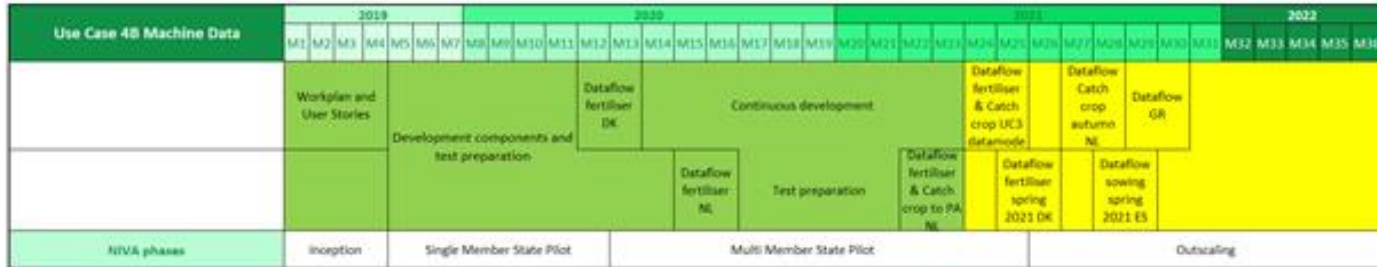


UC4b Machine data - status update, 31 March 2021



After the first year of developing and testing in Denmark and the Netherlands, the following components are available, source code is in NIVA Gitlab repository (currently accessible only to NIVA partners):

Messagebook – structure of eCrop message and code lists	Word document on SharePoint
Niva Connector Frontend Farmer – farmers user interface	https://gitlab.com/nivaeu/uc4b_nivafrontend
Niva Connector Backend – API, connection with Seges Cropmanager	https://gitlab.com/nivaeu/uc4b_nivaconnectorapi
Niva Validator – API, checks the eCrop message on national codelists	https://gitlab.com/nivaeu/uc4b_nivavalidatorapi
Webservice PA, API receiving eCrop message, plus database scripts for storing JSON message	https://gitlab.com/nivaeu/uc4b_ecropservice

In the first tests in 2020 as applied maps (AAM) of fertilizer and a catch crop from a Bogballe spreader in DK and NL were collected by Seges CropManager, checked by the farmer and the validator and send to a PA-webservice and database at Wageningen UR.

In 2021 we are working on more generic access by OEMs (machinery and software) and FMIS (farm management information systems):

- Realizing a Niva-IsoXml-to-eCrop-Library, including authentication: OAuth
- Storing JSON message in a relational data model in PA-database (in addition to UC3)

Also this year we are conducting tests in 4 member states of the EU:

- Greece: fertilisation of cotton by Fendt and Trimble, using Baywa Farmfacts
- Spain: sowing of crops, using Sativum FMIS
- Denmark: Fertilizer AAM's with other machines to the DAA by CropManager



- Netherlands: mowing grassland, avoiding bird nests by Kverneland and NewHolland, using Akkerweb FMIS.

The following video gives a good overview of the process of our use case.

[NIVA4cap.eu UC4b Machine data IACS - YouTube](https://www.youtube.com/watch?v=...)