



Netherlands Enterprise Agency

AMS Tender NL

Brief overview of Key Points



General introduction

Objective

- › Provide a brief overview of the Tender;
- › Opportunity to ask general questions;
- › Gain a better understanding of the Tender.

Structure

- › Introduction (5 min)
- › Presentation by NEA (10/15 min)
- › Q&A interested parties (40 min)
- › Closing

Please mute your microphone

The interested parties will take turns in asking questions after the presentation.



Important information

The presentation, all questions and answers will be made publicly available on TenderNed after the meeting

Important Deadlines

- ✓ 9 January 2023, 13:00, deadline for asking questions
- ✓ 18 January 2023, Memorandum of information
- ✓ 1 February 2023, 12:00, deadline for submitting your proposal



Area Monitoring System

- › The AMS is a procedure for systematically gathering and analysing data on activities and practices on agricultural parcels.
- › The results are used to assess whether or not the eligibility criteria for one or more EU interventions have been met.
- › Furthermore, a key element of the AMS is that the beneficiary must be able to respond to the monitoring results.
- › Key to the AMS is exploiting the time series of Sentinel data or other satellite imagery in order to continuously monitor all the FOIs (Feature of Interest) associated with agricultural parcels which are declared annually.



Agricultural activities

Crop detection

Mowing and/or

Grazing

Catch crops

Harvest

Sowing

Ploughing/bare soil





List of markers

- > This list contains the main markers which need to be operational in 2023 and those to be used 2024.
- > The development of these markers isn't part of the tender. Tuning them to the Dutch context of course is.

Year	Marker	Grassland activity	Arable land activity
2023	FOI	Detection of different uses of the same parcel, parcels that can be merged	
2023	Invalid parcel detection	Detection of eligible and non-eligible elements, different crops, different activities	
2023	Crop classification	Detection of grass	Detection of crops
2023	Mowing events	Mowing and grazing	
2023	Homogeneity of grassland	Mowing and grazing	
2024	Ploughing	Ploughing of grassland	Ploughing of arable land
2024	Harvesting of main crop		Harvesting
2024	Catch crop		Sowing, planting, emergence, harvesting (sowing and planting always by calculating later, e.g. from main crop harvesting)
2023	Completeness of grassland marker = crop classification + mowing + homogeneity of grassland	End stage of combined markers: crop classification, mowing, homogeneity	
2024	Completeness of catch crop marker detection = harvesting marker + catch crop marker		End stage of combined markers: harvesting of main crop, catch crop
2024	Water	Pond / swamp / pool / water in ditch	



Innovation

- There is also space for innovation
- Possible ideas:
 - Cattle detection
 - Object detection (e.g. silos)
 - Roughness (grassland and permanent crops)
 - Strip cropping
 - Spray paths
 - Probably more!
- AI and Geotag Photos

- Yearly calendar to plan activities

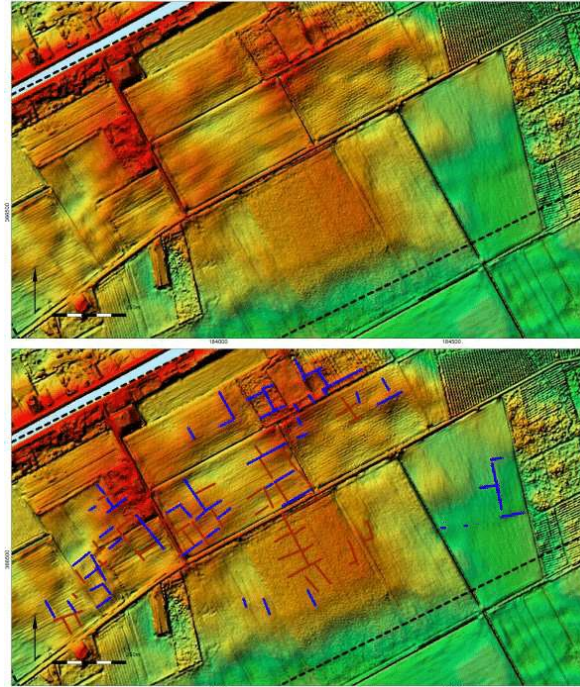




Data sources

Netherlands is rich in data!

- Nationaal Satellietdataportaal
(Provider for 2023 still unknown, but 30cm-70cm PAN; 1,2m/2,8m Multispectral)
- LiDAR Data
- Yearly nationwide aerial imagery (7 cm)





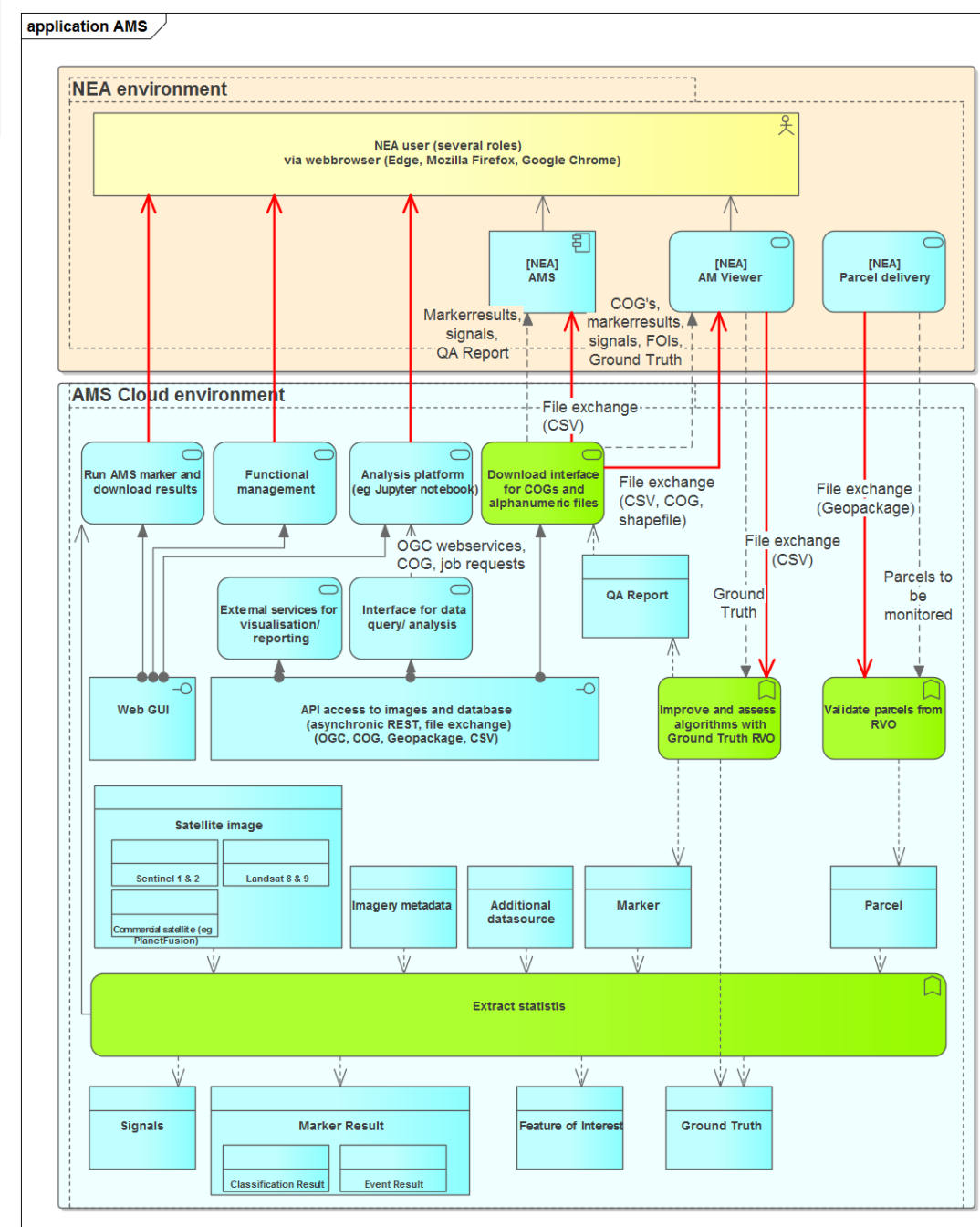
Test of Competence

- › Top 3 Tenders will be asked to perform a test of competence
- › Generate results for 5 Markers
 - Crop classification (end of season 2019)
 - Mowing (from 15th of March until the 1st of October 2019)
 - Homogeneity (grassland) (throughout 2019)
 - Ploughing, bare soil (throughout 2019)
 - Catch crop detection (starting around August 2019)



(Technical) requirements

- > Cloud based environment
- > Open source
- > Analytics platform
- > Web GUI to run markers (similar to Sen4CAP)
- > Access to the data
 - File based (CSV/COG/GPKG)
 - API





Pay attention to the award criteria

- › Quality and Technical Merit of the methodological approach proposed
- › Marker quality improvement
- › Value-added features offered
- › The Innovation case
- › Technical insight
- › Implementation plan
- › Prices/rates
- › Test of Competence