

Towards a software solution for field management registration: general conclusions

LIFE RIPARIAS Action A.2: participative workshop 2022-08-26

1. Context

Within LIFE RIPARIAS, there is a need for one or more field management registration systems that are fit for a variety of actors and species and are feasible from a budgetary perspective. In the [Business analysis of invasive alien species management registration by Belgian actors](#), published by the Research Institute for Nature and Forest (INBO), several solutions for this need are suggested:

- **Solution 1:** One recommended software for all LIFE RIPARIAS partners is adopted. This would be software that is purchased for all and used by all partners, except for ANB which has its own application (TERRAPLAN, created by TenForce) and will not adopt any other software. The suggested software tools were ArcGIS Field Maps, iAsset, SurveyCTO, Tenforce and Wildnote.
- **Solution 2:** Further extend the Ecosystem app in collaboration with RATO vzw and Continuum. This open-source software tool was developed to record the management of muskrat populations. LIFE RIPARIAS partners who used the app have since moved to more feature-rich tools, but we could collaborate with the developer Continuum to improve/upgrade the software tool to our needs.
- **Solution 3:** Each partner chooses a registration software, independently of other partners.
- **Solution 4:** Develop a new LIFE RIPARIAS field management registration tool.

2. Workshop

These suggested solutions were presented and further discussed in a participative workshop on 2022-08-26. Demos were presented for the software tools ArcGIS Field Maps, iAsset, SurveyCTO, Tenforce, Wildnote and Ecosystem.

None of the participants were in favour of developing our own app (solution 4) since it would be very costly and difficult to deliver on time. In addition, the business analysis and demos showed that software tools exist that can already meet our needs.

Partners agreed that it was better to aim for one recommended software for all LIFE RIPARIAS partners (solution 1 or 2) rather than choosing independently (solution 3), as it would make it easier to aggregate the data and likely lower the costs. Still, they found it hard to make this assessment without testing the capabilities of the chosen software. However, the partners decided that the following applications are excluded for further exploration:

- **SurveyCTO:** this application does not offer a map for the visualisation of management actions.
- **Wildnote:** this application is very suitable for making nice reports, but the price per user is too high, which is a large disadvantage when upscaling the users or supporting the app during the afterlife of the project.

Two approaches were retained/suggested at the end of the workshop:

- **Approach 1:** Start the use of one of the following toolboxes: iAsset, Tenforce or FieldMaps (solution 1 and 3)
- **Approach 2:** Further the development of the Ecosystem application (solution 2)

3. General conclusions

As coordinators of action A2, we considered the advantages and disadvantages of both approaches. We prefer approach 1, where we opt for one of the toolbox apps: iAsset, Tenforce or FieldMaps. Each of these toolboxes meet the requirements for a field management registration system brought forward by the LIFE RIPARIAS partners. Additionally, they allow for:

- **Self-reliance:** the forms can be updated and customised by ourselves (rather than relying on the software vendor/developer)
- **High flexibility:** different forms and fields can be created for different protocols. This is valuable when working with different partners, each having their own management registration needs
- **Fast implementation:** changes made to forms are available immediately to all users
- **Simplicity:** it is possible to create simple forms (as well as more complex ones)
- **Multiple platforms:** the app is available on Android and iOS devices

Thus, the services provided by one of the defined toolboxes fit better with the requirements of the LIFE RIPARIAS project. We can't decide on a specific toolbox app at the moment: that choice will depend on the result of a public procurement. The final selected application will be tested the coming year and its use will be evaluated amongst the partners. If the experience is positive, the applications shall be further adapted towards the needs of the partners.

The app would be offered to all LIFE RIPARIAS partners who want to make use of it. If partners opt to use other apps for recording management actions, then we will support harvesting data from those apps, but not the costs or development associated with those apps.