from ASIGN PRO. To do this, select 'Add zone'. This will take you to the Geo-Alert setup, which allows you to name the new zone, select the type of zone you are drawing, either a Safe or Danger zone, and how you and the Online Servers should be notified in case you go in or out the zone. Select 'Entry Alarm' if you or the control center should be notified if entering the designated zone. The 'Me' tab allows for the configuration of your personal alarms, the 'Control Center' tab warns the control center if you enter the zone, and both configures the notifications for both. Type in the warning message you receive and select whether you want to be warned by your smartphone playing an audio, vibrating or waking up the screen. You can do the same with the 'Exit Alarm' option if a notification should be given when you exit the designated zone.

As a last step, you can move and resize the geo-zone on the map. Move the circle to the safe/danger zone of your choice by clicking and dragging the white cross with arrows in the center. To change the size of the zone, click and drag the white perpendicular arrows on the external perimeter of the circle. Click and drag outside of the geo-zone circle as you would on another map application to zoom in and out on the map.

Select 'Save' and your new Geo-Alert will be archived and updated.
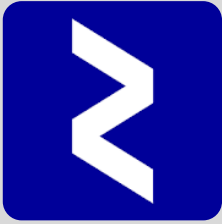
2.9 LIVE IMPORTS

Live Imports, when turned on, will import all the photos taken or received in your smartphone Library automatically to the ASIGN Server. This means that if the feature is turned on, you can take photos with your smartphones camera without opening the ASIGN app again or manually uploading the photos.

This feature can also be used to upload photos imported from an external camera such as a professional DSLR, 360insta or GoPro.

2.10 COLLECTIONS

The Collections features enables you to send a group of pictures, either taken through the ASIGN PRO application or stored on your smartphone libraries under one 'collection' for easier filtering and interpretation on the server side. Select the bottom right-hand plus + sign and add a description of your new collection. To add observations, again click on the bottom right hand +, which enables you to add new text, take new pictures, select observations from your ASIGN Library or import from your smartphone album. This is the only method that allows for the importation of images which are not taken through the ASIGN PRO app.

Once your collection is ready, click 'Send' to communicate it with the ASIGN Server.