

Blade Expert

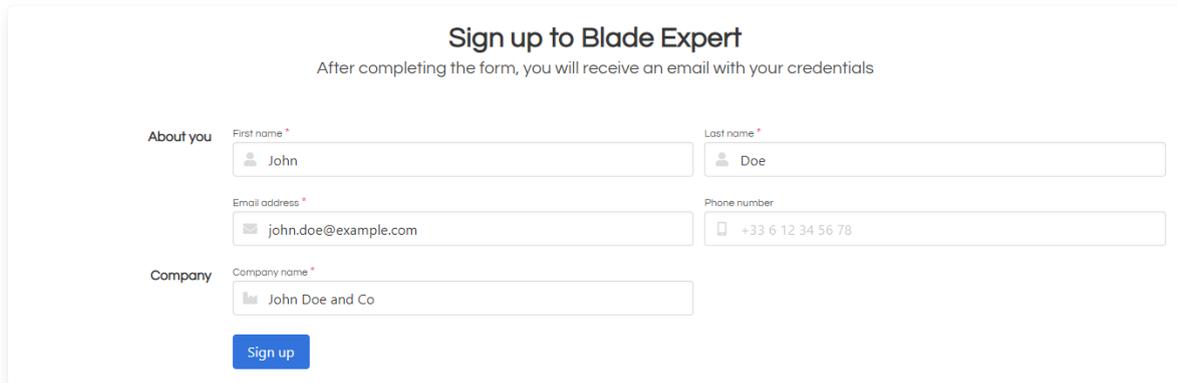
Quick start tutorial Using website and mobile app

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In this tutorial we will run a typical scenario of blade inspection, with a free account on Blade-Expert.

1. Create your free account

Go to <https://app.blade-expert.com> and fill the required informations.



The screenshot shows a registration form titled "Sign up to Blade Expert". Below the title is a subtitle: "After completing the form, you will receive an email with your credentials". The form is divided into three sections: "About you", "Company", and "Sign up".

- About you:** Contains four input fields: "First name" (with a person icon) containing "John", "Last name" (with a person icon) containing "Doe", "Email address" (with an envelope icon) containing "john.doe@example.com", and "Phone number" (with a phone icon) containing "+33 6 12 34 56 78".
- Company:** Contains one input field: "Company name" (with a building icon) containing "John Doe and Co".
- Sign up:** A blue button labeled "Sign up".

The company name represents the company you are working for. It will appear on reports. In the free account, all the windfarms you will add will be attached to this company.

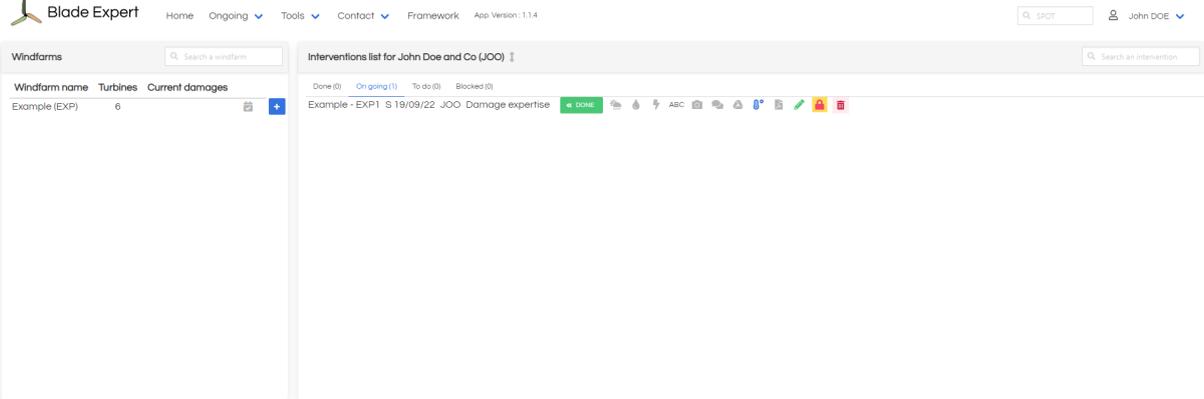
2. Sign-in to Blade Expert

You have received an e-mail with your password to log-in to Blade Expert. Click the link and sign in to BladeExpert.

You will then land on the main dashboard :

- On the left you will see the list of your wind farms.
- On the right you will see the list of the interventions you have created. An intervention is always attached to a wind turbine.

As you can see, there is a sample windfarm already created, as well as a sample intervention on the wind turbine #1 :



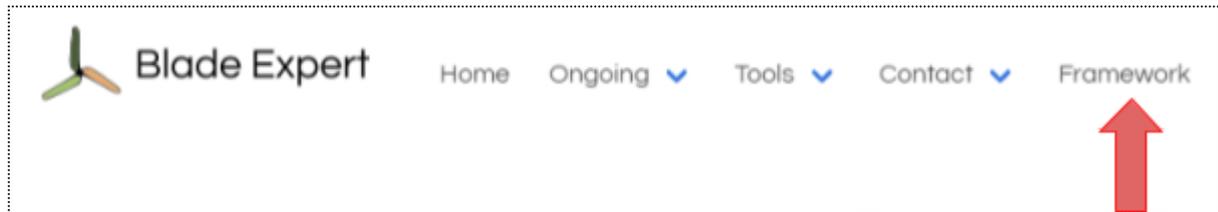
The screenshot displays the Blade Expert dashboard. At the top left is the logo and name 'Blade Expert'. The navigation menu includes 'Home', 'Ongoing', 'Tools', 'Contact', 'Framework', and 'App Version 1.1.4'. On the top right, there is a search bar with 'SPOT' and a user profile for 'John DOE'. The dashboard is divided into two main panels. The left panel, titled 'Windfarms', contains a table with the following data:

Windfarm name	Turbines	Current damages
Example (EXP)	6	

The right panel, titled 'Interventions list for John Doe and Co (JOO)', shows a list of interventions. The first entry is 'Example - EXP1' with a status of 'DONE', a date of 'S 19/09/22', and a description of 'Damage expertise'. The interface includes various icons for actions like edit, delete, and refresh.

3. Custom your datas

You can custom your company, wind farms and so on. To do that, you can click on the "Framework" button, located in the top menu :



a. Company

Update the company informations if need :

- The company code is a short name given to your company and appears at some places in the website.
- You can drag and drop your logo on the last cell of the table (use preferably a .png image file without background).
- Don't forget to save your modifications with this button : 

b. Windfarms

- Here you can edit your wind farms, and add new ones if you wish.
- For the purpose of this simple tutorial, we will stick with the Example wind-farm

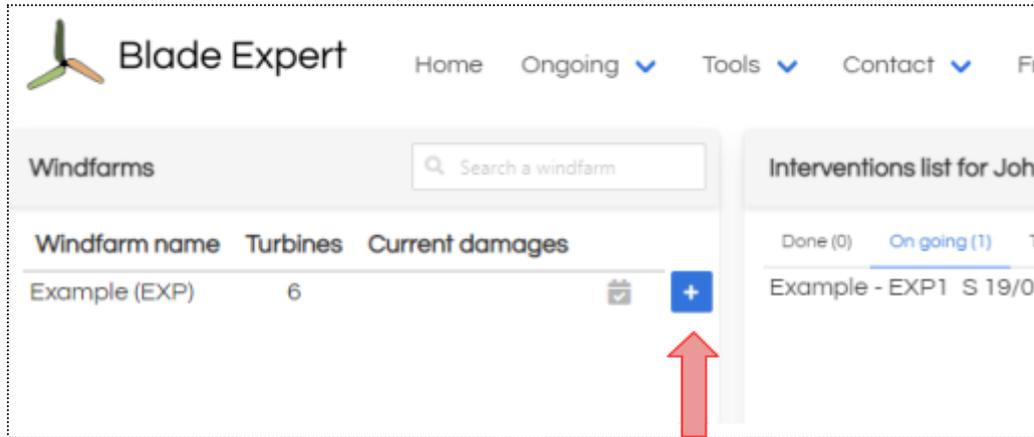
c. Wind turbines and blades

On the same way, you can edit wind turbines and blades.

4. Create an intervention

For the tutorial, we will create an intervention on turbine #2.

Go to the home page (click "home" on the menu), and click on the "Plus" button next to the wind-farm name :



This opens a pop-up in which you can set the details of the intervention.

Please note :

- You can select multiple wind turbines to create an intervention on each one you select.
- You can add technicians to the intervention : these persons will be able to see the intervention in the mobile app (we will see that just after).
- The status of the intervention is important : if you want to be able to see it in the mobile app, **the status has to be "on going"**.
- The project fields are optional : you may fill the project number, which represents a number internal to your company, as well as an order number from your customer, and a link (e.g. google drive or any link that you want to refer to).

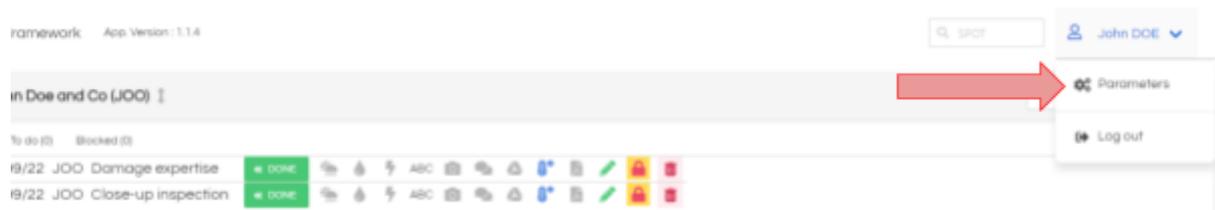
The screenshot shows a pop-up form titled 'Create intervention(s) on Example'. The form is divided into several sections. The 'Contractor and Turbines' section has a dropdown for 'Performer company (Contractor)' set to 'John Doe and Co' and a dropdown for 'Select turbines' set to 'EXP2'. The 'Users' section has a dropdown for 'Select the technicians affected to these interventions' set to 'All (1)'. The 'Dates' section has a 'Start date' field set to '20/09/2022 10:54' and an 'End date' field with a placeholder 'jj/mm/aaaa --:--'. The 'Type' section has two dropdowns: 'Access mean' set to 'Rope access' and 'Intervention type' set to 'Close-up inspection'. The 'Status' section has a dropdown set to 'On going'. The 'Project' section has two text input fields: 'Project number' and 'Customer order' (with a placeholder 'Order number'). There is also a text input field for 'Project link on Google drive' with a placeholder 'Project link'. At the bottom of the form, there are two buttons: 'Create intervention(s)' and 'Cancel'.

5. Use of the mobile app

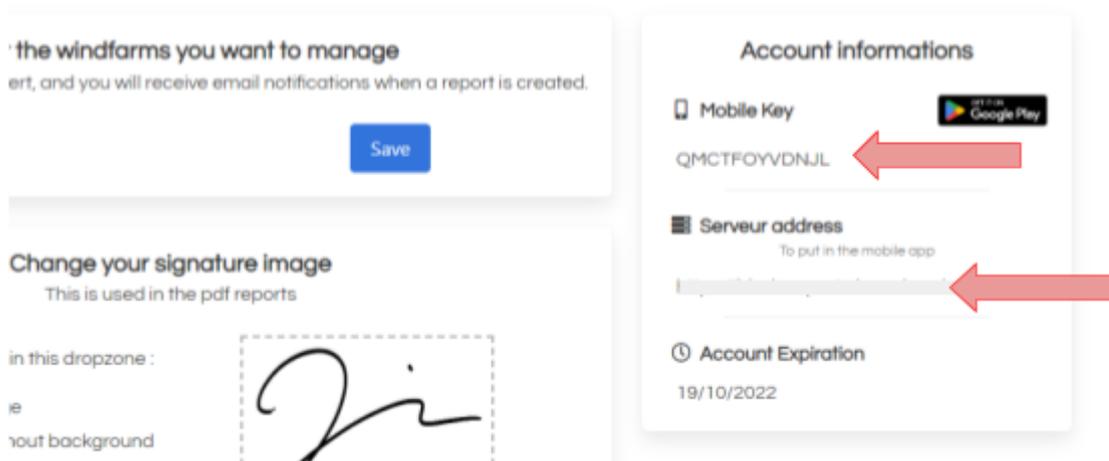
This is not mandatory, but you can use the BladeExpert android app to fill the datas of your intervention :

- Weather,
- Damages,
- Drain hole states,
- Lightning protection system measures,
- Pictures

For using the mobile app, you need some informations to parameter it : you can find them by clicking your username / parameters on the BladeExpert web app :



Update your parameters

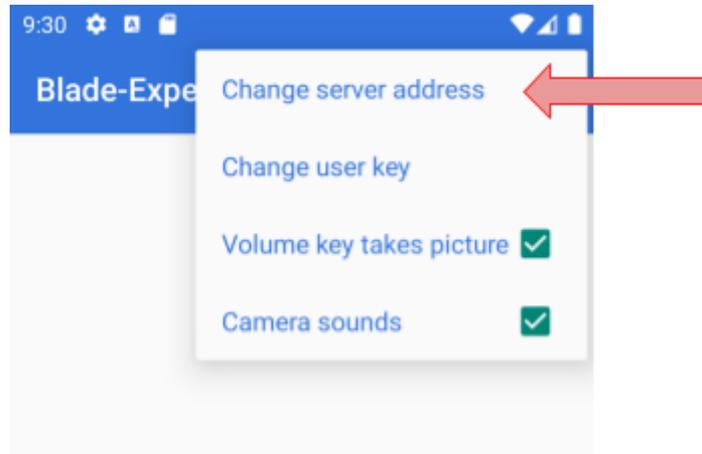
A screenshot of the 'Update your parameters' page in the BladeExpert web application. The page is divided into two main sections. The left section is titled 'the windfarms you want to manage' and includes a 'Save' button. The right section is titled 'Account informations' and contains several fields: 'Mobile Key' with the value 'QMCTFOYVDNJL', 'Serveur address' with a note 'To put in the mobile app', and 'Account Expiration' with the date '19/10/2022'. A red arrow points to the 'Mobile Key' field, and another red arrow points to the 'Serveur address' field. There is also a 'Change your signature image' section with a signature image and a 'Save' button.

⚡ The mobile key will be assigned on the first phone where you use it : it will be impossible to use it on another phone after !

On your phone, open google play, find the app by searching "BladeExpert", install it and launch it.

You will arrive on the main view, which is the list of interventions.

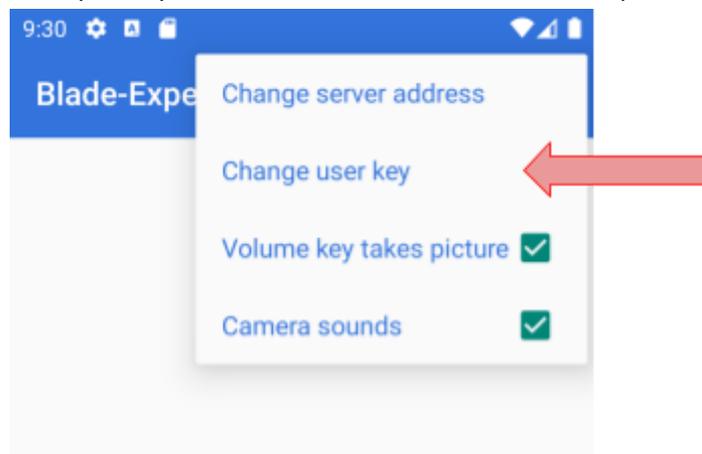
To configure the app, click on the 3 dots in the upper right corner, and select "change server address" :



Enter the server address you retrieved from the BladeExpert web app on the previous page, and save.

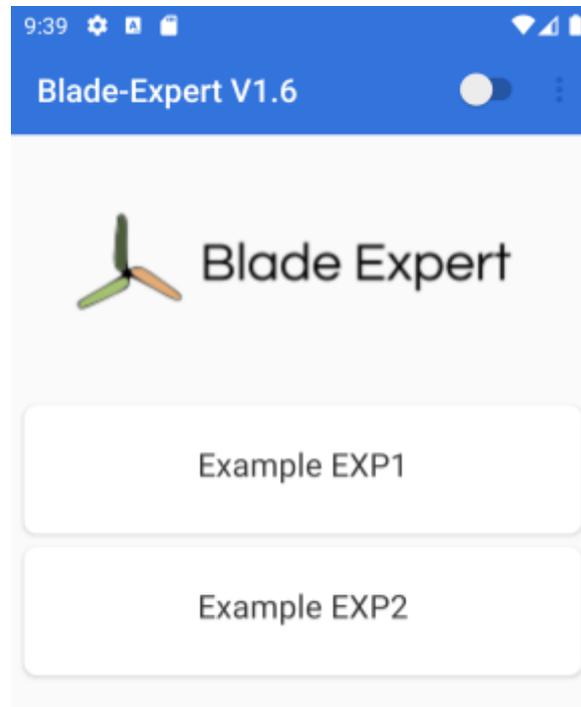
You will now see the full Blade Expert logo.

Now, enter the mobile key that you also retrieved from the BladeExpert web app :



You will then see the interventions recovered from the Blade Expert web application :

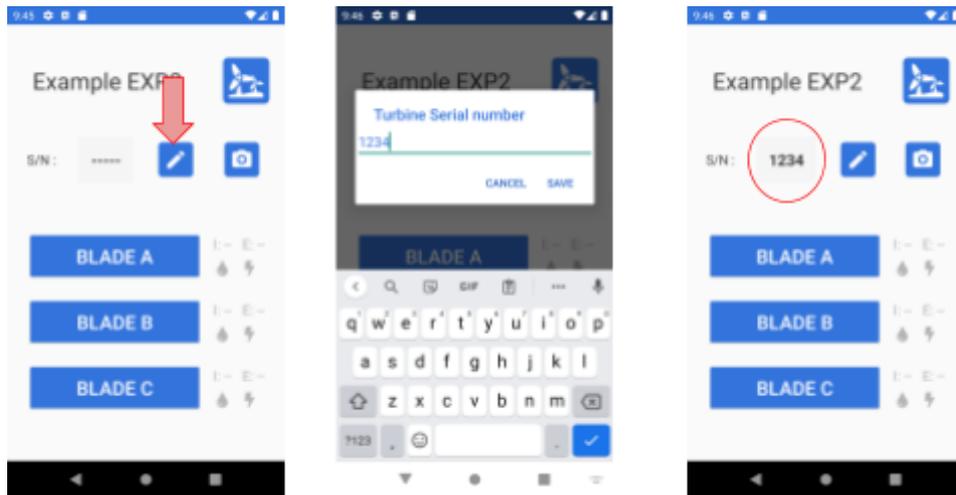
⚡ Be careful : you will only see interventions that have the “On Going” status, and which on you are enrolled (you have to be a member of the intervention technicians).



For the purpose of this tutorial, we will :

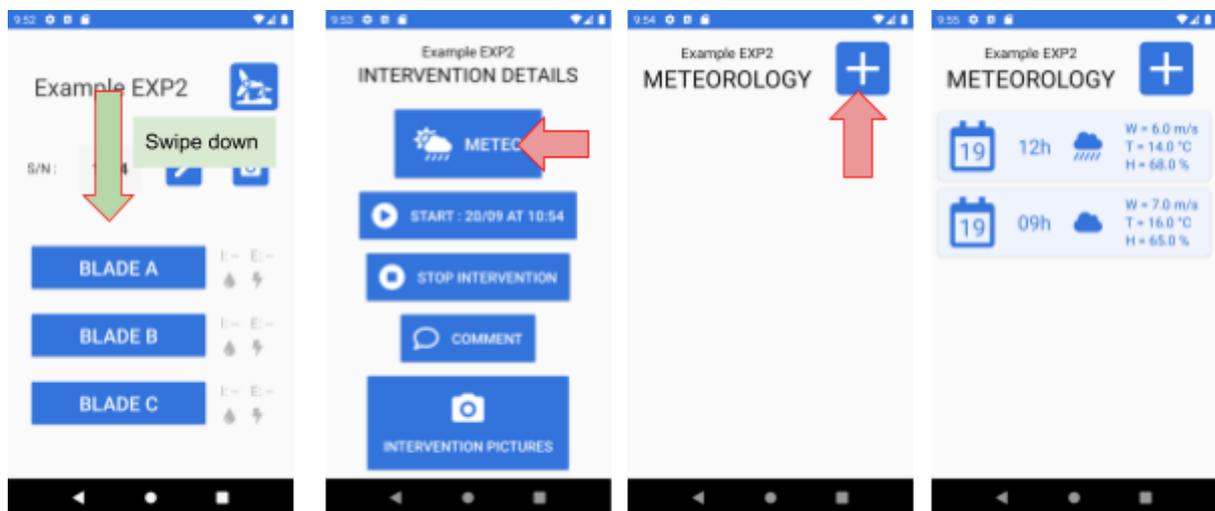
- Set the turbine Serial number and take a picture of it,
- Add weather,
- Set the blade A Serial number and take a picture of it,
- Add 2 damages on blade A,
- Complete drainage holes check and LPS measures on Blade A

Click on the intervention you want to work on (EXP2 in our case).
Click on the pen next to the S/N field (this is the wind turbine serial number), fill the field and save :



To take a picture of the wind turbine, just click the camera button next to the pen button.

We will now add the weather : swipe down the name of the turbine, this will open the view related to the intervention informations, and click the weather button, and the "Plus" button to add weather lines :



If you need to edit a weather line, just tap on the intended line and make your modifications.

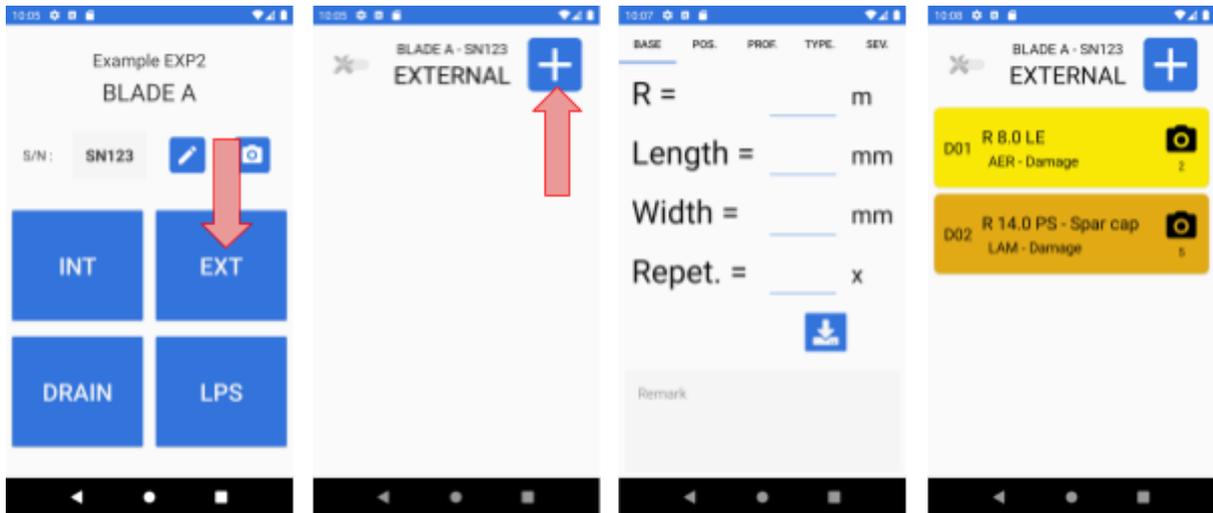
When you have finished, tap the return button or swipe up to come back to the Turbine view.

Then click on blade A, we will continue by adding damages on it.

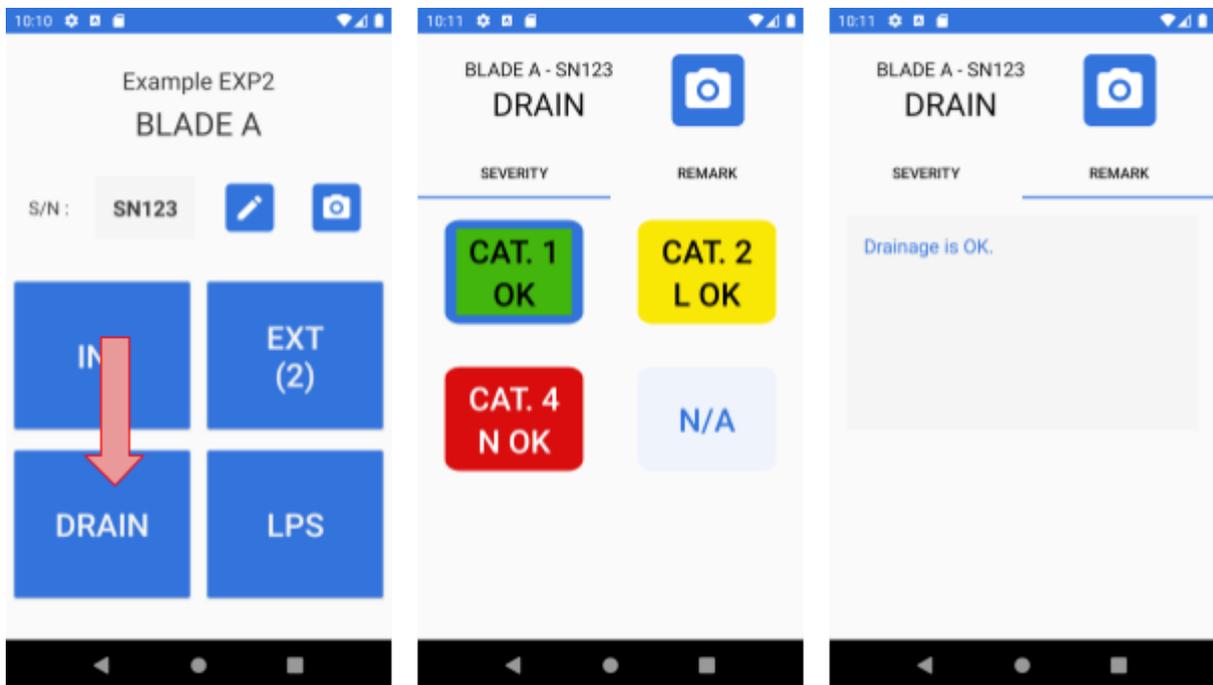
Once on the Blade A, we can proceed to the editing of the serial number : this is exactly like the wind turbine serial number. Let's say we put SN123 as serial number, and we take a picture of it.

Now we will add damages to the external of the blade (outdoor) : click on the EXT button. Then, click on the "Plus" button to add a new damage.

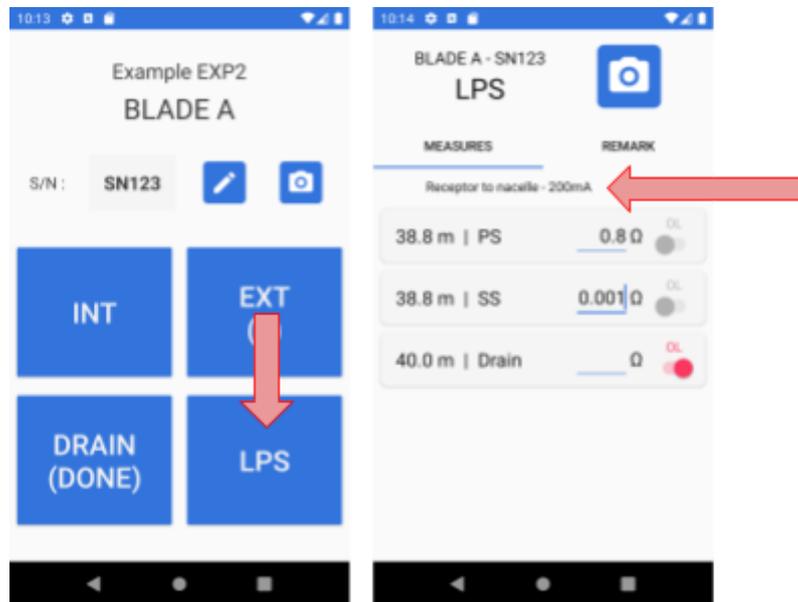
Fill the fields to complete the damage creation. Once the damage category (damage severity) is selected, the camera is automatically launched to take pictures of that damage.



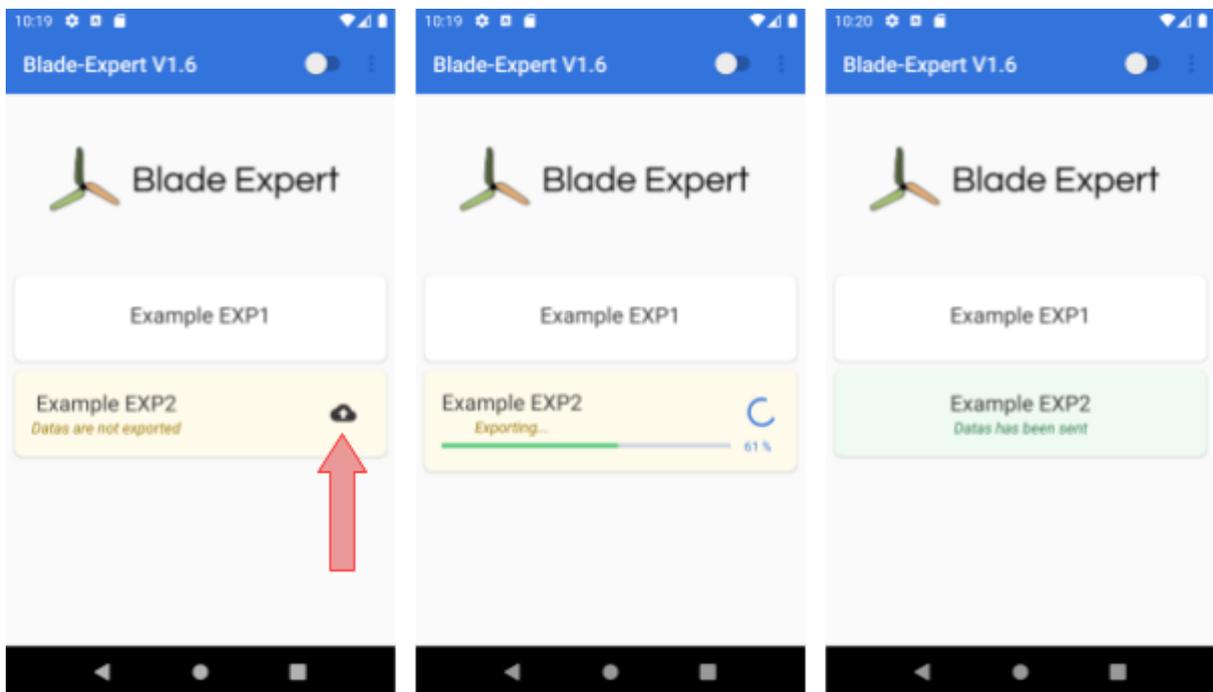
To set the drain hole status, come back on the blade page, and click on the DRAIN button. Select the appropriate severity and add an optional remark.



To fill the LPS measures up, come back to the Blade view and click the LPS Button. Select the measurement method you used, and fill the measurements. There is also the possibility to set the value of a lightning receptor to OL (over limit).



Now, let's say we are done on this intervention. Come back to the intervention list. We can now export our datas to the server, by clicking the "cloud" button : The intervention is being exported and you can see the exportation progress.



6. Review the intervention datas

Now let's go back to the web application.

We will review the datas of our intervention and validate it.

On going back to the main dashboard, you can see that our intervention has changed a bit :

Interventions list for John Doe and Co (JOO) ↓

Done (0) On going (2) To do (0) Blocked (0)

Example - EXP1	S	19/09/22	JOO	Damage expertise	☑ DONE	☁	☔	⚡	ABC	🔧	🔍	📄	🔒	🗑️
Example - EXP2	S	20/09/22	JOO	Close-up inspection	☑ DONE	☁	☔	⚡	ABC	🔧	🔍	📄	🔒	🗑️

Some weather has been added

The blade A has some damages, but they are not validated yet.

We will validate the weather : click on the icon, review and edit the datas, and tick the checkbox "validated".

EXP2 - 20/09/22 Weather

Date and time	Weather	Wind	Temp.	Humidity
19/09/2022 09:00	Cloudy	7	16	65
19/09/2022 12:00	Rainy	6	14	68
jj/mm/aaaa --:--				

Validated

Save Cancel

We will now validate the drainage system status : click on the “drop” icon to open the validation pop up, tick the checkbox “closed” on blade A, and tick the box “overall validation”.

The screenshot shows a web form titled "EXP2 - 20/09/22 Drain holes state". It contains three columns for "Blade A", "Blade B", and "Blade C".

- Blade A (SN123):** Category: Cat. 1, Description: "Drainage is OK.", Closed checkbox: .
- Blade B (####):** Category: (empty), Description: "Add a remark...", Closed checkbox: .
- Blade C (####):** Category: (empty), Description: "Add a remark...", Closed checkbox: .

At the bottom, there is an "Overall validation" checkbox which is checked () and "Save" and "Cancel" buttons.

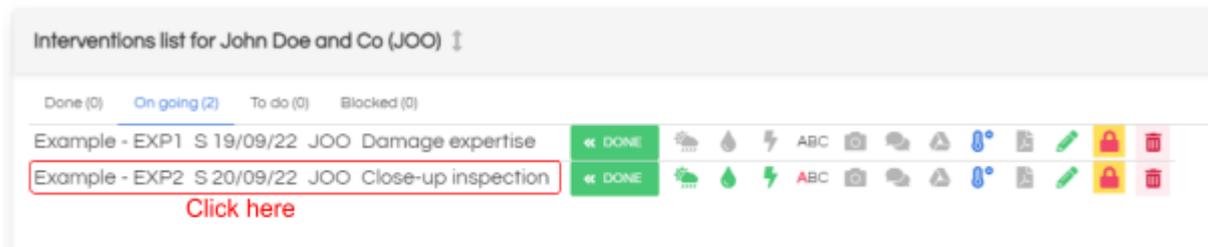
We will now validate the LPS status : click on the “lightning strike” icon to open the validation pop up, tick the checkbox “closed” on blade A, and tick the box “overall validation”.

The screenshot shows a web form titled "EXP2 - 20/09/22 LPS measures". It contains three columns for "Blade A", "Blade B", and "Blade C".

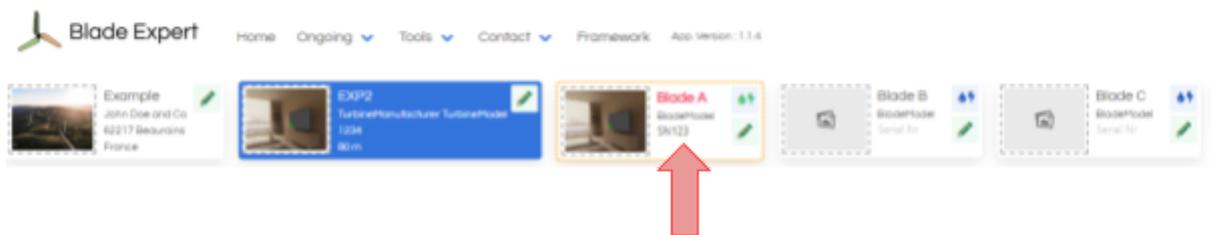
- Blade A (SN123):** External receptor to nacelle @ 200mA, 38.8 m SS (0.001, Cat. 1), 38.8 m PS (0.8, Cat. 1), 40 m DRAIN_RECEPTOR (OL, Cat. 4), Overall Category: Cat. 4, Description: "Add a remark...", Closed checkbox: .
- Blade B (####):** Method used, 38.8 m SS (Cat. 1), 38.8 m PS (Cat. 1), 40 m DRAIN_RECEPTOR (Cat. 1), Overall Category: (empty), Description: "Add a remark...", Closed checkbox: .
- Blade C (####):** Method used, 38.8 m SS (Cat. 1), 38.8 m PS (Cat. 1), 40 m DRAIN_RECEPTOR (Cat. 1), Overall Category: (empty), Description: "Add a remark...", Closed checkbox: .

At the bottom, there is an "Overall validation" checkbox which is checked () and "Save" and "Cancel" buttons.

Now, click on the intervention name in the list : this will open the intervention in a new page : we will be able to review our damages.



Click on the blade A to view the damages of this blade :

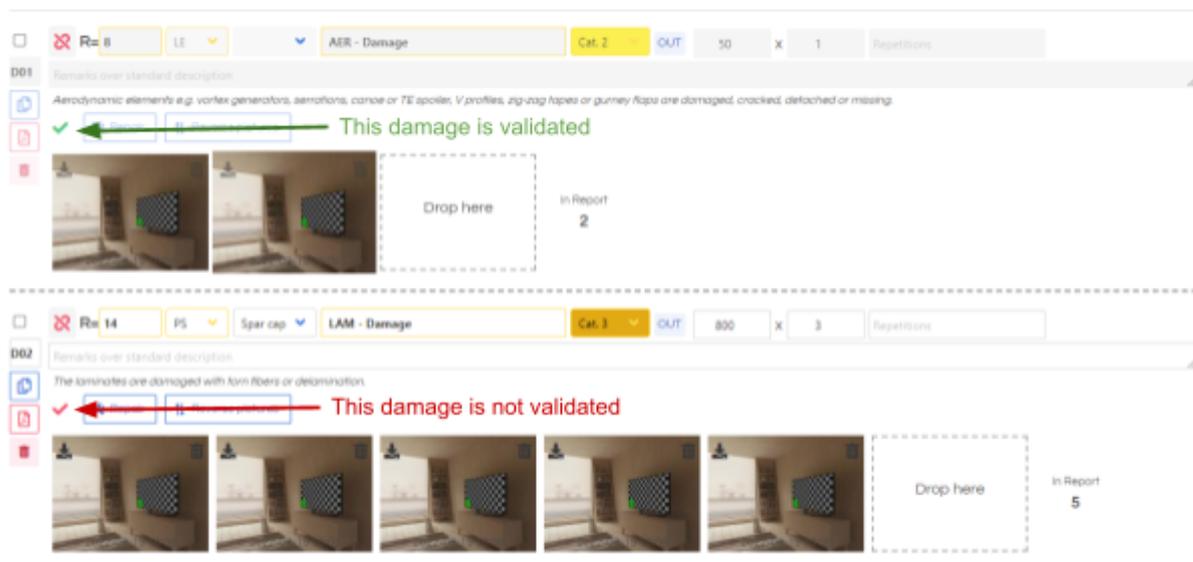


For each damage, you can edit its characteristics, remove or add pictures. You can also add a repair to them if you need to.

The important thing is the validation of each damage : click twice on the red check of each damage to pass them in green : this will mark the damage as validated :

- The modifications on it will be locked,
- It will be included in the report.

It is mandatory to validate all the damages in order to validate the intervention.

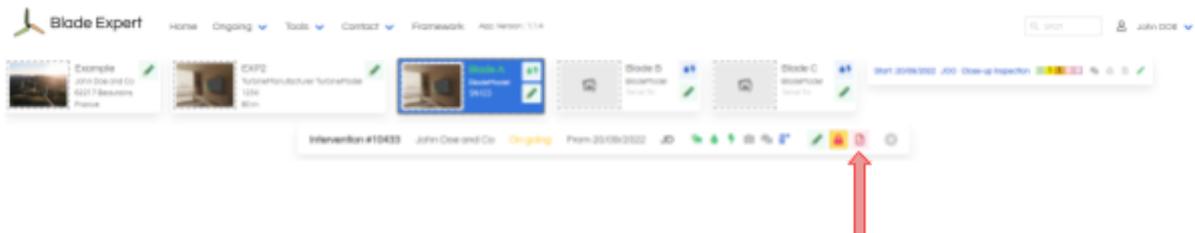


7. Intervention validation

Now that everything is validated in our intervention, we can validate it itself. This is important because it will :

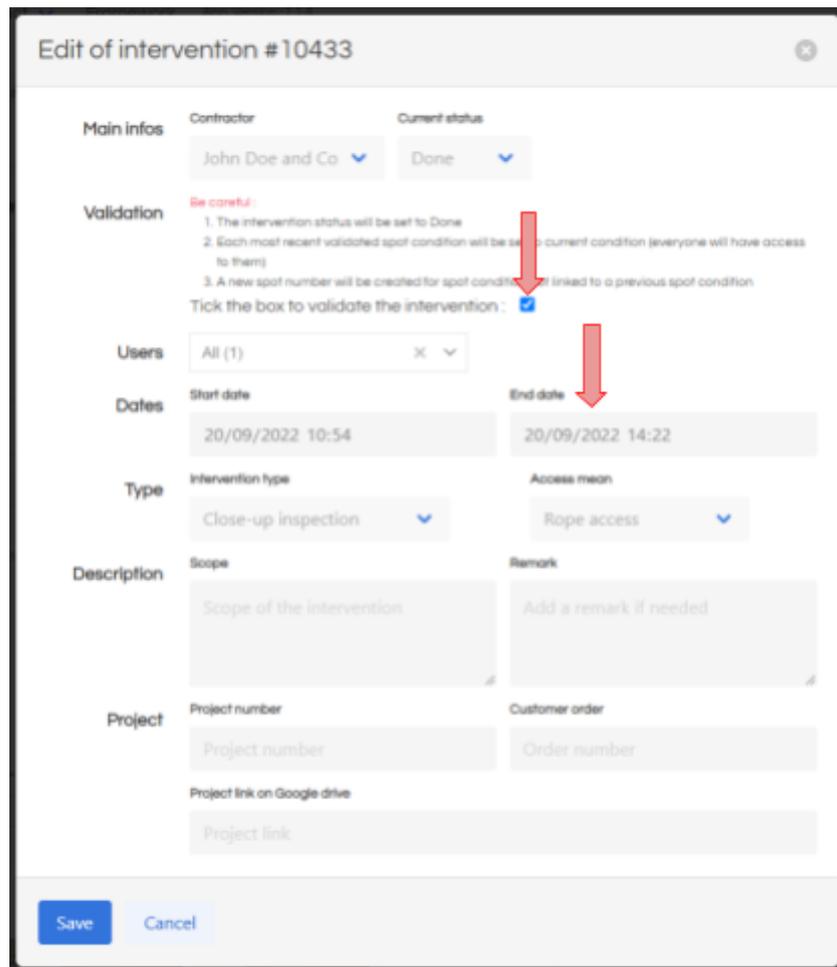
- Check that everything is ok in the intervention,
- Create a unique identifier code for the damages,
- Update the current state of all damages to show them on the home page.

Before validating the intervention, you can preview what the report will look like. To do so, just click on the PDF button on the intervention strip :



When you are satisfied, you can validate the intervention :

Click on the green pen in the intervention strip, make sure that the intervention has an end date, tick the validation checkbox and click save.

The image shows a screenshot of the 'Edit of intervention #10433' form. The form is divided into several sections: 'Main infos' (Contractor: John Doe and Co, Current status: Done), 'Validation' (with a 'Be careful' warning and three numbered instructions), 'Users' (All (1)), 'Dates' (Start date: 20/09/2022 10:54, End date: 20/09/2022 14:22), 'Type' (Intervention type: Close-up inspection, Access mean: Rope access), 'Description' (Scope: Scope of the intervention, Remark: Add a remark if needed), and 'Project' (Project number, Customer order, Project link on Google drive). A red arrow points to the 'End date' field, another red arrow points to the validation checkbox, and a third red arrow points to the 'Save' button at the bottom left.

8. Reports



You will notice that by default there is a watermark printed on reports : This is because you are using a free account.

It is possible to remove this watermark by paying for the intervention.

If you pay the intervention, it will be unlocked and you will be able to generate reports on it without restriction.

Note that if you make a payment, your account expiration date will be extended as well.

To proceed to intervention payment, click on the lock button available on the main intervention list, or on the intervention strip. You will be redirected to a payment page, where you will be able to select the desired interventions and pay for them in one shot.



If an intervention has been unlocked, the lock button will become green.



It is possible to generate a static pdf report and add some personalization, including a custom conclusion.

This will also add your signature to the report. By default there is a mock signature, but you can upload your own signature in the user parameters page.

To generate a report, simply go to the menu Tools / Intervention reports.

On the left part, you will see a list with all your validated interventions. Click on the one you want to generate the report.

You can then fill the conclusion field up, and select the options as required.

Check the editor and approver checkboxes to sign the report and click on "Generate and save report".