



REPUBLIC OF ESTONIA
AGRICULTURAL REGISTERS
AND INFORMATION BOARD



UC1c – Farmer Performance

ESTONIA

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

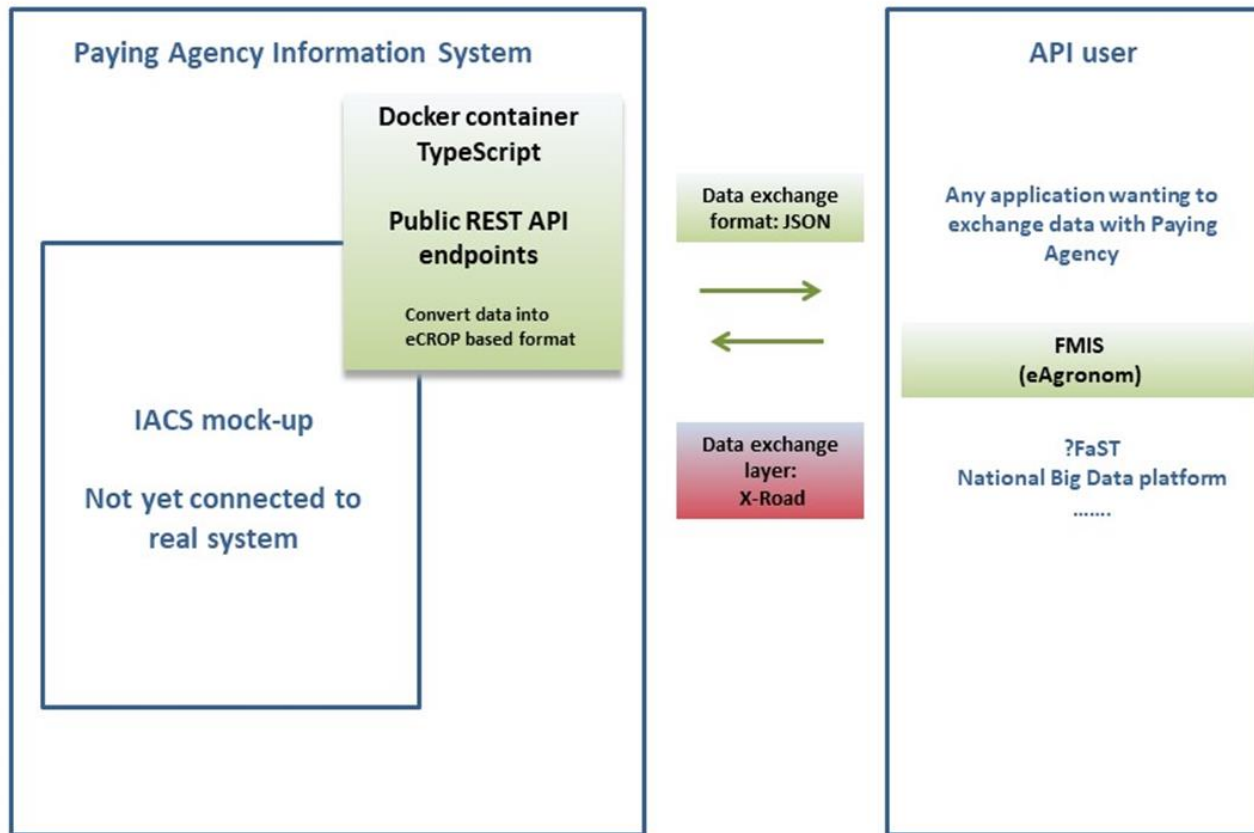
Main concept

- Get data from IACS to measure farmer performance, calculate indicators
 - Problem: IACS data gaps
- Where to get the missing data about farmer activities?
 - Farm Management Information System (FMIS)
- Outcome: Building a prototype service with FMIS (eAgronom) and defining standard (based on eCrop, modified)

Tools & components – prototype scope

- Semantic mapping:
 - IACS dataset vs eCROP (Estonia/ARIB)
 - FMIS dataset vs eCROP (Estonia/eAgronom)
- Creating prototype: REST API component, enabling data exchange in JSON format
 - Message content based on eCROP standard
- Defining some sample indicators which can be calculated based on additional data received from FMIS

Tools & components – architecture

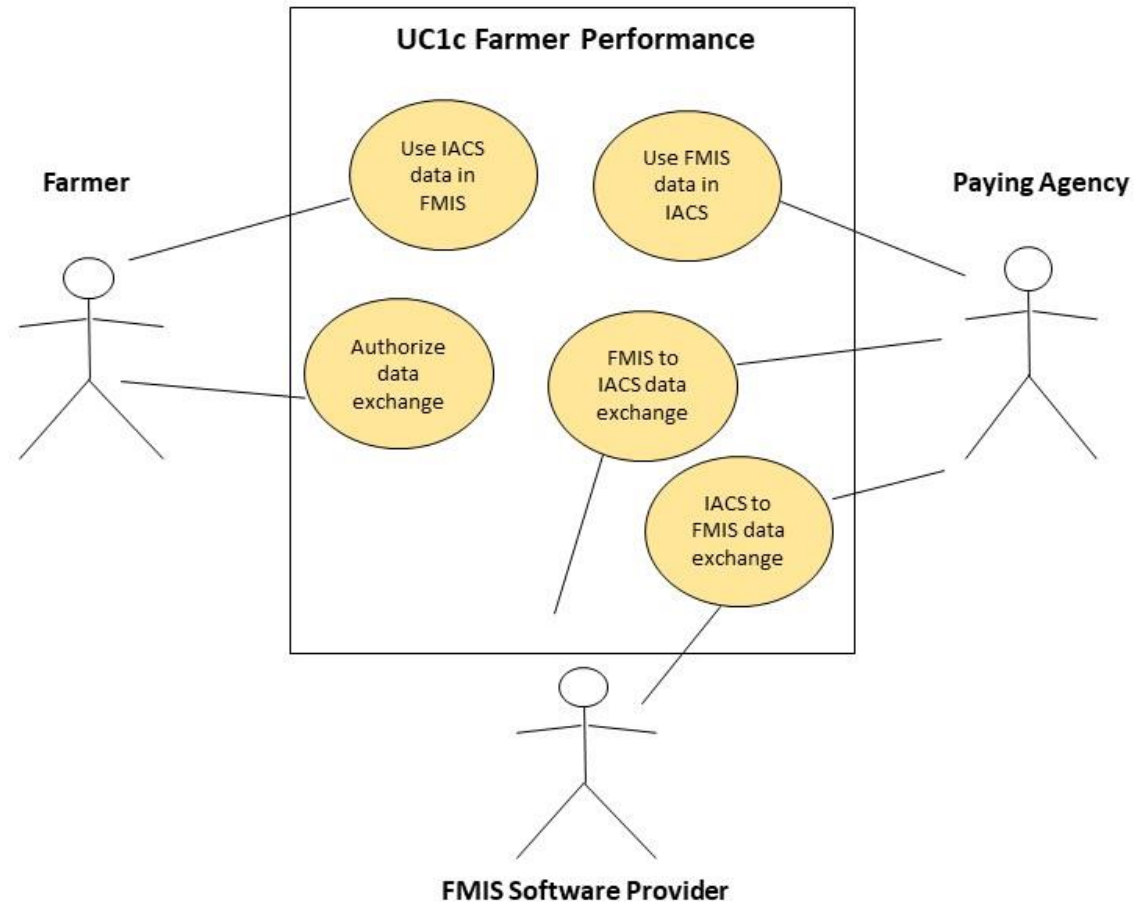


X-road: <https://x-road.global/>

Tools & components – outcomes

- Microservice to convert a limited set of IACS and FMIS sample data to eCROP format
- Prototype of service will be country-specific. Reusable components are recommended standards and data structure of APIs to exchange data between different systems

Use cases

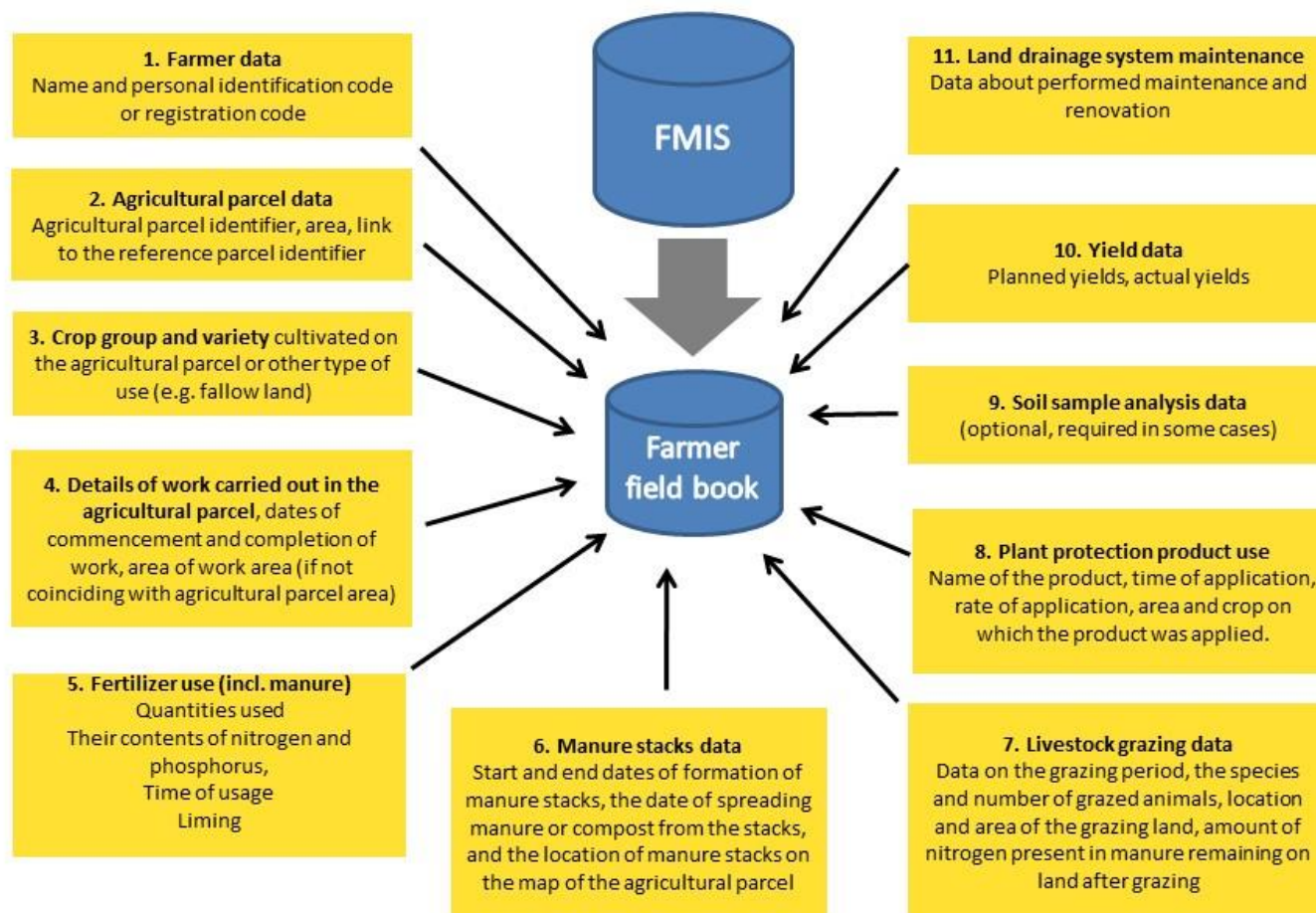


Use cases: indicators

- Measuring farmer performance > indicators
- Starting point > performance indicators proposed by EC (Annex I of the proposal for a regulation on CAP Strategic Plans*)
- Additional data from Field Book > possible source for elaborating additional indicators
- Results of calculated individual/state level indicators > farmer, PA, Ministry of Rural Affairs

*[Proposal for CAP Strategic Plans regulation](#)

Use Cases: Field Book data – EE



Other relevant data related to agricultural activities may be captured in field book. Data on performed work must be entered within 10 calendar days after the completion of the work. Data must be stored for 10 years after the entry of the data in the field book. Field book (in paper or electronic format) is mandatory in Estonia.

Stakeholder involvement activities

- ARIB internal knowledge
- Estonian National Agricultural Big Data project
- Communication with FMIS software provider eAgronom (EE)
- Estonian farmers survey
- Other MS PAs: IACS-FMIS data exchange questionnaire
- Communication with NIVA partners
- NIVA project introductions to wider audience in Estonia

Tools and components – prototype testing

- Preparations required from testing Member State:
 - Nothing. Service endpoint, mock request data and API documentation will be provided

Timeline

- Jun – Jul 2019: Inception phase, project set-up
- Aug –Dec 2019 Stakeholders involvement, design
- Jan – Jun 2020 Requirements specification, Development
- Jul – Oct 2020 Testing and validation (internal/ARIB)
- Nov 2020 Preparations for testing in another MS (Italy/AGEA)
- Dec 2020 – May 2021 Testing in another MS
- Jun 2021 – May 2022 Pan-european testing

Use Case	2019							2020												2021												2022				
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24	M25	M26	M27	M28	M29	M30	M31	M32	M33	M34	M35	M36
UC1c			D	D/MA	D/MA	D/MA	D/MA	DV	DV	DV	DV	DV	DV	T/D P/M	T/D P/M	T/D P/M	T/D P/M	MA/DP	T	T	T	T	T	T	IT/T V	IT/T V	IT/T V	IT/T V	IT/T V	IT/T V	IT/T V	IT/T V	IT/T V	IT/T V	IT/T V	

D Design
DV Development
DP Deployment
T Test
V Validation
MA Multi Actor

THANK YOU!
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