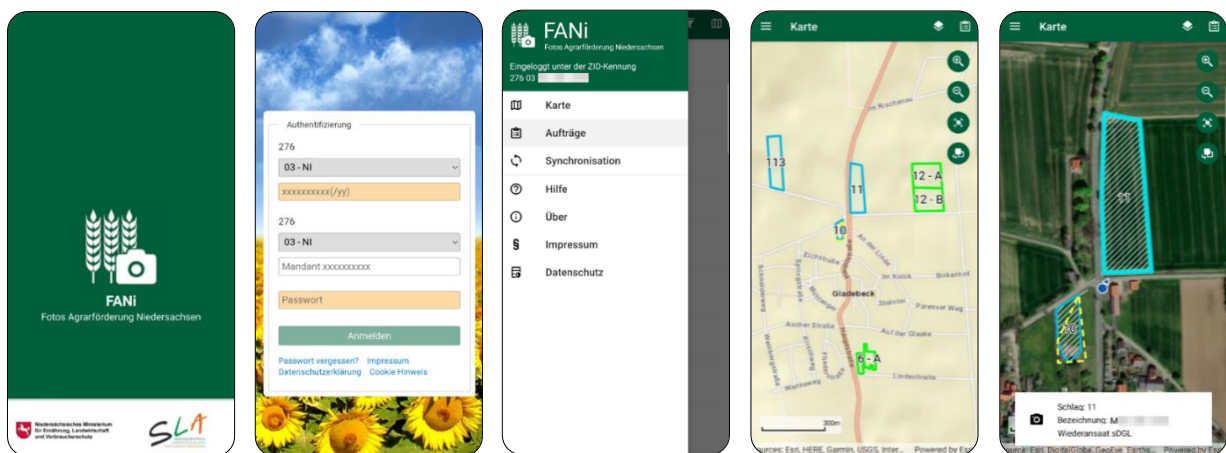


GI Foto App

Application accompanying GI Foto App to support farmers in the context of EU-agricultural subsidies (EU-CAP)



Background

With the introduction of area monitoring, the inspection procedures in the context of EU agricultural subsidies are changing. In addition to the intensification of area monitoring methods (Sentinel-2 data), the farmers themselves are to be involved in the process of control and clarification in the future. And this is exactly where our GI Foto App comes in.

The GI Foto App is the next step to implement the new EU-policy in addition to our existing Solution GI Mobil RT VOK, which is used since 10 years in many federal states.

Consideration of current EU requirements

The conception of the GI Foto App was developed in cooperation with the SLA Niedersachsen according to current EU requirements. Care was taken to use current development technologies and methods.

- ✓ Georeferenced photo capturing (Geotagging)
- ✓ EU-CAP – conform

- ✓ Reliable and secure (e.g.: Single-User-Login via OAuth)
- ✓ Verification of the location determination based on the respective inspection procedure
- ✓ Preventing data tampering
- ✓ Continuous updating of the order data
- ✓ Always usable due to offline functionality
- ✓ Galileo-ready: supports the future Galileo services (HAS, OS-NMA) for highly accurate and tamper-proof location determination (hardware-dependent)
- ✓ Cross-platform for Android and iOS (WIN10 on request)

Configurable and flexible

Numerous contents and inspection functionalities can be configured by the agricultural administration. This means that the GI Foto App can be used in a wide range of applications, even outside of the application process.

Goals of the GI Foto App

- Supplementary application to EU area monitoring
- Integration and support of farmers in the application process
- Direct involvement in audits of individual case clarifications
- Quick and easy information about the current status of funding application
- Acceleration in the processing of funding applications
- Relief of the audit service of the agricultural administration

Direct involvement of the applicant

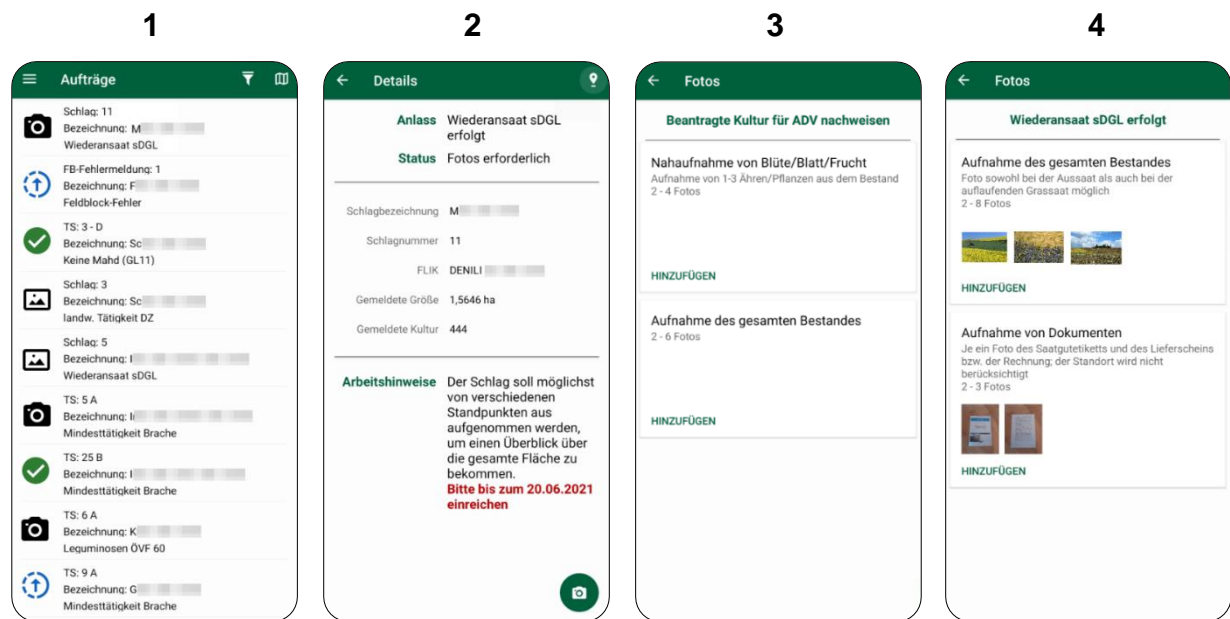
Using the GI Foto App, applicants can provide located photos and documents as evidence of condition, utilization or an activity.

Fast exchange between audit service and applicant

Our GI Foto App provides optimal support in the application process, in which a direct and fast exchange takes place between the audit service and the applicant. The applicant is directly involved in the process and can use the GI Foto App to transmit up-to-date information promptly and without media discontinuity.

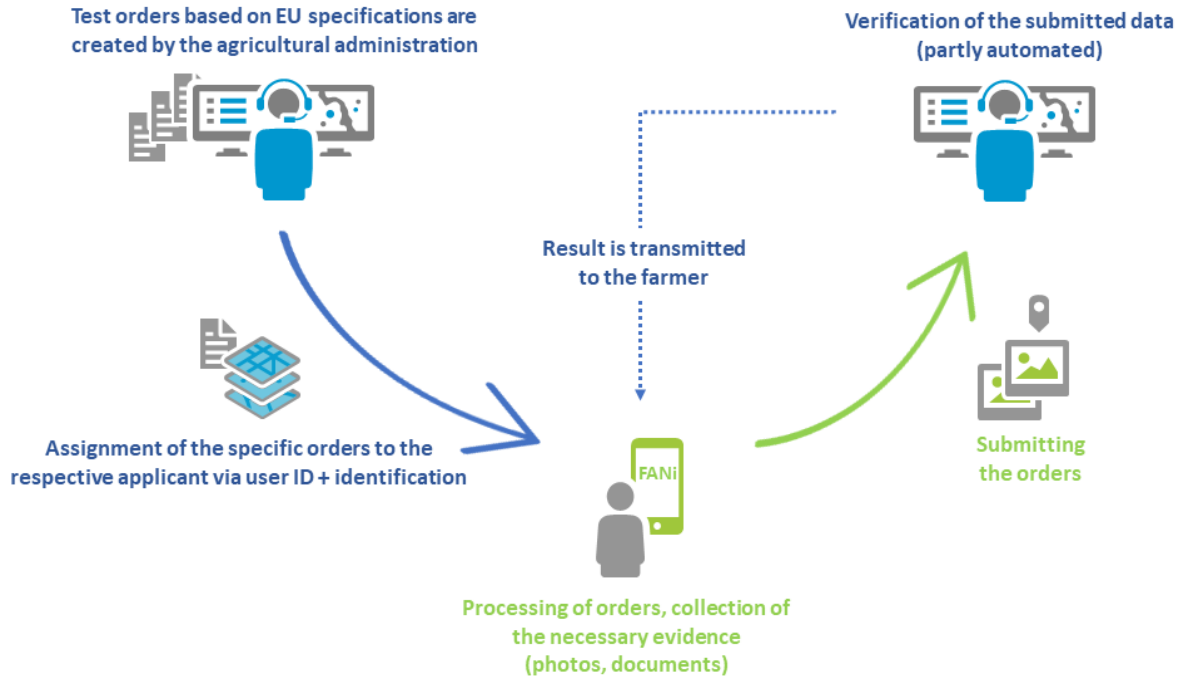
High usability

Within the app, the applicant is guided through the collection of the required evidence and gets supported, by this means a high level of usability:



1. The applicant can see at a glance which orders are open to do and which work steps are associated with them.
2. In the detail view, the exact work instructions are explained and the indication of the latest submission of the order is given
3. Within the scope of the working note, close-up photographs of flower/leaf/fruit as well as photographs of the entire crop should be added in the given example.
4. The captured images can also be re-selected, checked and e.g. exchanged again via the thumbnail view.

Workflow



At first the test orders created by the agricultural administration are provided and assigned to the applicant via GI Foto App.

They are displayed as a list view, and together with the corresponding area in a map view. Based on his current location, the user can orientate himself in the field and select the desired order. For better orientation, various background maps are available to him (e.g.: aerial photos, World Street Map).

The applicant processes the order by capturing the prescribed photos and documents and making them available to the audit service via GI Foto App. Depending on the type of order, a different number of images, different levels of detail, documents or similar must be provided.

Finally, the required evidence is uploaded by the applicant.

Technical structure

- Development environment: .NET, Xamarin Forms
- ArcGIS Runtime SDK
- Programming language: C#
- Single-User-Login via O-Auth
- Providing the application data via WFS-service