NIVA

NEW IACS VISION IN ACTION

Current status on Use Case 4b Machine data

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 842009

Presentation

- The use case in short (Marc)
- Architecture (Hepco)
- Data flow (Finn)
- Next steps (Marc)

The rationale behind the use case

Movement in CAP from compliance to performance

-> Monitoring

-> Seamless claim

Fear for sharing data will turn into an interest in sharing data

Different data sources can contribute to ‘prove’ performance

Field data is closely linked to certain for CAP interesting activities.

Machine

Precision Ag data has high quality characteristics

FMIS

Paying agency

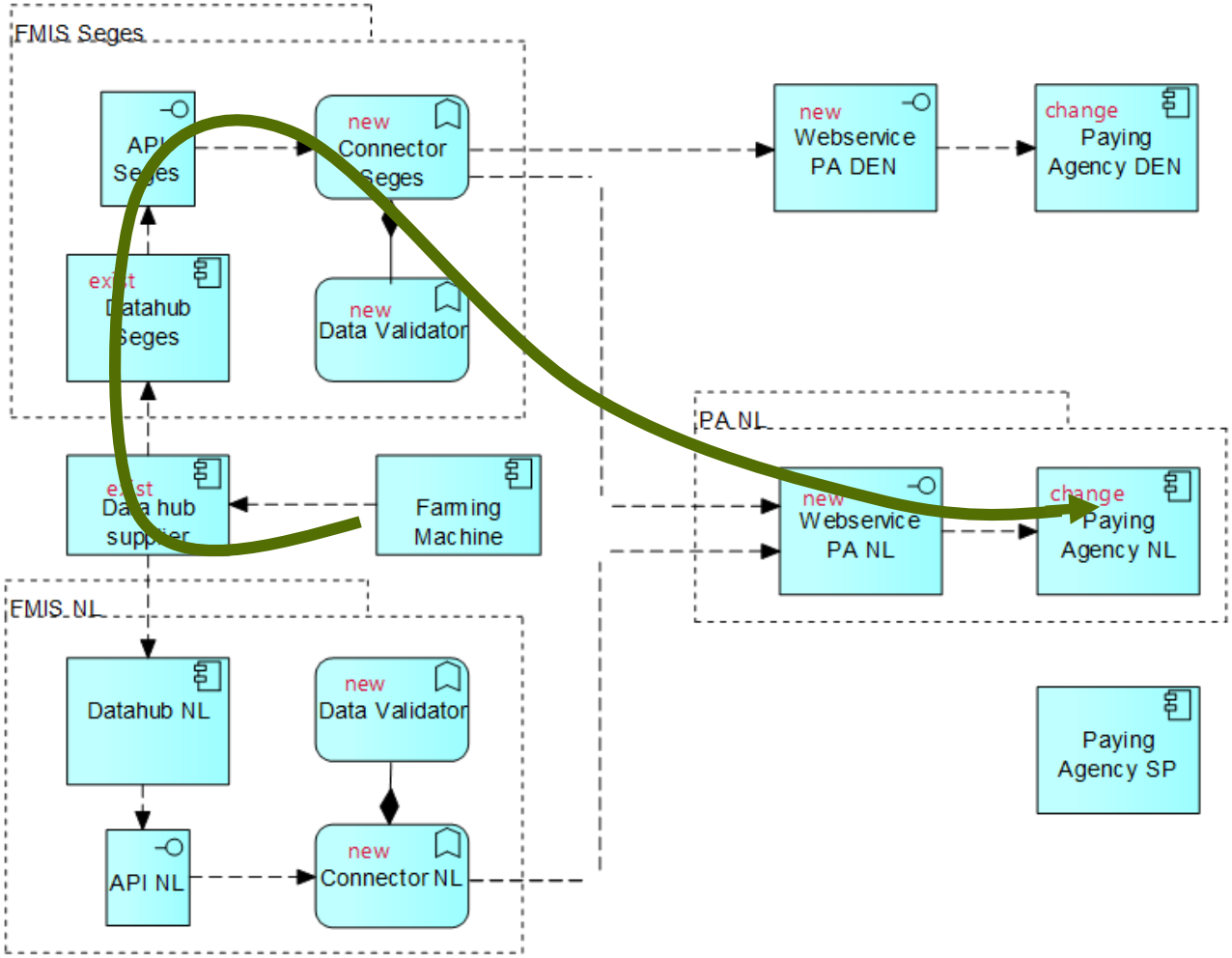
Can fill the monitoring void for small elements

strip cultivation and buffer strips

The aim at June 2020

Create a system for data flow from machine to Paying Agency

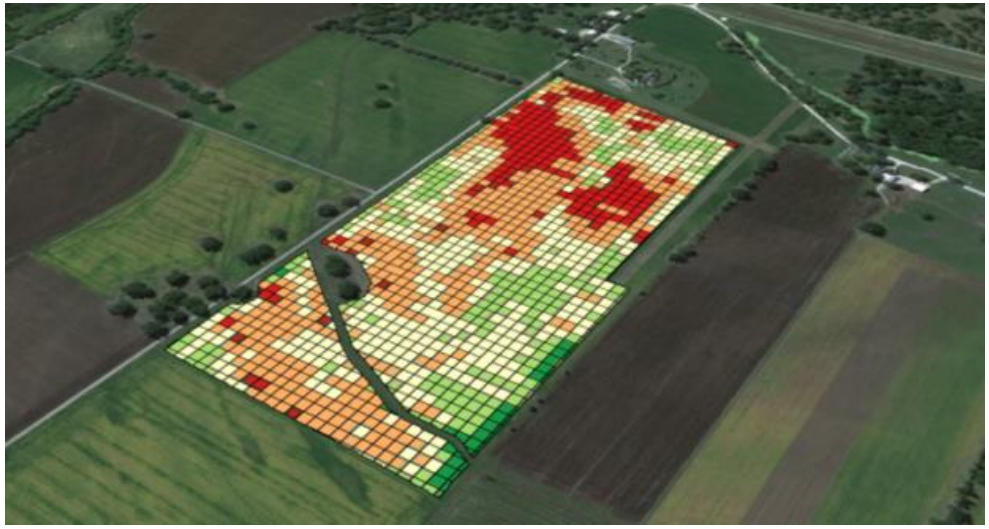
Selected Use case focusses on **catch crop**



Precision Farming

Task map = VRA

Specification of the activities for the farming machine on the parcel. The farmer makes the Variable Rate Application map on the FMIS

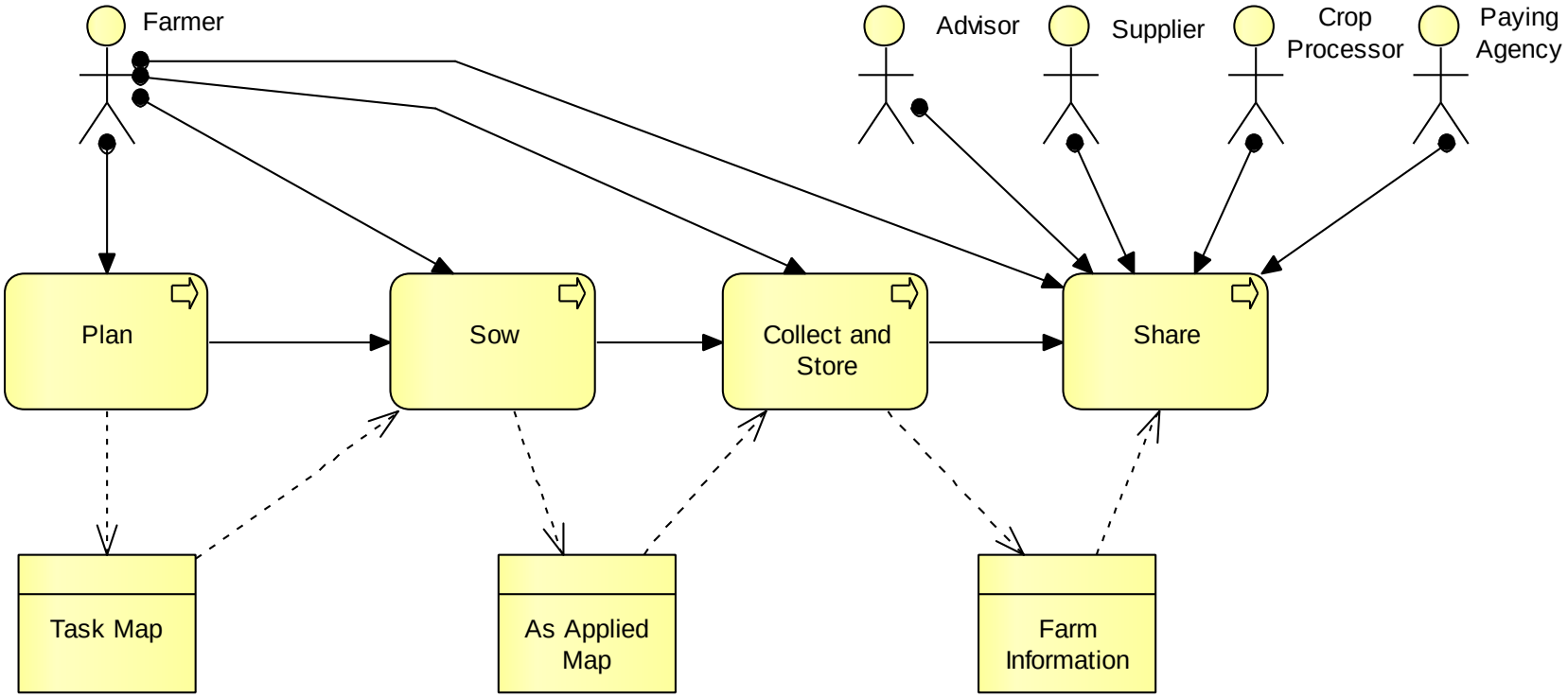


Task map

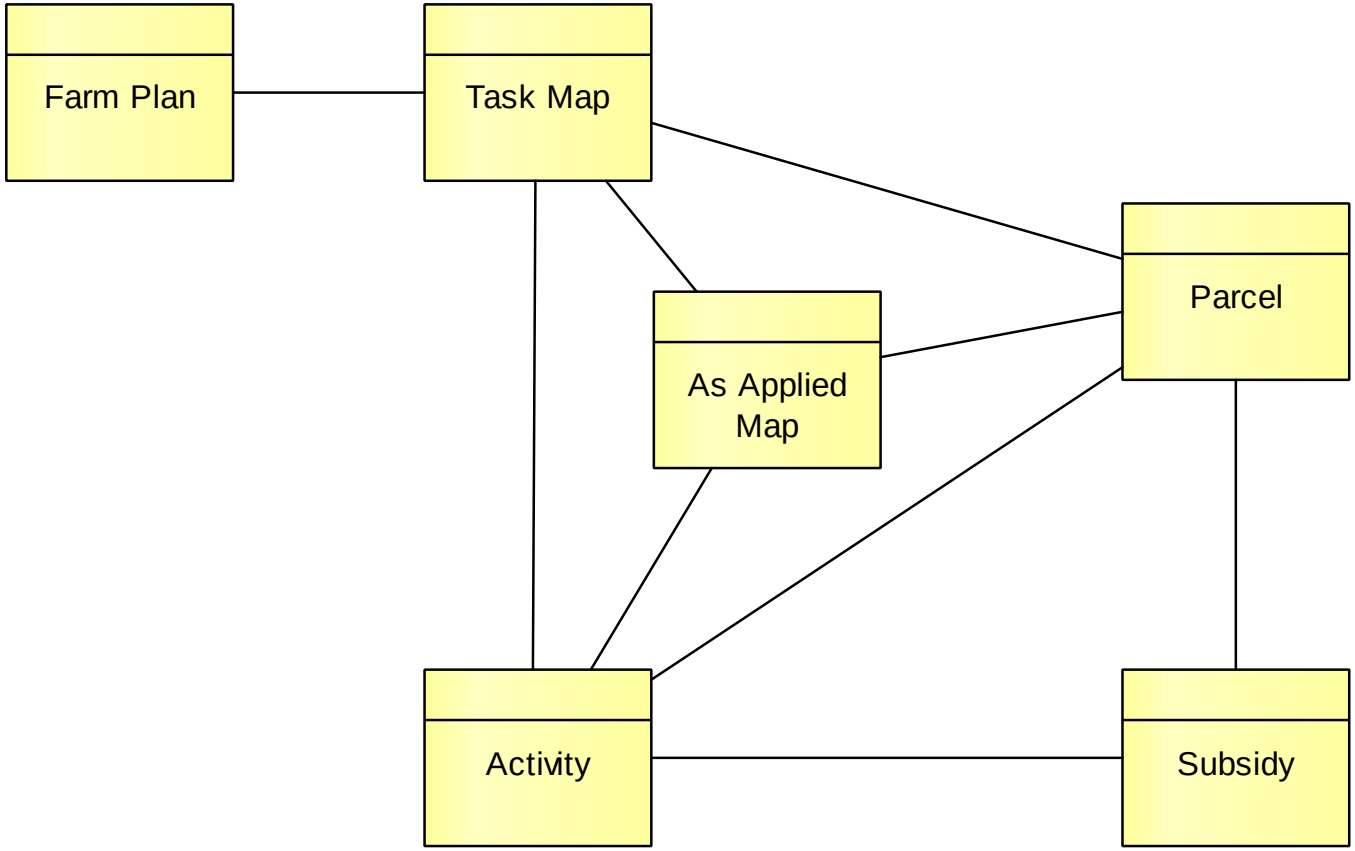
As applied map = AAM

Logging of the executed activities of the farming machine, made by the farming machine during the rig of the parcel

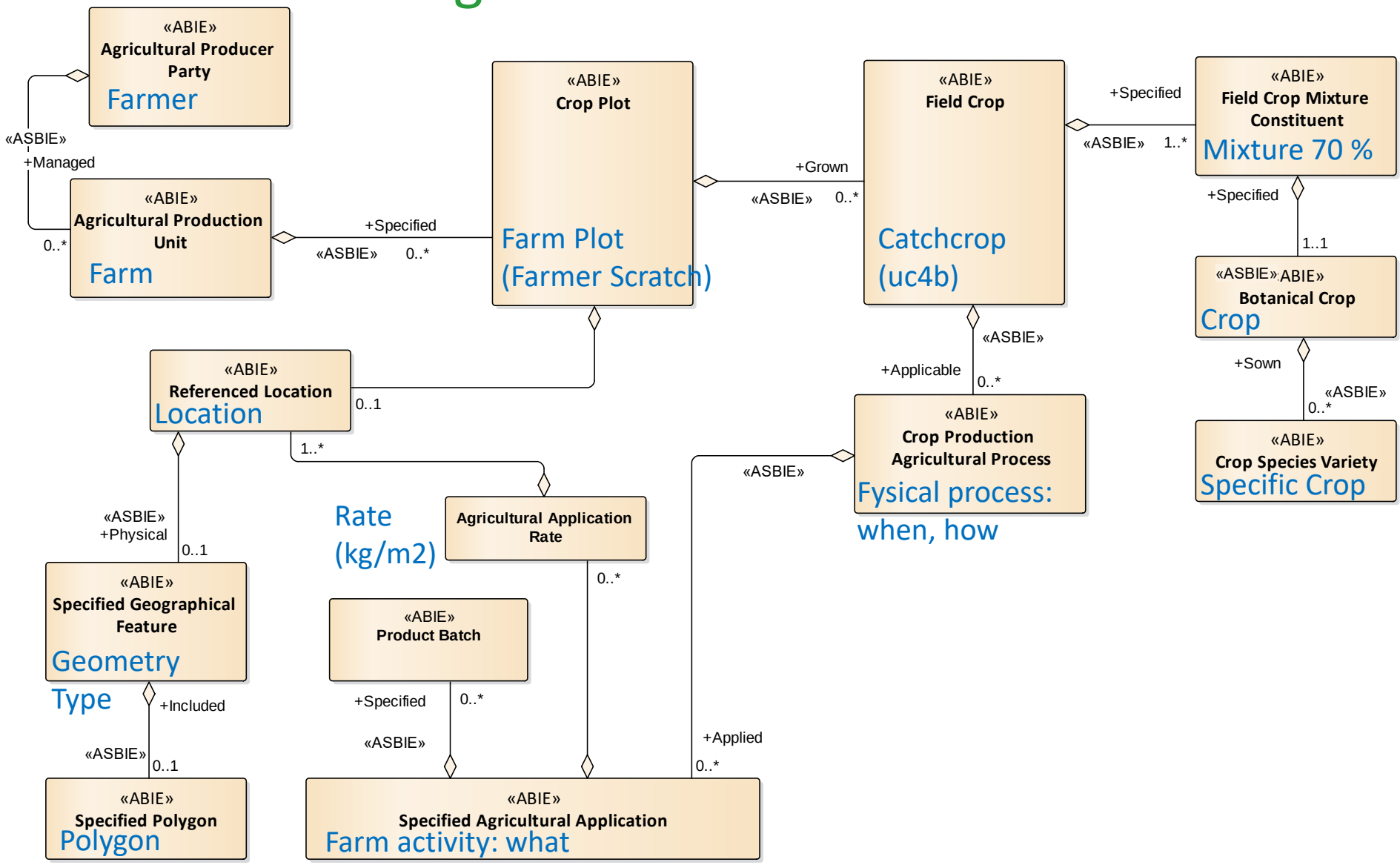
Process Farmer



Object Model



E-CROP message UC4b

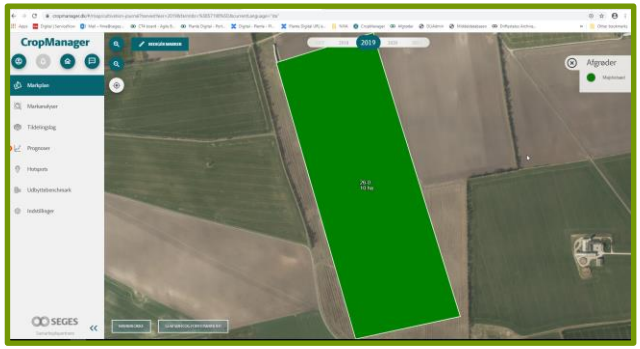


Components

Name	Description	Supplier (brand) + Model	Number of units	Deployment Site(s)
NIVA front end farmer	Connection to datahub	Open source	1	Gitlab
NIVA Connector	Sends data to validate and put through to PA	Open source	1	Gitlab
NIVA Validator	Elementary data check	Open source	1	Gitlab
Web service PA NL	Webservices to pull in the data.	Open source	1	Gitlab
Database scripts PA	Storage at the Payment agency	Open source	1	Gitlab

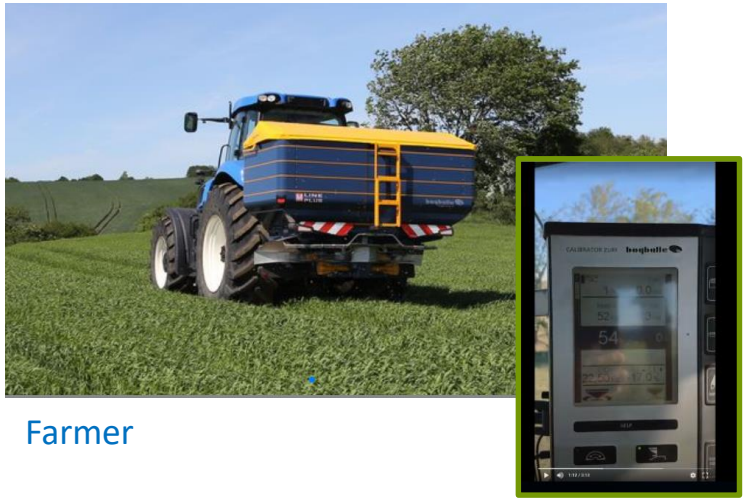
First demo end-to-end dataflow (1), May

1. Create Variable Rate Application map in Farm Management Information System



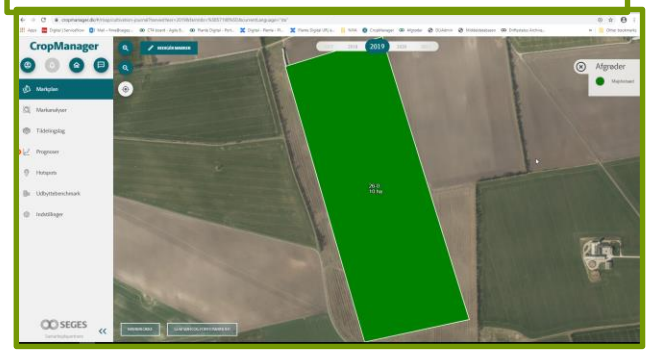
Farmer

2. Execute task with Bogballe device



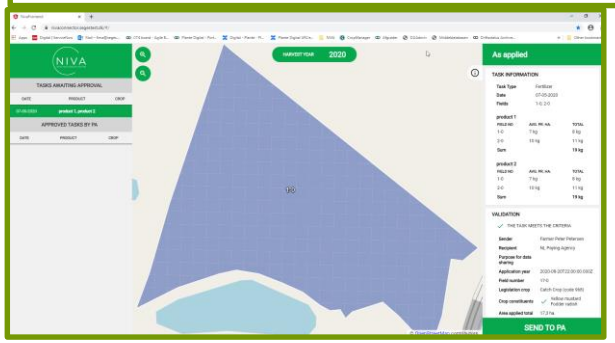
Farmer

3. Inspect As Applied Map in FMIS



Farmer

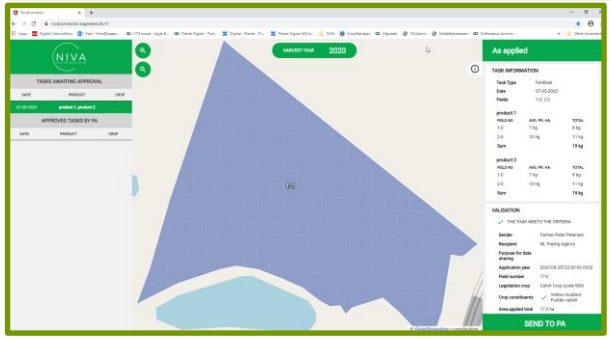
4. Inspect As Applied Map in Connector frontend (EU-PL)



Farmer

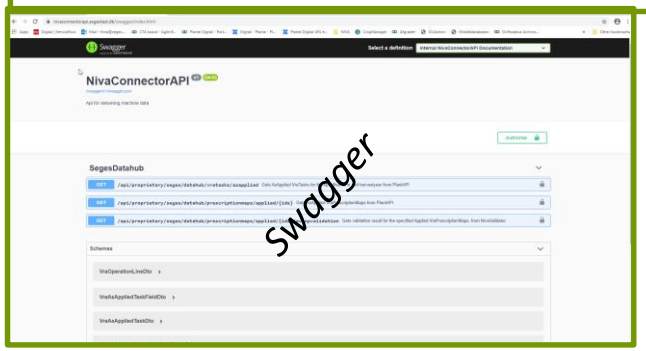
First demo end-to-end data flow (2), May

4. Inspect As Applied Map in Connector frontend (EU-PL)

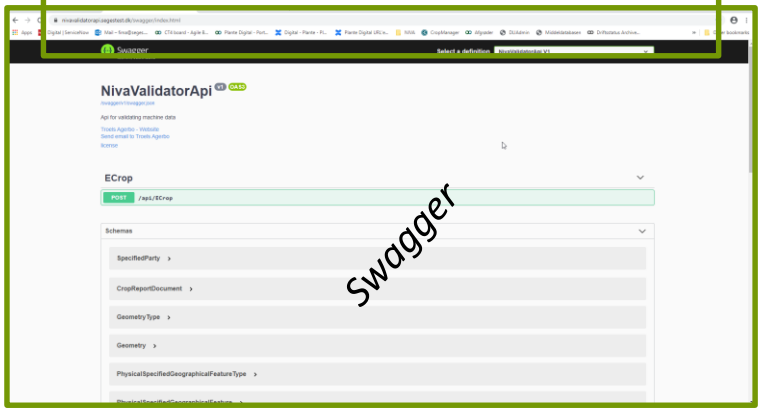


Farmer

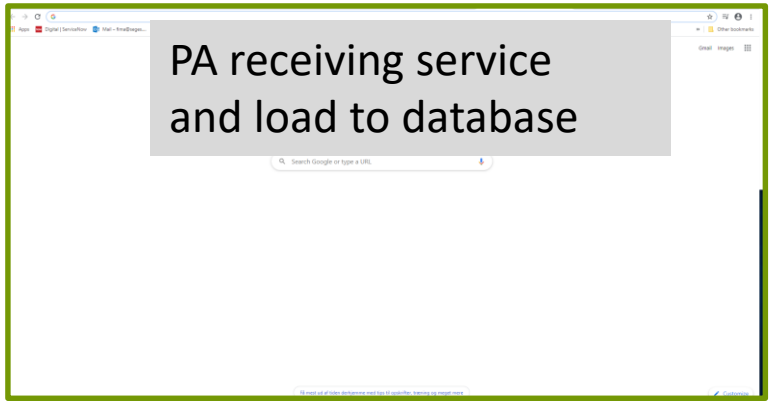
6. Expose As Applied Map from ConnectorAPI (EU-PL)



5/8. Evaluate with ValidatorAPI (EU-PL)



7. Receive As Applied Map in webservice (EU-PL)



Plans 2nd year of NIVA UC4b

- May
  - Finishing first year with E2E test dataflow of fertiliser (farmers from NL,DK).
- June
  - Webinar on UC4b incl. results
  - Select what next steps to take (with testing partners)
- Autumn
  - Testing the use case, catch crop application (farmers from NL,DK)
  - Preparing multi MS test
    - Data transferring to UC3 (ES)
    - …
  - …

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THANK YOU!

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