

Annex 1 – Requirements and Specifications

By submitting a Tender, you, as a Tenderer, therefore explicitly consent to all of the requirements and conditions specified in Annex 1 of the Tender Document and declare that you will continue to comply with these throughout the entirety of the Contract period. Furthermore, you confirm that you will comply with all of the specified prices and rates, including any agreed indexation. Failure to comply with one or more of these requirements will result in your Tender being disqualified from the assessment process and therefore excluded from the tendering process.

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Definitions and concepts

This section provides definitions for the main concepts used in this document in alphabetical order.

Annual Performance Report (APR): A report completed by a Member State on how the Common Agricultural Policy (CAP) Strategic Plan was implemented in the previous financial year. APRs should set out key qualitative and quantitative information on the implementation of the CAP Strategic Plan by referencing financial data, and output and result indicators, including regional-level data where relevant. The quantitative information should include realised outputs, expenditures declared in the annual accounts and relevant to the outputs (before the application of any penalties or other reductions), the ratio of expenditures to relevant outputs and results, and distance to corresponding milestones. The information should be broken down for each unit amount as set out in the CAP Strategic Plan for the purpose of performance clearance.

Area Monitoring System (AMS): The regular and systematic observation, tracking and assessment of agricultural activities and practices in agricultural areas by Copernicus Sentinel Satellite data or other data of at least equivalent value.

Computer Assisted Photo Interpretation (CAPI): Manual interpretation and assessment of optical images.

Common Agricultural Policy (CAP): The European Union's agricultural policy. It implements a system of agricultural subsidies and other programmes.

Conditionalities: Conditions for subsidies under the new Common Agricultural Policy (CAP). If someone participates in the CAP, they adhere to these standards and requirements. By doing so, they help improve the climate, soil, water, biodiversity and landscape, health and animal welfare.

Control period: The period during which QA-related activities need to be performed. It is closely linked to when the agricultural activities take place on the land. For example, catch crops are usually present at the end and the beginning of the year. Harvesting usually takes place between July and October.

Declared area (or claimed area): The area claimed by the beneficiary as being eligible for payment under a given unit amount. 'Declared area' can apply to individual parcels and at holding level.

Dossier: All the data generated for a specific applicant in relation to the QA checks.

Eligible area: The area that corresponds to the number of hectares for which all conditions under a claimed unit amount have been met. 'Eligible area' can apply to individual parcels and at holding level.

Eligibility conditions (ElCo): The set of conditions and requirements that a beneficiary must meet to render the area declared eligible for a specific intervention, including (where applicable) eligibility conditions, commitments, eligible criteria and other obligations (cf. point 5(c) of Annex I of Regulation (EU) 2021/2289).

Geospatial Aid Application (GSA): A pre-established aid application form and the corresponding graphic material for farmers, provided through a computerised, geographical, information-based interface.

Green parcels: Parcels on which the declared eligible activity or condition has been detected with certainty by the AMS.

Integrated Administration and Control System (IACS): A set of comprehensive administrative and on-the-spot checks on subsidy applications, managed by the Member States.

Ineligible area: These are areas that are non-eligible, which occur within the boundaries of a GSA-declared parcel due to delineation issues. They occur either on the outer perimeter of a GSA-declared parcel or on the outer perimeter of a permanent non-eligible feature located partially or fully within the GSA-declared parcel.

Interventions: A support instrument with a set of eligibility conditions specified by Member States in their CAP Strategic Plans. They are based on intervention types provided for in Regulation (EU) 2021/2115 (Article 3(3)).

Lot: The set of parcels (size N) declared for a given unit amount or group of unit amounts.

Non-compliant area: Non-eligible area(s) that occur within the boundaries of a GSA-declared parcel, specifically for eligibility conditions where failure to comply typically impacts only a part of the declared area. Non-compliant areas may occur within correctly delineated agricultural parcels (i.e. in parcels without ineligible area) or may cover all of the declared area of a parcel.

Output indicators: These are related to the realised output of the supported interventions. There is a one-to-one relationship between an intervention and an output indicator. Outputs can be measured with different measurement units for single output indicators. For the purpose of this document, only output indicators measured in hectares are relevant.

Parcel (or agricultural parcel): A unit of agricultural area (Article 65(4)(d) of Regulation (EU) 2021/2116), defined by Member States in their CAP Strategic Plans. The agricultural area can comprise arable land, permanent crops, permanent grassland and specific landscape elements, including agroforestry systems on these areas (Article 4(3) of Regulation (EU) 2021/2115).

Population: A full set of GSA parcels in a claim year.

Quota: The number of parcels in a holding to be inspected for a holding-level eligibility condition.

Ranked list: A list of randomly ordered parcels provided by the European Commission based on Member States' input.

Red parcels: These are parcels on which the declared eligible activity or condition has not been detected by the AMS with certainty.

Reference parcel: Geographically delimited area with a unique identification, registered in the LPIS (Article 68 of Regulation (EU) 2021/2116). Reference parcels must contain a unit of land that represents agricultural area including specific landscape elements considered eligible for receiving support for area-based interventions under IACS (Article 2(2) of Regulation (EU) 2022/1172). Also refer to the guidance document in previous regulation: DS/CDP/2018/11.

Result indicators: Used to establish quantified milestones and targets in relation to specific objectives in the CAP Strategic Plans and for assessing progress towards those targets. Result indicators establish the link between an intervention and its purpose. Most result indicators are specific to the intervention. In most cases, interventions are linked to different result indicators depending on whether the support is granted to farming (primary agricultural production) or other activities. Only result indicators with a share of utilised agricultural area (UAA) are relevant for this document.

Sample: A subset (size n) of a lot used for quality assessment, i.e. the parcels that will be inspected during quality assessments.

Type of interventions: High level of intervention. Examples include BISS, CIS for young farmers, Eco schemes, and environmental, climate-related and other management commitments (see Articles 16, 42, 69 of Regulation (EU) 2021/2115).

Yellow parcels: Parcels on which the declared eligible activity or condition cannot be detected by the AMS with certainty.

1. Requirements related to data processing, data exchange and visualisation

This chapter provides an overview of all the requirements related to data processing, data exchange and visualisation. Please be aware that this list is subject to change during the contract period, particularly in terms of the requirements related to exchange format, which can change due to changes in legislation.

1.1 Requirements relating to input data

This section describes the input data used by the AMS.

- Monitoring tasks must be based on freely available satellite and commercial data. The tasks must be based on data from the ESA's satellites Sentinel-2 and PlanetFusion, and data provided by the NSO on <https://www.satellietdataportaal.nl/>. Buying data is not part of this tender.
- The data is processed by a different contractor, and it should be available for the Contractor to download. Access should be provided to AWS S3 Buckets once the contract has been awarded. A more detailed overview of the specifications related to the satellite data can be found in Appendix B.
- Dutch beneficiaries should apply for EU support by drawing their parcel polygons along with parcel data (e.g. main crop type) in the web-based GIS system 'GO' (Gecombineerde Opgave). In IACS terms, this is the same as the Geo Spatial Aid Application. The polygons include parcel information and constitute the initial parcel layer.
 - The NEA will provide the Contractor with a subset of the declaration data. In 2024, this should be done after 15 May. This subset is a sample that is partially randomly selected and partially selected based on a risk assessment. In years to come this maybe at an earlier or later date.
 - A description of the declaration data provided can be found in Appendix C. This format is subject to change based on changes in European regulations and internal systems.
- In addition to the randomly selected and risk-based selected parcels, a third group of declared parcels can be provided too. This group consists of 'red parcels'. These are parcels that are flagged as red (i.e. they do not comply with at least one eligibility criteria) by the Area Monitoring System (AMS). Please be aware that this is optional: it will depend on the number of red parcels and the NEA's processing capacity.
 - A description of the data provided can be found in Appendix D. This format is subject to change based on changes in European regulations and internal systems.
- The contractor must perform a critical assessment of the data before analysis and if the quality is below the expected, the Contractor must inform the NEA about this immediately. This has to be done within one working day after the discovery of the poor quality. This can include a check to see if the data provided by the NEA is in line with data-exchange standards. This should be agreed upon at the start of the contract.
- Dutch interventions are subject to change. This means new eligibility criteria can be introduced or existing ones modified. The Contractor is required to be flexible with regard to these changes.
- The latter also applies to the declaration data. The applicant can make modifications to their application (e.g. to the crop code, geometry, parts of the application) throughout the year.
- The Contractor should provide a secure FTP site for the NEA to upload all the input data related to the tasks.

1.2 Requirements relating to data processing

This section describes issues related to data processing:

- All satellite data used in the QA tasks should be pre-processed.
- Reports must be created detailing all the images used and downloaded from AWS S3. These reports should be delivered as Excel files on a monthly basis.

- With regard to the input parcel data, a report needs to be delivered explaining the performed checks and the outcome (e.g. number of self-intersects, missing data). The exact checks and format that need to be performed will be agreed upon after the contract is awarded. This format is subject to change based on changes in European regulations and internal systems.
- The report related to the input parcel data should be generated and shared with the NEA after each parcel data delivery.

1.3 Requirements relating to data access and storage

This section describes the requirements relating to data access and storage:

- The Contractor must provide access to all the data used and generated in the QA tasks throughout the contract period for transparency and traceability of the satellite analysis results and for the future development of the AMS.
- The Contractor must propose a setup that ensures that the NEA has easy access to data and that supports easy access to the data. In this case, 'easy' means 'available through a dedicated viewer'.
- The NEA requires all services and products to operate in accordance with the Dutch government's open standards policy, with the underlying goals of promoting interoperability and increasing vendor independence. Since this tender primarily concerns GEO information, specific reference is made to open standards for GEO information in Appendix A, where an overview is provided.

1.4 Requirements relating to the viewer

One important aspect of the QA process and the processing of parcels that were flagged by the AMS as 'red' is the visualisation of data, both of used and generated data. The expectations for dedicated viewers are provided online. A more detailed overview of the requirements is presented in the bullet-points below.

- A dedicated viewer has to be supplied in order to provide insight into the data used and generated by the Contractor.
- The viewer has to be web-based and be able to run on at least the two most recent versions of MacOS Safari, Microsoft Edge, Mozilla Firefox and Google Chrome.
- This viewer should have the following functionality:
 - Visualisation of all the imagery used (including a complete timeseries).
 - Access to the declaration data provided by the NEA.
 - The AMS and GSA QA results.
 - A button to generate a PDF (NEN-ISO) containing all the images used by for a particular QA activity and the results of the QA. This has to be generated on a file level. NEA employees should be able to edit these PDFs.
 - The possibility for NEA to modify the CAPI process results. Please note that this should be stored and logged for audit purposes.
 - A ticketing system to ask questions regarding CAPI findings.
 - Signals that can be used to support interpretation during the CAPI process should also be available in the form of a graph.
 - User management for adding new users or deleting users who should not have access to the viewer.
 - Different user profiles (e.g. full access or read only access).
- The NEA expects that the number of users for the operational environment will not exceed 20. Each of these accounts should have full responsivity at the same time.
- The NEA requires all services and products to operate in accordance with the Dutch government's open standards policy, with the underlying goals of promoting interoperability and increasing vendor independence. Since this tender primarily concerns GEO information, specific reference is made to open standards for GEO information in Appendix A, where an overview is provided.

1.5 Requirements relating to the delivery of and use of results

- All operational tasks are bound to a fixed annual workflow in the NEA. The timely delivery of monitoring tasks is therefore essential. Every year, the Contractor and the NEA must agree on a fixed delivery plan. The exact dates for and scope of deliverables of all tasks must be specified.
- The results of the QA tasks must be delivered in GPKG or Shapefile and CSV formats with predefined structures. All deliveries must follow the file description, which is described in Appendix E. This format is subject to change based on changes in European regulations and internal systems.
- Progress reports need to be provided. These are monthly overviews of the Tenderer's progress in relation to processed dossiers and parcels that are subject to checking.
- The delivery of the results should be done using a secured FTP-connection. This has to be provided by the Contractor.
- The outcomes of the activities outlined and elucidated in this annex are strictly limited to the intended purpose specified in this tender document and may not be utilized for any other purpose whatsoever.

1.6 Requirements relating to security

Security is a paramount consideration in this tender, encompassing various facets including procedural measures, IT infrastructure, training protocols, compliance frameworks, implementation strategies and access controls.

- **Security Training:** The Contractor must provide staff with security awareness training, tailored to their duties, and ensure annual refresher training that emphasises personal responsibility and the client's specific security guidelines.
- **Access Control:** The Contractor should maintain operational processes for defining and enforcing responsibilities and tasks related to information security. These responsibilities must remain in effect even after changes in employment.
- **Media and Data Protection:** The Contractor must have operational procedures for secure media disposal and must ensure the protection of data and program software belonging to the client.
- **Compliance and Assessment:** The Contractor needs to have operational processes to periodically assess compliance with both security policies and technical security standards for staff and information systems involved in the service.
- **Application Access:** The Contractor must implement two factor authorisation (2FA).

2. Quality assessment-related tasks

This section provides a comprehensive breakdown of the involved tasks. It starts with a discussion on activity classification (part of the AMS QA), followed by an examination of the GSA Quality Assurance (QA) within specific areas. It then goes into the procedures for handling red parcels. The concluding section provides an overview of parcel and dossier quantities.

2.1 Activity classification (AMS QA)

As part of the AMS QA, the Contractor will be provided with a comprehensive list of crop parcels, each of which is associated with one or more distinct activities and various interventions. This list of parcels and other relevant data will be uploaded to the FTP which should be provided by the contractor (also see paragraph 1.1). It is worth noting that activities can occur at different times throughout the year within the same parcel. The core obligation of the contract is to thoroughly evaluate each activity linked to a specific parcel. This evaluation involves a manual process, commonly known as CAPI (Computer-Assisted Photo Interpretation). The Contractor may have to check the crops present on a specific parcel, for example, or if and when mowing activities took place.

The specific activities that the Contractor is required to inspect will be clearly indicated in the file that contains the parcel information. Additionally, detailed guidelines on what to look at are given in the list of control aspects. This ensures a precise and consistent assessment process for each activity tied to these parcels.

An overview of all activities that have to be monitored is provided in the table below. Please be aware that this list can change during the contract period due to changes in national and European legislation and changing availability of new data and techniques.

Activity	Description
Crop classification	Identification of the crop present on the parcel
Mowing/grazing	Detection of mowing or grazing events
No mowing/grazing	Detection of the period of no mowing or grazing
Homogeneity	Detection of the presence of a homogeneous crop cover
Ploughing/black soil	Detection of ploughing activity or the presence of black soil
Water	Detection of water present
Harvest	Detection of the moment of harvest
Crop residue	Detection of crop residue left behind on the field
Green cover	Detection of the presence of green cover
Catch crop	Detection of the presence and period of a catch crop

There are a number of different files related to this activity:

- Alphanumeric data related to a parcel (see Appendix C)
- Geometry of the parcels (see Appendix C)
- Delivery format of the results (see Appendix E)
- Control aspect list (see Appendix F)

2.2 GSA QA

Area measurement: procedures and tolerances

GSA quality assessment includes inspections and, if necessary, areal measurement for the elements in the samples. Before a measurement is carried out, it is important to determine whether the plot should be measured or not. The procedure summarised below is adopted from the European Commission (2018).

First, a visual inspection is used to determine whether a measurement is necessary, so that it can be determined whether the declared area corresponds with the actual area as visible on the VHR image. If the declared area corresponds to the actual situation, no measurement is necessary, and the eligible area is considered the same as the declared area. If there are visible discrepancies, for example due to drawing problems or if there are any undeclared ineligible elements, the Contractor must carry out a measurement. In any case, a measurement should be carried out if the AMS/GSA quality assessment reveals any inconsistency or drawing problems.

The declared area usually corresponds to the area previously declared in the GSA. This area may or

may not correspond to the total eligible area of the LPIS reference plot, with the beneficiary only having to click and confirm whether it does or not. Still, a visual inspection may reveal significant discrepancies between the declared area and the actual situation. In addition to the measurement itself, the necessary actions to update the LPIS should be carried out where necessary as soon as possible so the correct results will be available in the next claim year. If ineligible elements are found in the inspected GSA plot, they must also be recorded in the corresponding LPIS reference plot. The Contractor should perform this necessary measurement, also measuring these ineligible elements and deducting them from the eligible area of the parcel indicated in the GSA.

The area measurement should be carried out to map the actual situation. In some cases, it may be difficult to determine a GSA parcel's actual boundaries. If there are two adjacent GSA plots with the same land cover (e.g. the same application but belonging to two different farmers) and there is no overlap between the plots, it should be assumed that the declared common boundary is correct even if it is difficult to demarcate.

Once the requirements for actual measurements have been established, the relevant principles of the method developed for on-the-spot checks should be applied for area measurements. The details of the method can be found here: [D5CG-2014-32- FINAL REV 4 OTSC guideline 2018 CLEAN.pdf](#) (European Commission, 2018).

The general principles of the method can be summarised as follows: the GSA plot to be measured should be delimited using VHR images. The area of the delimited (measured) plot should be compared with the declared area. The determined difference can be compared with the uniform buffer tolerance. The details for determining uniform buffer tolerance can be found here: [On the spot checks - Guidance and Tools for CAP \(GTCAP\) - EC Public Wiki \(europa.eu\)](#) and are summarised in Annex 10. The uniform buffer tolerance is multiplied by the perimeter of the plot polygon to be measured and converted into an area tolerance.

Note that the maximum area tolerance is set at 1 hectare, independent of the plot perimeter. The final area tolerance is calculated as the minimum between the uniform buffer tolerance multiplied by the plot perimeter and the threshold of 1 hectare. If the difference between the declared and measured eligible areas is less than the area tolerance, the eligible area is assumed to be equal to the declared area.

If a field is actually to be measured using a technical service (remote sensing or field control), the single buffer tolerance is applied (see Appendix H). This tolerance is applied to measurements by both technical services, and it is based on the accuracy of the measuring equipment. The Netherlands applies a tolerance of 0.75m multiplied by the perimeter of each measured plot.

The previous step may not account for the presence of ineligible elements. However, all ineligible elements should be identified and correctly reported to reflect the actual situation. This process is carried out after comparing the area tolerance to avoid concealing or disregarding small, ineligible elements because the final area difference is smaller than the area tolerance.

All ineligible elements should be detected, mapped and excluded from the area of the declared plot, including artificial paved surfaces, forest and woodland areas, scrubland, water bodies, natural fallow land and marshy vegetation. All distinguishable landscape elements of the inner part of the mapped eligible elements within the plot should also be excluded by mapping (as polygons, points).

When determining the eligible area, the area of all ineligible elements identified during the measurement process should be accounted for. The measurement process may result in the entire plot not meeting eligibility requirements. This means that parts of the requested area may not be eligible for inclusion in the annual performance report. In these cases, the NEA sets the eligible area to 0.

2.3 Red parcels

In the context of our tender documentation, it is crucial to clarify the handling of parcels that have undergone an AMS (Area Monitoring System) check for monitorable conditions. Some of these parcels may not be appropriate or go unnoticed. Just like QA-AMS (Quality Assessment Area Monitoring System) parcels, they also need to undergo individual scrutiny for the specified activities. These parcels are considered an additional set in addition to QA parcels.

In the AMS process, conditions subject to monitoring are systematically tracked, and parcels are automatically approved or rejected for specific conditions based on a decision tree. Rejection signifies non-compliance with a condition or the non-performance of an activity. It is also possible that an activity might have been unfairly overlooked. These parcels are referred to as 'red parcels'.

Applicants are sent notifications regarding findings related to 'red parcels'. However, before the NEA sends these notifications, every parcel must undergo manual inspection following the same processes as the QA parcels for AMS (see Section 3.1). This entails verifying whether Very High-Resolution (VHR) images confirm the non-compliance with the condition or the non-execution of the activity, or whether the requested activity can indeed be observed.

The parcels mentioned here represent an a different category from the QA parcels. Nonetheless, the activities being checked should align with those outlined in the list of control aspects. This ensures consistency in the assessment process for these parcels, even though they are distinct.

Please note that this element of the contract is optional. Whether the Contractor is required to support the NEA or not is assessed on a yearly basis. If there are more than 10,000 red parcels in total, the Contractor will be required to support the NEA with this activity. The minimum number of red parcels the Contractor will have to process is 5,000. The maximum number of red parcels the Contractor will have to process is 30,000.

2.4 The amount of work

A number of activities are described in the previous sections. A preliminary assessment of the numbers is provided in the table below. A distinction is also made between the number of parcels, the number of dossiers and the different interventions.

Intervention	Number of dossiers	Number of parcels	Area measurement¹
BISS	Max 800	800	350
ECO-scheme	Max 350	10.000	10.000
AECM	Max 40	12.000	12.000
Red parcels ²		5.000 – 30.000	

¹ This is the number of parcels for which the Contractor must determine whether an area measurement has to be carried out, as explained in Section 2.2 GSA QA.

² The processing of red parcels is only required if their number exceeds 10,000.

3. Process control and management

This section is dedicated to outlining the imperative requirements for process control and management that prospective contractors must adhere to in this tender procedure. The meticulous handling of operational aspects is vital to ensure the successful execution of the project. We have outlined key components that the Contractor must be proficient in.

Comprehensive delivery notes, the establishment of efficient communication channels, the organisation of productive meetings, the strict adherence to timelines, secure data transfer practices and unwavering commitment to maintaining high technical standards: these are non-negotiable aspects that form the foundations of successful partnerships.

3.1 Requirements relating to delivery notes

Before delivering results, the Contractor must deliver a technical delivery note that documents the method and summarises key features. This document should cover the following items at least:

- Number of parcels in the delivery
- Number of dossiers in the delivery
- Number of completed dossiers in the delivery
- Number of parcels still being processed
- Number of dossiers still being processed
- Description of the activities checked
- Number of parcels not monitorable and reason

This applies to every delivery.

3.2 Requirements relating to communication

Collaborative engagement with NEA is of utmost significance in this partnership. While a significant part of our cooperation is codified through the establishment of a comprehensive Service Level Agreement (SLA) (see Annex 6b), it is essential to acknowledge that some parts of our working relationship are inherently challenging to standardise in written agreements.

Both the Contractor and the NEA are committed to maintaining open channels of communication for addressing emerging issues and concerns promptly and efficiently. This proactive approach to issue resolution underlines our shared dedication to the success of this partnership, and it ensures that potential obstacles are addressed swiftly, thereby fostering a more agile and productive working environment.

3.3 Requirements relating to meetings

The Tenderer must facilitate physical or virtual meetings at start and end of each contract year and prior delivery of monitoring tasks. The Contractor must provide a meeting agenda at least three working days prior to the meeting. The Contractor must also prepare a PowerPoint presentation or a short, written status update and present these at the meetings if the NEA requests them. After each meeting, the Contractor must answer any meeting minutes or follow up on any action points within an agreed timeframe.

Throughout the Control Period (i.e. the period during which the quality assessment related tasks are performed) the Contractor should organise weekly progress meetings. In these, issues can be presented and discussed. The Contractor is responsible for carrying out the following activities during these meetings:

- Keeping track of action items;
- Preparing the agenda;
- Being able to respond to substantive questions.

3.4 Requirements relating to 'timeliness'

By submitting a tender, the Tenderer declares that: as of 27 May 2024, it will be able to carry out the part of the assignment that relates to the processing and exchanging data and will have the viewer available for use before 10 June 2024. A more detailed plan is presented in the diagram below. Please note that NEA also requires a dry-run before 6 May 2024 to ensure that all technical arrangements are in place.

Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Dry-run					6/5							
Delivery first sample population					27/5							
Viewer available						10/6						
Delivery of results spring checks							40%	60%	80%	95%	100%	
Delivery of Results autumn checks									20%	40%	60%	100%

For returning results, our payment targets must be considered. This means a large proportion of partners will receive their subsidies in December. To this end, NEA must have assessed all checks and processed them in the appropriate registers. For the Contractor, this means that 95% of all checks (excluding autumn checks) must have been submitted by 1 October. For the autumn checks, this means that 60% of checks must be submitted by 1 December, and 100% must be submitted by 1 January of the following year.

3.5 Requirements relating to data transfer

By submitting a tender, the Tenderer declares that the exchange of data traffic takes place via a procedure prescribed by the NEA, it meets all requested information security requirements as stated in this document and it meets the Open Standards (see Appendix A).

3.6 Requirements relating to the technical quality

By submitting a tender, the Tenderer declares that it meets the content and accuracy requirements in accordance with Common Technical Specifications set out in the working document DS-CDP-2016-03 Technical Guidance of the Joint Research Centre of the EU or subsequent legislation and regulations. This document can be found in Annex 10 – Guidance CTS – 2022.pdf.

3.7 Requirements relating to the audits

During both the contract duration and thereafter, national or European auditors may seek insight into the contractor's process. This may involve specific inquiries or on-site visits as part of these audits. It is expected that the contractor cooperates and facilitates such visits.

4. Requirements relating to prices, taxes, invoicing, the team and social returns

4.1 Requirements relating to the prices/rates

4.1.1 The Tenderer will provide an overview of the prices and rates applicable to this assignment by filling in Annex 5, 'Prices/Rates'.

4.1.2 The price for the following activities must be all-inclusive and are considered to be fixed annual costs:

Fixed annual costs

1	Developing and maintaining the CAPI environment
2	Developing and maintaining the data pipeline and data transfer
3	Developing and maintaining the web-based viewer
4	Hosting costs web-based viewer
5	Archiving

The following costs are variable and heavily rely on the amount of parcels that need to be handled every year. Accordingly, variable costs are asked for per parcel. Also refer to Annex 5 in which the price per parcel is requested. The prices you provide in Annex 5 will apply to the contract.

Variable costs

6	Managing parcels from the sample of the BISS/CRISS sample
7	Managing parcels from the sample of the GSA sample
8	Managing parcels from the sample of the ECO scheme sample
9	Managing parcels from the sample of AECM scheme sample
10	Managing red parcels

In all circumstances, the prices/rates must include all of the following: wage costs, overheads (e.g. accommodation and wage costs for support staff), costs relating to the use of equipment and machinery during the assignment, service costs (SLA), insurance costs, any applicable costs for electronic invoicing, and local travel and accommodation expenses.

4.1.3 The agreed hourly rates, production rates and annual costs are fixed until at least 1 January 2026. Requests for indexation can be submitted once per year, exclusively in the month of October. Before and after this month requests for indexation for the upcoming year will not be considered. Requests for indexation must be sent to the following email address: contractmanagement@rvo.nl.

Prices and rates may be adjusted in line with the price index published by Statistics Netherlands (<https://opendata.cbs.nl/statline/#/CBS/nl/>) for hourly pay rates, excluding special remuneration established in collective labour agreements in the business services sector. For this purpose, the figure for the month preceding October will be used, with the index for the starting date of the contract March 2024 set at 100%.

The Contractor must submit a specified request for indexation with a printed information form from Statistics Netherlands, making reference to the contract with the Contracting Authority. This request should contain the old prices/rates versus the new prices and rates.

Upon receipt of the request, the Contracting Authority will send a confirmation to the Contractor, if the request is granted.

4.1.4 The Tenderer will give a fixed total price for the annual costs in the offer using Annex 5.

- 4.1.5 The Tenderer will provide a rate for handling a parcel for the different activities that need to be assessed. These rates for each parcel will be used if the Contractor is required to handle the QA AMS/GSA and/or manage red parcel.
- 4.1.6 The Tenderer will not submit any zero or negative prices/rates. This also applies to price components.
- 4.1.7 The Tenderer will not offer abnormally low prices. This also applies to price components. The prices/rates offered must be competitive.

4.2 Requirements relating to taxes

- 4.2.1 The Tenderer indemnifies the Contracting Authority against any claims from the Dutch Tax and Customs Administration (Belastingdienst) or other tax authorities.
- 4.2.2 The Tenderer will quote the prices according to the following structure:
- the amount excluding Dutch VAT and any VAT due outside the EU;
 - the amount of Dutch VAT due (if applicable) and the amount of any VAT due outside the EU, and;
 - the amount including Dutch VAT (if applicable) and any VAT due outside the EU.
- 4.2.3 If the Tenderer indicates that VAT is not applicable, they agree to provide documentary proof of the grounds for this to the Contracting Authority within 15 calendar days of the request to do so.
- 4.2.4 The Tenderer is liable for any extra VAT-related costs for the Dutch and/or foreign tax authorities due if the Tenderer incorrectly does not charge VAT or an incorrect amount of VAT to the Contracting Authority. If applicable, the Tenderer is liable for making an accurate payment of VAT in the Netherlands and outside the EU, with the exception of the case stipulated in the following sentence. If the Contracting Authority procures a service from a foreign business and Dutch tax law considers the work to have been performed in the Netherlands, the Contracting Authority is liable for the payment of VAT to the Dutch Tax and Customs Administration for this/these service(s) performed in the Netherlands.
- 4.2.5 The Tenderer guarantees that the amounts specified in the quotation are inclusive of all taxes and levies (including amounts considered equivalent to taxes or levies), regardless of their description and wherever in the world they may have been levied.
- 4.2.6 The Tenderer indemnifies the Contracting Authority against any claims from any tax authorities for any taxes, levies or contributions considered equivalent to taxes or levies, originating from either within or outside the Netherlands.

4.3 Invoicing requirements

- 4.3.1 Delivery, payment and/or other general terms and conditions – however named – of the Tenderer or its branch organisation are expressly not accepted. The contract is subject to the General Terms and Conditions for Public Service Contracts 2018 (ARVODI 2018).
- 4.3.2 The applicable general conditions include a provision for electronic invoicing. This can be done in four different ways:
- The Central Government invoice portal
 - Connection with Digipoort
 - E-invoicing from your (accounting) software package, through Simpleinvoicing
 - E-invoicing through a service provider
- 4.3.3 Fixed annual costs are invoiced on a quarterly basis afterwards.
- 4.3.4 Variable costs, which concern the handling of the QAs, and management of red parcels, can be invoiced on a monthly basis, based on the costs actually incurred. You must include a summary of the amount of parcels that have been handled in accordance with the applicable rates.
- 4.3.5 *For companies established in the Netherlands only*

E-invoicing

The general terms and conditions that apply to this contract contain a provision that invoices must be sent electronically (not as PDF files). This can be done in three different ways:

- The Dutch government invoicing portal
- E-invoicing with your own (accounting) software package, through Peppol
- E-invoicing through a service provider.

For companies not established in the Netherlands.

The section concerning e-invoicing does not apply to companies located outside of the Netherlands.

- 4.3.6 You indemnify the Contracting Authority against any claims from any tax authority for any taxes, levies or contributions considered equivalent to taxes or levies, originating from either the Netherlands or outside the Netherlands.

4.4 Requirements relating to the team

- 4.4.1 The Project Manager nominated in the tender for delivery of the service must meet the following minimum criteria:

- Have a recognised qualification in project management or equivalent;
- Have at least three years' project management experience in comparable projects of a similar size;
- Have at least five years' experience in the Earth Observation environment, covering the following:
 - Extensive experience with spatial analysis, data management and big data processing.
 - Experience in the interpretation of Sentinel and other satellite data for the identification of vegetation, land cover/land use and other purposes.
 - Experience in overseeing IT infrastructures, server components, database solutions, etc.
 - An in-depth understanding of database structure and RDBMS (Relational Database Management System) principles.
 - Fluency in the English and Dutch language, both spoken and written, is required.

The Project Manager will bear responsibility for the delivery of this project. They must have the critical planning and organisation skills required to establish, implement and manage processes and procedures covering project management, including risk and issues management, documentation management and quality assurance.

- 4.4.2 At least two Project Team Members nominated in the tender for delivery of the service must individually meet the following minimum criteria:

- Have a recognised qualification in the Earth Observation (EO), GIS or Data Analytics fields or equivalent.
- Have at least three years' experience in the Earth Observation environment.
- Be fluent in English, both spoken and written.

Additionally, the project team nominated in the tender for delivery of the service must collectively meet the following minimum criteria and have expertise and experience covering all of the following topics as a collective and at least one of the following topics as individuals:

- Large scale EO IT Infrastructure experience.
- EO database solutions experience.
- EO knowledge and application to agriculture.
- Satellite processing, extraction and analysis experience.
- Front-end service development experience.
- Quality assurance of EO data experience.
- Understanding of Dutch agriculture.

4.5 Requirements relating to social return and social responsibility

- 4.5.1 The Contractor applies a standard of 1% of the total contracted amount to social return for the execution of the contract. Three months after contracting, the Contractor must submit an action plan describing how this requirement will be fulfilled. The specifics must be related to the contract, but they do not need to be at the Contractor's locations in all cases. The action plan must also describe how the displacement of personnel by employees from the social return target group is avoided.

The action plan should be delivered within three months after the contract is awarded. The specifics of social return must be substantiated in the action plan with the following aspects:

- total number of SR employees to be deployed (person, no names with a view to the GDPR).
- period of deployment of SR employees.
- indication of employees to be deployed (e.g. WWB, WSW and WIA).
- recruitment channel (e.g. municipality and UWV).
- a value of 1% of the total contract amount, to be achieved during the contract.

Social return includes the following target groups:

- a. People entitled to social returns under the Work and Social Assistance Act (WWB) who have been unemployed for longer than 12 months, are aged 50 years old or older and/or who cannot find work independently without rehabilitation support or other guidance.
 - b. People entitled under the Unemployment Insurance Act (WW) who have been unemployed for longer than 12 months and/or are aged 50 years old or older.
 - c. People entitled under the Work and Income (Capacity for Work) Act (WIA).
 - d. People entitled under the Return to Work (Partially Disabled Persons) Regulations (WGA).
 - e. People entitled under the Invalidity Insurance (Self-Employed Persons) Act (WAZ).
 - f. People entitled under the Disablement Assistance Act for Handicapped Young Persons (WAJONG).
 - g. People entitled under the Older and Partially Disabled Unemployed Workers Income Scheme Act (IOAW).
 - h. People entitled under the Older and Partially Disabled Former Self-Employed Persons Income Scheme Act (IOAZ).
 - i. People under the Sheltered Employment Act (WSW).
 - j. Practical training sites/workplaces for jobseekers not entitled to benefits (*nuggers*).
 - k. Practical training sites/workplaces for school dropouts and young people with insufficient qualifications.
 - l. Practical training sites/workplaces in the context of BOL/BBL training programmes, VSO and/or practical schools.
- 4.5.2 The Contractor must execute the activities in the contract in accordance with the OECD Due diligence Guidance for Responsible Business Conduct³ and the ILO Declaration on Fundamental Principles and Rights at Work⁴.

³ [OECD Due Diligence Guidance for Responsible Business Conduct - OECD](#)

⁴ [ILO Declaration on Fundamental Principles and Rights at Work \(DECLARATION\)](#)

Appendix A – Open Standards

The following standards are used for GEO information:

- Dutch metadata profile on ISO 19115 for geography, version 2.1.0
- Dutch metadata profile on ISO 19119 for services, version 2.1.0
- Dutch WFS profile 1.1 on ISO 19142 for Web Feature Services 2.0, version 1.1
- Dutch Web Map Service profile on ISO 19128, version 1.1
- ISO 19136:2007 Geographic information - Geography Markup Language (GML), version 2007
- NEN 3610:2011 (nl) Basismodel Geo-information - Terms, definitions, relationships and general rules for the exchange of information about terrestrial spatial objects, version 2011
- GeoPackage 1.2
- OpenAPI specification 3.0

For more information, please visit: [Geo-Standaarden | Forum Standaardisatie](#)

Appendix B – Specifications imagery

All imagery should be made available as COGs. There are four COGs for each image:

- Fully processed optical image, raw band values (ARD)
- Fully processed optical image, three bands stretched True Colour
- Fully processed optical image, three bands stretched False Colour
- Corresponding mask, one band in four categories: clear, haze, cloud and shadow.

All products will be delivered with acquisition and processing metadata and footprint vector.

Appendix C – Declaration data

The BISS/CRISS, ECO scheme and AECM attribute lists are presented here.

BISS/CRISS attribute list

Attributes list CTE + Ranking	Attributes list Contractor			
attribute	Present	Filled in with	Format	Notes
Relatienummer	Y	For example, '123456789'	Number(9,0)	A unique number identifying the relationship or collective. (123456789)
relatienaam	N	N/A		APPLICATIONS.relationshipname
Relatiestraatnaam	N	N/A		
Relatiehuis_NR	N	N/A		
Relatiehuis_NR_To ev	N	N/A		
relatiepostcode	N	N/A		APPLICATIONS.relationpostcode
relatiewoonplaats	N	N/A		APPLICATIONS.relationresidence
REBUS	N	N/A		
BSN_nr	N	For example, '123456789'	Number(9,0)	
KvK_nr	N	For example, '12345678'	Number(8,0)	
Zaakid	Y	For example, '1234567'	Number(7,0)	A unique number for the application. (1234567)
Ind_ECO	Y	Y, N		Indication whether application has also been made for ECO on the plot in question.
Ind_BISS	Y	Y, N		Indication whether application has also been made for the BISS on the relevant plot.
Ind_ANLb	Y	Y, N		Indication whether ANLb application has also been made on the plot.
Volgnummer	Y	Example for '1234': in case of a split, this plot can be given as '1234_1' and '1234_2'	VarChar(10)	Sequence number of the control plot. Sequence number is unique within the application.
FunctioneelID	Y	For example, '53.00000000000001.001'		Unique number of the control plot.
Gewascode	Y	See crop code list	Varchar2(10)	Crop code of the control plot. See crop code list
Omschrijving_Gewascode	Y		Varchar2 (200)	Verbal description of the crop
Gebruikstitel	N	N/A	Varchar2 (500)	Tenancy, ownership, etc.
Oppervlakte_opgegeven	Y	For example, '0.1234'	Number(9,4)	Area specified by the relation.
Oppervlakte_berekend	Y	For example, '0.1234'	Number(9,4)	Calculated area of the drawn GIS plane

Biologische productie wijze	Y	N/A	Number(1)	Organic = 1 In conversion with certificate = 3 In conversion without certificate = 4
Ind_voorteelt	Y	Y, N	Varchar2(1)	Y = Pre-breeding applied for/ empty no pre-breeding applied for
Voorteelt1grondbedekking	Y	See crop code list	Varchar2(10)	The crop code corresponding to pre-cultivation
Voorteelt1oppervlakte	Y	For example, '0.1234'	Number(9,4)	The area belonging to the pre-cultivation
Voorteelt1inzaaidatum	Y	empty		Date the pre-cultivation was sown.
Voorteelt2grondbedekking	Y	See crop code list	Varchar2(10)	The crop code corresponding to pre-cultivation
Voorteelt2oppervlakte	Y	For example, '0.1234'	Number(9,4)	The area belonging to the pre-cultivation
Voorteelt2inzaaidatum	Y	empty		Date the pre-cultivation was sown.
Ind_nateelt	Y	Y, N	Varchar2(1)	J = Progeny applied for/ empty no progeny applied for
Nateelt1grondbedekking	Y	See crop code list	Varchar2(10)	The crop code corresponding to the progeny
Nateelt1oppervlakte	Y	For example, '0.1234'	Number(9,4)	The area belonging to the progeny
Nateelt1inzaaidatum	Y	empty		Date that the progeny was sown.
Nateelt2grondbedekking	Y	See crop code list	Varchar2(10)	The crop code corresponding to the progeny
Nateelt2oppervlakte	Y	For example, '0.1234'	Number(9,4)	The area belonging to the progeny
Nateelt2inzaaidatum	Y	empty		Date that the progeny was sown.
Regio_ECO	N	N/A	Varchar2(50)	
Ind_niet_productief	Y	Y, N	Varchar2(1)	Subject GLMC8
Verklaring_niet_productief	Y		Varchar2(1)	Checkmark declaring that the plot is not productive.
LE_lengte	Y			Length of landscape element in metres
LE_soorteigendom	Y		varchar2(10)	Does all or part of an LE belong to the control plot.
ECO_Activiteit_omschrijving	N	N/A		
ECO_Activiteit_codering	N	N/A		
Oppervlakte_forfait	N	N/A	Number(9,4)	This flat rate is intended for line elements.

Bomen_voorgesteld_perceel	Y	Number of trees counted as RFO on the plot in question. This is not mutable by the relationship.	Number(3)	Number of trees counted as RFO on the plot in question. This is not mutable by the relationship.
Bomen_opgegeven_biss_perceel	Y	For example, '6'	Number(3)	Number of trees occurring on the BISS plot
Bomen_opgegeven_eco_perceel	Y	For example, '6'	Number(3)	Number of trees occurring on the ECO plot
Oppervlakte_bomen_biss	Y	For example, '0.1234'	Number(9,4)	Number of trees times fixed value (1 m2)
Oppervlakte_bomen_eco	Y	For example, '0.1234'	Number(9,4)	Number of trees times fixed value (1 m2)
Controlesoort	Y	ASEL	Varchar(20)	ASEL (Aselect)
Initiatiereden	Y	QA_AMS_GSA	Varchar(10)	Reason the check was initiated.
ranking	N	N/A		
Attributes list Contractor				
Attribute	Present	Filled in with	Format	Notes
Relation number	Y	For example, '123456789'	Number(9,0)	A unique number identifying the relationship or collective. (123456789)
relation name	N	N/A		APPLICATIONS.relationshipname
Relationship street name	N	N/A		
Relationship house_NR	N	N/A		
Relationship house_NR_Toev	N	N/A		
relation postal code	N	N/A		APPLICATIONS.relationpostalcode
relationship residence	N	N/A		APPLICATIONS.relationresidence
REBUS	N	N/A		
BSN_nr	N	N/A		If KVK is filled in, this can be empty.
Chamber of Commerce_no	N	N/A		If BSN is filled in, this can be empty.
Case id	Y	For example, '1234567'	Number(7,0)	A unique number for the application. (1234567)
Ind_ECO	Y	Y, N		Indication whether ECO has also been applied for on the relevant plot.
Ind_BISS	Y	Y, N		Indication whether application has also been made for the BISS on the relevant plot.
Ind_ANLb	Y	Y, N		Indication whether ANLb application has also been made on the plot in question.

Serial number	Y	Example '1234', in case of a split, this plot can be as '1234_1' and '1234_2'	VarChar(10)	Sequence number the control plots. Sequence number is unique within the application.
FunctionalID	Y	e.g. '53.00000000000001.001'		Unique number of the control plot.
Crop code	Y	See crop code list	Varchar2(10)	Crop code of the control plot. See crop code list
Description_Wash code	Y		Varchar2 (200)	Verbal description of the crop
Use title	N	N/A	Varchar2 (500)	Tenancy, ownership, etc.
Area_enumerated	Y	For example, '0.1234'	Number(9,4)	Area specified by the relation.
Area_calculated	Y	For example, '0.1234'	Number(9,4)	Calculated area of the drawn GIS plane
Organic production method	N	N/A	Number(1)	Organic = 01 In conversion with certificate = 03 In conversion without certificate = 04 Indicated not filled in = 00, empty means not filled in by relation.
Ind_pre-breeding	Y	Y, (empty)	Varchar2(1)	Y = Pre-breeding applied for/ empty no pre-breeding applied for
Pre-cultivation1 ground cover	Y	See crop code list	Varchar2(10)	The crop code corresponding to pre-cultivation
Pre-cultivation1 area	Y	For example, '0.1234'	Number(9,4)	The area belonging to the pre-cultivation
Pre-cultivation1sowing date	Y	empty		Date the pre-cultivation was sown.
Pre-cultivation2 ground cover	Y	See crop code list	Varchar2(10)	The crop code corresponding to pre-cultivation
Pre-cultivation2area	Y	For example, '0.1234'	Number(9,4)	The area belonging to the pre-cultivation
Pre-cultivation2sowing date	Y	empty		Date the pre-cultivation was sown.
Ind_nation	Y	Y, (empty)	Varchar2(1)	Y = Progeny applied for/ empty no progeny applied for
Nateelt1 ground cover	Y	See crop code list	Varchar2(10)	The crop code corresponding to the progeny
Nateelt1surface	Y	For example, '0.1234'	Number(9,4)	The area belonging to the progeny
Nateelt1sowing date	Y	empty		Date the progeny was sown.
Nateelt2 ground cover	Y	See crop code list	Varchar2(10)	The crop code corresponding to the progeny
Nateelt2surface	Y	For example, '0.1234'	Number(9,4)	The area belonging to the progeny
Nateelt2sowing date	Y	empty		Date the progeny was sown.

Region_ECO	Y	1, 2, 3, 4, 5, 6, 7, 8	Varchar2(50)	CODE DESCRIPTION, Only the sequence number is reflected in the column 'REGIO_ECO' 1 Bouwhoek, Hogeland and Oldambt 2 Northern Meadow Area 3 Peat Colonies 4 Eastern stream valleys and clearings 5 Flevopolders 6 Western Holland 7 Southwestern Delta and Rivers 8 Southern stream valleys and clearings
Ind_not_productive	Y	Y, N	Varchar2(1)	Subject GLMC8
Statement_not_productive	Y		Varchar2(1)	Checkmark declaring that the plot is not productive.
LE_length	Y			Length of landscape element in metres
LE_soorte property	Y		varchar2(10)	Does all or part of an LE belong to the control plot.
ECO_Activity_description	Y	Rest crop Nitrogen-fixing crop/protein crop Multi-year cultivation Long-term grassland Grassland with herbs Wet cultivation Early variety harvest crop (no later than 31 August) Early variety harvest crop (no later than 31 October) Grass clover Strip cultivation Fibre crop Undersown catch crop Green cover Biological control Green fallow Buffer strip with herbs (along arable land) Buffer strip with herbs (along grassland)		Rest crop Nitrogen-fixing crop/protein crop Multi-year cultivation Long-term grassland Grassland with herbs Wet cultivation Early varietal harvest crop (no later than 31 August) Early varietal harvest crop (no later than 31 October) Grass clover Strip cultivation Fibre crop Undersown catch crop Green cover Biological control Extended grazing: day grazing only Extended grazing: day and night grazing Woody element (hedge, hedge, thicket) Woody element (other woody elements) Green fallow Buffer strip with herbs (along arable land) Buffer strip with herbs (along grassland) Organic farm (SKAL)

ECO_Activity_coding	Y	H01 H02 H03 H04 H05 H06 H07 H08 H09 H10 H11 B01 B02 T01 N03 N04 N05		H01 H02 H03 H04 H05 H06 H07 H08 H09 H10 H11 B01 B02 T01 V01 V02 N01 N02 N03 N04 N05 D01
Area_forfait	N	N/A	Number(9,4)	This is intended for line elements.
Trees_proposed_plot	Y	Number of trees counted as RFO on the plot in question. This is not mutable by the relationship.	Number(3)	Number of trees counted as RFO on the plot in question. This is not mutable by the relationship.
Trees_declared_biss_plot	Y	For example, '6' or (blank)	Number(3)	Number of trees occurring on the BISS plot
Trees_declared_eco_plot	Y	For example, '6' or (blank)	Number(3)	Number of trees occurring on the ECO plot
Surface_trees_biss	Y	For example, '0.1234'	Number(9,4)	Number of trees times fixed value (1 m2)
Area_trees_eco	Y	For example, '0.1234'	Number(9,4)	Number of trees times fixed value (1 m2)
Control type	Y	ASEL, SEL, OV	Varchar(20)	
Initiative reason	Y	QA_AMS_GSA	Varchar(10)	Reason the check was initiated.
ranking	N	N/A		
ranking	N	N/A		

Attribute list AECM

	Delivery Parcel measurement QA – Contractor
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Attribute	DAT File	Filled in with
functioneel_id	yes	Character, e.g. 31.0000000000171.001
dienstsleutel	yes	Character, 9 or 8 digits
zaak_id	yes	Character, BISS & ECO = 7 digits, ANLB = 6 digits
naam_relatie	yes	Character
zone_nr	yes	Numeric (0, 100, 101, 102, 103, 104, 105, 106, 107, 108 or 109)
volgnummer	yes	Character
grondbedekking	yes	Character, 3 or 4 digits
dg	yes	Numeric, 4 decimal places
sector_id	yes	Character
Ind_BISS	yes	empty
Ind_ECO	yes	empty
Ind_ANLB	yes	empty
ANLB_Activiteit_omschrijving	yes	
ANLB_Activiteit_codering	yes	
	INIT File	
dienstsleutel	yes	Character, 9 or 8 digits
ZAAK_ID	yes	ANLB = 6 digits
initiatie_reden	yes	ASEL
risicoprofiel	yes	empty
controle_code	yes	ANLB

Geometric information is also provided for each parcel in a separate file. A link between the geometric information and the alphanumeric data can be created based on the functioneel_id.

Appendix D – Data description red parcels

Although the work that needs to be performed is similar to the QA controls, the data format for the red parcels is slightly different.

Data format of red parcels that need checking

Attribute	Description	Example
FUNCTIONEEL_ID		53.0000000740258.001
BVD_ID		504801328
WNM_ID		499114058
AANMAAKTIJDSTIP		17-08-2023 08:49:04
BEVINDING		R
BEGIN_ANALYSE		01-01-2023 00:00:00
EINDE_ANALYSE		31-07-2023 00:00:00
WAARNEMINGSTYPE		
BEGINDATUM		
EINDDATUM		
BRON		
SUPERKLASSE		
SUPERKLASSE_OMS		
BETROUWBAARHEID		
UITKOMST		

Data format of the delivery of the results

Attribute	Description	Example
Functioneel_ID		53.00000000000387.001
Bevinding_ID		534672246
Medewerker_naam		tkaratas
Creatietijdstip		22-08-2023 09:43:00
Controleresultaat		2
Waarneming_type		2
Begindatum		27-05-2023
Einddatum		24-06-2023
Superklasse_code		
Betrouwbaarheid		
Uitkomst		J

Appendix E – Data description of the delivery

BISS and ECO delivery format. Please note that these are subject to change due to changes in national and European legislation and the availability of data.

Field	Scheme	Format	Description
Relatienummer	Alg		A unique number identifying the relation or collective.
Zaakid	Alg		A unique number for the application.
Volgnummer	Alg		Sequence number for the control plot. Sequence number is unique within the application.
FunctioneelID	Alg		Unique number of the control plot.
Oppervlakte_berekend	Alg	e.g. '0,1234'	Calculated area of the drawn GIS plane
Ind_niet_productief	GLMC	varchar2(1)	Concerns GLMC8. Values are J and N
LE_lengte	BISS, ECO		Length of landscape element in metres
LE_soorteigendom	BISS, ECO	varchar2(10)	Does all or part of an LE belong to the control plot.
ECO_Activiteit_codering	ECO		H01 H02 H03 H04 H05 H06 H07 H08 H09 H10 H11 B01 B02 T01 N03 N04 N05
Oppervlakte_bomen_biss	BISS	Number(9,4)	Number of trees times fixed value (1 m2)
Oppervlakte_bomen_eco	ECO	Number(9,4)	Number of trees times fixed value (1 m2)
Controlesoort	Alg	Varchar(20)	ASEL (Aselect) SEL (Select) S+ (targeted) OV (other)
Initiatiereden	Alg	Varchar(10)	Reason the check was initiated.
Gemeten_gewas	ECO,BIS		Measured crop code
Geconstateerd_gewas	ECO,BIS		Observed crop
Gemeten_oppervlakte	ECO,BIS	e.g. '0,1234'	Surface area based on geometry
Geconstateerde_oppervlakte	ECO,BIS	e.g. '0,1234'	Area after applying tolerance. To be delivered for both plots and activities

Tolerantie	ECO,BIS		Indicates the tolerance used.
Ind_ploegen	ECO	Varchar2 (1)	Indicator of whether ploughing has also taken place. Values are J and N
Datum_ploegen	ECO		Date when ploughed.
Ind_gerooid	ECO	Varchar2 (1)	Indicator of whether the main crop has been harvested. Values are J and N
Datum_gerooid	ECO		Date the main crop was harvested.
Ind_gewasresten	ECO	Varchar2 (1)	Indicator whether crop residues are present on the plot after harvesting Values are J and N
Ind_bedekking	ECO	Varchar2 (1)	Indicator of whether the whole plot is covered by the main crop Values are J and N
Ind_langjarig_grasland	ECO	Varchar2 (1)	Indicator of whether grassland is present throughout the year. Values are J and N
Geconstateerd_vanggewas	ECO		Observed crop code
Datum_inzaai_vanggewas	ECO		Date when a catch crop was sown
Ind_aanwezigheid_gewas	ECO	Varchar2 (1)	Indication of whether crop observed (from 01-01 to 01-03 presence for van crop, all year fibre crop) Values are J and N
Ind_bedekking_vanggewas	ECO	Varchar2 (1)	Indicator whether the field is at least 80% covered with a catch crop and/or soil fertiliser Values are J and N
Ind_beweiding	ECO	Varchar2 (1)	Indicator of whether grazing has taken place Values are J and N
Datum_beweiding	ECO		date when grazing took place
Ind_maaien	ECO, BIS	Varchar2 (1)	Indicator of whether mowed Values are J and N
Datum_maaien	ECO		date when mowing took place
Ind_spuitsporen	ECO	Varchar2 (1)	Indicator of whether spray marks are visible (on greater than 10% of the plot area) Values are J and N
Ind_shape	Alg	Varchar2 (1)	Indicator whether a shapefile of this plot is also present. Values are J and N
rapportnummer	Alg		Displays the number of the report delivered by the satellite party.
datum_controle	Alg		Indicates the date the plot was checked by the satellite party.

Opmerkingen	Alg		A field in which the satellite party can supply any additional information.
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Data delivery format AECM

Designation in DAT file	Format & interpretation	Format in shape file	Notes
functional_id	Character, e.g. 31.0000000000171.001	FUNCTIONEE,C,32	Plot ID number
service key	Character, 9 or 8 digits	SERVICE SL_1,C,12	BRS number of the relation
case_id	Character, 7 digits	BUSINESS_ID,C,7	Scheme application number, can consist of up to 14 digits
name_relationship	Character		Name of relationship
zone_number	Numeric (266, 276, 277, 283, 287, 298, 316, 317, empty)		Zone number.
sequence number	Character	SEQUENCE NUMBER,C,32	Plot number, is in format Character because in current Contractor this is processed in the same field as sector_id and that is character
ground cover	Character, 3 or 4 digits		Crop code of the main crop
dg	Numeric, 4 decimal places		Applied area of main crop, in the case of crop codes 343, 2641 and 2643 this will be a length instead of an area
sector_id	Character	SECTOR_ID,C,32	Sector_id is the identifier for the field/BE in ANLB
Ind_BISS	Y, N		Indicate whether application has also been made for the BISS on the relevant plot.
Ind_ECO	Y, N		Indicate whether ECO has also been applied for on the relevant plot.
Ind_ANLb	Y, N		Indicate whether ANLB application has also been made on the relevant plot.
ANLB_Activity_coding			Coding ANLb activity

Designation in INIT file	Format and interpretation	Notes
dienstsleutel	Character, 9 or 8 digits	BRS number of the relation

zaak_id	Character, 7 digits	Scheme application number
initiatie_reden	Character	The initiation reason should mention the schemes for which a relationship was created.
risicoprofiel	Character	Risk profile based on which a relationship was created for a check.
controle_code	Character (PCHT, OD, EA, EAEX, BGN2I, BGN2H, ANLB, GK and possible combinations)	This code is in fact a kind of categorisation or simplification of the initiatie_reden and provides direct insight into the type of file.

Appendix F – Control aspects

The table below provides an overview of all control aspects. Please note that these are subject to change due to changes in national and European legislation and the availability of data.

Scheme	Short description	Activity code	Control aspect	Notes
BIS	eligible crop		The farmer grows an eligible crop consisting of an arable crop, permanent grassland or a permanent crop, or there is an eligible landscape element.	
BIS	parcels of grassland have been grazed or mown		Annual mowing of the area of grassland before 1 October, unless the farmer cannot meet this criterion due to a contract for agricultural nature management based on the ANLb and Groenblauwe Diensten catalogue of subsidy schemes. In this case, the area shall be mowed at least once every two years before 1 October.	
ECO	Rest crop	H01	The farmer grows a crop from the eco-scheme rest crops list referred to in Annex 1 as a main crop with a visible cover.	Crop classification and cover. If whole field is not covered, then split
ECO	Nitrogen-fixing crop/protein crop	H02	The farmer shall exclusively grow at least one crop from the nitrogen-fixing crops list referred to in Annex 1 as a main crop with a visible cover, or grow a crop from the nitrogen fixing crops list as referred to in Annex 1 in combination with cereals, where the share of nitrogen-fixing crops is greater than 50%.	Crop classification and cover. If whole field is not covered, then split
ECO	Multi-year cultivation	H03	The farmer grows a crop from the multi-year crop list referred to in Annex 1 as a main crop with a visible cover.	Crop classification and cover. If whole field is not covered, then split
ECO	Multi-year cultivation	H03	The crop was grown as a main crop in the previous year and is contiguous on the plot.	Crop classification and cover. If whole field is not covered, then split

ECO	Multi-year cultivation	H03	The crop is present on the plot throughout the year	Plot must not be ploughed throughout the year and the crop must not be harvested (black soil)
ECO	Long-term grassland	H04	The farmer maintains permanent grassland on the plot from 1 January to 31 December.	Crop classification and cover. If whole field is not covered, then split
ECO	Long-term grassland	H04	Only light tillage has been applied to the plot from 1 January 2023.	Based on vegetation, check whether there is a crop; also check for tillage marks
ECO	Wet cultivation	H06	The farmer harvests the crop at least once per calendar year	Harvest date/period; for cranberry at least, it is unlikely that harvest can be detected. Discuss with the NEA on a crop-by-crop basis whether harvest can be detected.
ECO	Wet cultivation	H06	The farmer grows a crop from the wet cultivation crop list referred to in Annex 1 as a main crop with a visible cover.	Crop classification and cover if not whole field covered then split
ECO	Early variety harvest crop (no later than 31 August)	H07	The farmer grows a crop from the early variety harvest crop 1 September list referred to in Annex 1 as a main crop with a visible cover.	Crop classification and cover if not whole field covered then split
ECO	Early variety harvest crop (no later than 31 August)	H07	The farmer harvests the declared early variety of harvested crop before 1 September of the application year	Harvest date/period, control moment is important
ECO	Early variety harvest crop (no later than 31 August)	H07	The farmer removes the crop and crop residues from the plot or works the crop residues before 1 September of the application year.	Control moment is important, plot should be bare after harvesting main

				crop, no visible crop residues
ECO	Early variety harvest crop (no later than 31 October)	H08	The farmer grows a crop from the early variety harvest crop 1 November list referred to in Annex 1 as a main crop with a visible cover.	Crop classification and cover if not whole field covered then split
ECO	Early variety harvest crop (no later than 31 October)	H08	The farmer harvests the declared early variety of harvested crop before 1 November of the application year	Harvest date/period
ECO	Strip cultivation	H10	The agricultural plot consists of at least five strips	In some cases it could be checked with CwRS, but generally this activity is too complex for that (crop recognition on narrow strips/are there 5 strips of the right size on 1 plot)
ECO	Strip cultivation	H10	The strips are a minimum of 3 and a maximum of 27 metres wide	check strip width
ECO	Strip cultivation	H10	The farmer grows a combination of at least five crops, excluding permanent grassland, as main crops with a visible cover, of which at least two are productive crops and one is a rest crop from the eco-scheme rest crops list referred to in Annex 1	crop classification
ECO	Strip cultivation	H10	A strip of shrubs and trees under which forest agriculture is allowed	crop classification
ECO	Fibre crop	H11	The farmer grows a crop from the fibre crop list as referred to in Annex 1 as a main crop with visible cover	Crop classification and cover if not whole field covered then split
ECO	Undersown catch crop	B01	The farmer grows a catch crop from the green manure/catch crops list referred to in Annex 1 as an undersown crop in combination with the main crop, such that it results in visible ground cover immediately after the harvest of the main crop	Cover does, no crop classification; crop detection is not possible because there is no normal growth cycle of a crop. You only get emergence, stable crop and crop undercovers.

ECO	Undersown catch crop	B01	Until at least 1 December, at least 80% of the area of the plot concerned consists of the declared catch crop	Cover is controllable, crop classification at 80% is not
ECO	Undersown catch crop	B01	The catch crop must be visible after harvesting the main crop and maintained until at least 1 December. That means no ploughing or undercutting before 1 December. Harvesting is unlikely in this context, but what matters is that no activities are carried out before 1 December.	The time when the catch crop is undercut/no longer present must be recorded.
ECO	Undersown catch crop	B01	Relation must not use chemical plant protection products after harvesting the main crop.	Spray traces may indicate the use of plant protection products.
ECO	Green cover	B02	The farmer grows a crop from the green manures/catch crops list referred to in Annex 1, where during the entire period from 1 January to 1 March 2023, at least 80% of the area of the plot concerned consists of the declared crop	Cover can be checked, crop classification cannot. There are only sentinel images available at this time of year so only on these can be plotted
ECO	Green cover	B02	The crop must be maintained at least until 1 March 2023. So no ploughing or harvesting before 1 March. Therefore, the date on which the crop is undercut is important. This should not be before 1 March.	The point at which the green cover is undercut/no longer present should be recorded.
ECO	Green cover	B02	The relation must not spray or burn the catch crop to death before undercutting.	Spray traces may indicate the use of plant protection products.
ECO	Biological control	T01	The farmer grows a crop from the biological control crop list referred to in Annex 1	Crop classification and cover if not whole field covered then split
ECO	Green fallow	N03	The farmer grows a crop from the green set-aside crop list referred to in Annex 1 as main crop on arable land, which is at least three metres wide	Crop classification and cover if not whole field covered then split
ECO	Green fallow	N03	In the period from 31 May to 31 August, at least 80% of the area should consist of the declared crop	Cover is controllable, crop classification at 80% is not
ECO	Green fallow	N03	No grazing or harvesting is allowed	A rapid decrease in biomass may indicate harvesting. Livestock detection is possible
ECO	Green fallow	N03	Ploughing is not allowed on the plot.	Presence of black soil.

ECO	Green fallow	N03	The green fallow must be maintained until at least August 31.	The plot may not be harvested or ploughed in between.
ECO	Green fallow	N03	The relation is not allowed to use chemical plant protection products and manure for 9 months in the year.	Spray traces may indicate the use of plant protection products.
ECO	Buffer strip with herbs (along arable land)	N04	No grazing or harvesting is allowed	A rapid decrease in biomass may indicate harvesting. Livestock detection is possible
ECO	Buffer strip with herbs (along arable land)	N04	The buffer strip must be maintained from 1 April to 1 October	The plot may not be harvested or ploughed in between.
ECO	Buffer strip with herbs (along grassland)	N05	No grazing or harvesting is allowed	A rapid decrease in biomass may indicate harvesting. Livestock detection is possible
ECO	Buffer strip with herbs (along grassland)	N05	The buffer strip must be maintained from 1 April to 1 October	The plot may not be harvested or ploughed in between.
ECO	check entire companies for all requested eco-activities			complete control of all activities on all plots applied for
ANLB	No agricultural operations are carried out during the rest period from date x to date y.	A01	Agricultural operations are not allowed between date x and date y (so they are allowed again on date y). Agricultural operations include mowing, grazing, fertilising and harvesting. Manure spreading is sometimes visible because of brown spots on the turning areas. If geese cause the damage, RVO establishes that link itself.	Period changes quite often during management year. Grazing, mowing, blotting, manure spreading and the like are all not allowed.
ANLB	Found nests and/or chicks are protected and safeguarded from all agricultural operations by way of a rest period from date x to date y	A05	Agricultural operations are not allowed between date x and date y (so they are allowed again on date y). Agricultural operations include mowing, grazing, fertilising and harvesting. Manure spreading is sometimes visible because of brown spots on the turning areas. If geese cause the damage, RVO establishes that link itself. This often concerns parts of larger agricultural parcels.	Period changes quite often during management year. Grazing, mowing, blotting, manure spreading and the like are all not allowed.

ANLB	The grassland will not be mowed from 1 March and before the dormancy period.	A03	Control only involves not being allowed to mow between 1 March and the start of the rest period. Grazing is allowed. Mowing and grazing are sometimes difficult to distinguish. Grazing is often more patchy. Submit mowing or grazing date/period. Supplementary: animals visible in this period or not.	Always in combination with A01, though different period. So grazing is allowed
ANLB	The crop is mowed and removed at least once a year.	A17	Control is about mowing. Detecting mowing is possible (supply this, 1). If the windrows are visible, 2, indication for disposal, 3. Ideal: mowing detection (1), windrows visible (2), windrows gone (3) (has been disposed of). Only possible with sufficient images in mowing period. 2 and 3 will not be deliverable at all plots.	Always in combination with other activity
ANLB	The land is inundated (completely boggy). The inundation period runs from date x to date y.	A04	The given area must be inundated between x and date y (when you walk over it, your feet get wet). So the blades of grass can still be above the water or under water. Contractor can only detect the minimum size. The shapes of 2022 controls NVWA with control date are shared with Contractor for training purposes.	Boggy is also good (better than really underwater). This is not well visible through monitoring (marker water). Draw out dry parts, it is questionable whether adjacent plots are also shared
ANLB	From date x to date y grazing allowed with maximum stocking density b (LU/ha)	A21	Grazing is visible. Animals in the field are visible. Whether they are found in the specific period on the specific plot is of interest. Type of animal is not asked.	A08 and A21 both refer to LU/ha. This is a calculation that depends on livestock species and age and area of plot.
ANLB	Grazing is mandatory from date x to date y with minimum a and maximum stocking density b (LU/ha)	A08	grazing is visible. Animals in the field are visible. Of interest is whether they are found in the specific period on the specific plot. Type of animal is not asked.	A08 and A21 both refer to LU/ha. This is a calculation that depends on livestock species and age and area of plot.
ANLB	At least f% of the area from date x to date y consists of crop a or multiple crops b or crop residues c.	A09	If there is no edge/plot with ANLb at all, Contractor will provide this result as detected crop or uncertain crop. Typical ANLb mixtures will be tricky, as will narrow plots or strip cultivation.	There are winter and summer packages, often a mix, often long narrow plots

Appendix G – Description of Dutch crops

The list presented here is provisional and subject to change.

NAME	CROP CODE	CATEGORY
Flower seeds open ground	174	Nursery crops
Wheat (winter)	233	Arable crops
Wheat (summer)	234	Arable crops
Barley (winter)	235	Arable crops
Barley (summer)	236	Arable crops
Rye (not cut rye)	237	Arable crops
Oat	238	Arable crops
Field pea (and marrowfat)	241	Arable crops
Common bean (brown)	242	Arable crops
Pea, green/yellow (green to harvest)	244	Arable crops
Caraway	246	Arable crops
Poppyseed	247	Arable crops
Sugar beet	256	Arable crops
Fodder beet	257	Arable crops
Alfalfa	258	Arable crops
Maize	259	Arable crops
Yellow onion	6660	Arable crops
Red onion	6664	Arable crops
Silver onion	263	Arable crops
Grassland, permanent	265	Grassland
Grassland, temporary	266	Grassland
Pea (dry to harvest)	308	Arable crops
Broad bean (including horse bean)	311	Arable crops
Triticale	314	Arable crops
Corn, grain	316	Arable crops
Corn, corn cob mix	317	Arable crops
Grassland, natural. With agricultural activities.	331	Grassland
Grassland, natural. Nature as main function.	332	Grassland

Natural areas (incl. heathland)	335	Grassland
Edge, on arable land and directly adjacent to forest. No agricultural production.	338	Arable crops
Ditch	343	Landscape elements
Tagetes erecta (Mexican marigold)	346	Arable crops
Tagetes patula (French marigold)	347	Arable crops
Hop	375	Arable crops
Teff	381	Arable crops
Spelt	382	Arable crops
Other green manure crops, leguminous	426	Arable crops
Other green manure crops, non-leguminous	427	Arable crops
Yellow mustard	428	Arable crops
Chicory	511	Arable crops
Sunflowers	515	Arable crops
Miscanthus (Elephant grass)	516	Arable crops
Safflower	636	Nursery crops
Lady's mantle	637	Nursery crops
Madder	652	Arable crops
Evening primrose	653	Arable crops
Nettle	654	Arable crops
Black mustard	655	Arable crops
Sun crown	656	Arable crops
Dragon plants	657	Arable crops
Forest (SBL scheme)	662	Set aside
Lupins, not bitter	663	Arable crops
Rapeseed	664	Arable crops
Soybeans	665	Arable crops
Linseed not from fibre flax (oil flax)	666	Arable crops
Rocket (nematode trap)	669	Arable crops
Japanese oats	670	Arable crops
Rocket leaf (nematode trap)	671	Arable crops
Short rotation forest trees (excl. willow coppice)	794	(Nut) trees
Willow coppice	795	(Nut) trees
Christmas trees	796	(Nut) trees

Clover, red, clover seed	6763	Arable crops
Clover, red, green manure, catch crop	6762	Arable crops
Lotus	800	Arable crops
Common sainfoin	801	Arable crops
Winter vetch (<i>Vicia villosa</i>)	802	Arable crops
Common vetch (<i>Vicia sativa</i>)	803	Arable crops
Sweet corn	814	Arable crops
Broad bean (dry harvest) (no consumption)	853	Arable crops
Broad bean (green to harvest)	854	Arable crops
Forest without replanting obligation	863	Forest
Forest (set aside scheme)	864	Forest
Hemp, fibre	944	Arable crops
Dahlia, other floriculture crops	964	Nursery crops
Dahlia, dried flowers	965	Nursery crops
Gladiolus, other floriculture crops	967	Nursery crops
Gladiolus, dried flowers	968	Nursery crops
Hyacinth, other floriculture crops	970	Nursery crops
Hyacinth, dried flowers	971	Nursery crops
Iris, other floriculture crops	973	Nursery crops
Iris, dried flowers	974	Nursery crops
Crocus, other floriculture crops	976	Nursery crops
Crocus, dried flowers	977	Nursery crops
Lily, other floriculture crops	979	Nursery crops
Lily, dried flowers	980	Nursery crops
Daffodil, other floriculture crops	982	Nursery crops
Daffodil, dried flowers	983	Nursery crops
Tulip, other floriculture crops	985	Nursery crops
Tulip, dried flowers	986	Nursery crops
Zantedeschia, other floriculture crops	988	Nursery crops
Zantedeschia, dried flowers	989	Nursery crops
Other flowers, other floriculture crops	991	Nursery crops
Other flowers, dried flowers	992	Nursery crops
Amaryllis, other floricultural crops	994	Nursery crops
Amaryllis, dried flowers	995	Nursery crops

Dahlia, flower bulbs and tubers	997	Flower bulbs and tubers
Gladiolus, flower bulbs and tubers	998	Flower bulbs and tubers
Hyacinth, flower bulbs and tubers	999	Flower bulbs and tubers
Crocus, flower bulbs and tubers	1001	Flower bulbs and tubers
Lily, flower bulbs and tubers	1002	Flower bulbs and tubers
Daffodil, flower bulbs and tubers	1003	Nursery crops
Tulip, flower bulbs and tubers	1004	Flower bulbs and tubers
Zantedeschia, bulbs and tubers	1005	Flower bulbs and tubers
Other flowers, bulbs and tubers	1006	Flower bulbs and tubers
Amaryllis, flower bulbs and tubers	1007	Flower bulbs and tubers
Ornamental onion, other floriculture crops	1010	Nursery crops
Ornamental onion, dried flowers	1011	Nursery crops
Ornamental onion, flower bulbs and tubers	1012	Flower bulbs and tubers
Grape hyacinth, other floriculture crops	1013	Nursery crops
Grape hyacinth, dried flowers	1014	Nursery crops
Grape hyacinth, flower bulbs and tubers	1015	Flower bulbs and tubers
Tassel hyacinth, other floriculture crops	1016	Nursery crops
Tassel hyacinth, dried flowers	1017	Nursery crops
Tassel hyacinth, bulbs and tubers	1018	Flower bulbs and tubers
Valerian, production	1019	Arable crops
Valerian, seeds and propagation material	1020	Arable crops
Garlic	1021	Arable crops
Quinoa	1022	Arable crops
Parsnip, production	1023	Vegetables
Parsnip, seeds and propagation material	1024	Vegetables
Peony, other floriculture crops	1025	Nursery crops
Peony, dried flowers	1026	Nursery crops
Lovage (Maggiplant), production	1028	Arable crops
Lovage (Maggiplant), seeds and propagation material	1029	Arable crops
Wild marjoram (Oregano), production	1030	Arable crops
Wild marjoram (Oregano), seeds and propagation material	1031	Arable crops
Marigold	1032	Nursery crops

Igniscum Candy	1033	Arable crops
Canary seed	1034	Arable crops
Setaria	1035	Arable crops
Parsley root	1036	Arable crops
Parsley, production	1037	Vegetables
Parsley, seeds and propagation material	1038	Vegetables
Chrysanthemum, other floriculture crops	1039	Nursery crops
Chrysanthemum, dried flowers	1040	Nursery crops
Angelica, production	1042	Vegetables
Angelica, seeds and propagation material	1043	Vegetables
Poppy	1044	Nursery crops
Adonis	1045	Nursery crops
Forget-me-not	1046	Nursery crops
Cranberry	1047	Fruit
Echinacea, production	1048	Vegetables
Echinacea, seeds and propagation material	1049	Vegetables
Snapdragons	1050	Nursery crops
Iris, spherical	1051	Flower bulbs and tubers
Iris, rhizome-forming	1052	Flower bulbs and tubers
Palms, pot and container fields	1053	Nursery crops and perennials
Peony, propagation	1054	Flower bulbs and tubers
Chrysanthemum, propagation	1055	Flower bulbs and tubers
Forest and hedge plants, open ground	1067	Nursery crops and perennials
Boxwood, open ground	1068	Nursery crops and perennials
Ericaceae (e.g. erica, calluna, rhododendron, azalea), open ground	1069	Nursery crops and perennials
Avenue/park trees, root stock, open ground	1070	Nursery crops and perennials
Avenue/park trees, young trees, open ground	1071	Nursery crops and perennials
Avenue/park trees, saplings, open ground	1072	Nursery crops and perennials
Rose bushes (incl. seedlings and rootstocks), open ground	1073	Nursery crops and perennials
Ornamental conifers, open ground	1074	Nursery crops and perennials

Ornamental shrubs and climbing plants, open ground	1075	Nursery crops and perennials
Flowering and berry shrubs, open ground	1076	Nursery crops and perennials
Fruit trees, nut trees, open ground	1077	Nursery crops and perennials
Fruit trees, rootstocks, open ground	1078	Nursery crops and perennials
Fruit trees, other, open ground	1079	Nursery crops and perennials
Perennials, open ground	1080	Nursery crops and perennials
Forest and hedge plants, pot and container field	1081	Nursery crops and perennials
Boxwood, pot and container field	1082	Nursery crops and perennials
Ericaceae (e.g. erica, calluna, rhododendron, azalea), pot and container field	1083	Nursery crops and perennials
Avenue trees/park trees, rootstocks, pot and container field	1084	Nursery crops and perennials
Avenue trees/park trees, young trees, pot and container field	1085	Nursery crops and perennials
Avenue trees/park trees, saplings, pot and container field	1086	Nursery crops and perennials
Rose bushes (incl. seedlings and rootstocks), pot and container field	1087	Nursery crops and perennials
Ornamental conifers, pot and container field	1088	Nursery crops and perennials
Ornamental shrubs and climbing plants, pot and container field	1089	Nursery crops and perennials
Flowering and berry shrubs, pot and container field	1090	Nursery crops and perennials
Fruit trees, pot and container field	1091	Nursery crops and perennials
Fruit trees, rootstocks, pot and container field	1092	Nursery crops and perennials
Fruit trees, other, pot and container field	1093	Nursery crops and perennials
Perennials, pot and container cultivation	1094	Nursery crops and perennials
Apple. Planted current season.	1095	Fruit
Apple. Planted prior to current season.	1096	Fruit
Pear. Planted current season.	1097	Fruit

Pear. Planted prior to current season.	1098	Fruit
Grape	1099	Fruit
Other fruits with stones or seeds (e.g. peaches, grapes)	1100	Fruit
Blueberry	1869	Fruit
Plum	1870	Fruit
Sour cherry (yield destined for processing industry)	1872	Fruit
Blackcurrant (yield processed for processing industry)	1873	Fruit
Other small fruit (e.g. gooseberry, kiwi)	1874	Fruit
Ornamental foliage	1876	Nursery crops
Turf	1921	Arable crops
Rapeseed, winter	1922	Arable crops
Rapeseed, summer	1923	Arable crops
Agricultural natural mixture	1926	Arable crops
Other Arable crops	1927	Arable crops
Onion, whole plant, first year	1932	Arable crops
Onion, whole plant, second year	1933	Arable crops
Shallots	1934	Arable crops
Corn cob silage	1935	Arable crops
Forest, permanent, with obligation to replant	1936	Forest
Food forest	1940	Arable crops
Jerusalem artichoke	1949	Arable crops
Potato, consumption	2014	Arable crops
Potato, NAK plant	2015	Arable crops
Potato, TBM plant	2016	Arable crops
Potato, starch	2017	Arable crops
Potato, control measure AM	2025	Arable crops
Corn, energy	2032	Arable crops
Uncultivated land due to a cultivation ban/exemption	2300	Set aside
Redcurrant	2325	Fruit

Raspberry	2326	Fruit
Blackberry	2327	Fruit
Sweet cherry	2328	Fruit
Tree group	2617	Landscape elements
Wind hedge, in a plot for fruit cultivation	2618	Landscape elements
Wooded area	2619	Landscape elements
Pond and small historic water	2620	Landscape elements
Row of trees	2621	Landscape elements
Row of alder	2622	Landscape elements
Hedge for cutting or trimming	2624	Landscape elements
Thicket hedge	2625	Landscape elements
Lane	2626	Landscape elements
Orchard of tall trees	2628	Landscape elements
Thicket edge	2629	Landscape elements
Coppice grove	2630	Landscape elements
Brushwood plot	2631	Landscape elements
Reed strip and small reed plot	2633	Landscape elements
Natural waterside	2634	Landscape elements
Espaliers	2636	Landscape elements
Planted bank and sand bank	2637	Landscape elements
Landscape element, other	2638	Landscape elements
Water, other	2639	Landscape elements
Woods	2642	Landscape elements
Nut tree	2645	(Nut) trees
Cereal, other	2652	Arable crops
Strawberry open ground, propagation	2700	Vegetables
Strawberry open ground, waiting bed	2701	Vegetables
Strawberry open ground, production	2702	Vegetables
Strawberry open soil, seeds and propagation material	2703	Vegetables
Strawberry on frame, propagation	2704	Vegetables
Strawberry on frame, waiting bed	2705	Vegetables
Strawberry on frame, production	2706	Vegetables

Strawberry on frame, seeds and propagation material	2707	Vegetables
Endive, production	2708	Vegetables
Endive, seeds and propagation material	2709	Vegetables
Asparagus, area yielding production	2710	Vegetables
Asparagus, area not yet yielding production	2711	Vegetables
Asparagus, seeds and propagation material	2712	Vegetables
Kale, production	2715	Vegetables
Kale, seeds and propagation material	2716	Vegetables
Carrot, production	2717	Vegetables
Carrot, seeds and propagation material	2718	Vegetables
Broccoli, production	2719	Vegetables
Broccoli, seeds and propagation material	2720	Vegetables
Chinese cabbage, production	2721	Vegetables
Chinese cabbage, seeds and propagation material	2722	Vegetables
Courgette, production	2723	Vegetables
Courgette, seeds and propagation material	2724	Vegetables
Celeriac, production	2725	Vegetables
Celeriac, seeds and propagation material	2726	Vegetables
Fennel, production	2727	Vegetables
Fennel, seeds and propagation material	2728	Vegetables
Cucumber, production	2729	Vegetables
Cucumber, seeds and propagation material	2730	Vegetables
Pickling cucumber, production	2731	Vegetables
Pickling cucumber, seeds and propagation material	2732	Vegetables
Melon, production	2733	Vegetables
Melon, seeds and propagation material	2734	Vegetables
Pumpkin, production	2735	Vegetables
Pumpkin, seeds and propagation material	2736	Vegetables
Swede, production	2737	Vegetables
Swede, seeds and propagation material	2738	Vegetables
Kohlrabi, production	2739	Vegetables

Kohlrabi, seeds and propagation material	2740	Vegetables
Beetroot, production	2741	Vegetables
Beetroot, seeds and propagation material	2742	Vegetables
Herbs, production	2743	Vegetables
Herbs, seeds and propagation material	2744	Vegetables
Pak choi, production	2745	Vegetables
Pak choi, seeds and propagation material	2746	Vegetables
Mangetout, production	2747	Vegetables
Mangetout, seeds and propagation material	2748	Vegetables
Runner bean, production	2751	Vegetables
Runner bean, seeds and propagation material	2752	Vegetables
Rapini, production	2753	Vegetables
Rapini, seeds and propagation material	2754	Vegetables
Rhubarb, production	2755	Vegetables
Rhubarb, seeds and propagation material	2756	Vegetables
Radish, production	2757	Vegetables
Radish, seeds and propagation material	2758	Vegetables
Red cabbage, production	2759	Vegetables
Red cabbage, seeds and propagation material	2760	Vegetables
Savoy cabbage, production	2761	Vegetables
Savoy cabbage, seeds and propagation material	2762	Vegetables
Salsify, production	2763	Vegetables
Salsify, seeds and propagation material	2764	Vegetables
Celery (incl. leaf celery), production	2765	Vegetables
Celery (incl. leaf celery), seeds and growing material	2766	Vegetables
Lettuce, iceberg, production	2767	Vegetables
Lettuce, iceberg, seeds and propagation material	2768	Vegetables
Lettuce, radicchio rosso, production	2769	Vegetables
Lettuce, radicchio rosso, seeds and propagation material	2770	Vegetables
Lettuce, other, production	2771	Vegetables

Lettuce, other, seeds and propagation material	2772	Vegetables
Spinach production	2773	Vegetables
Spinach, seeds and propagation material	2774	Vegetables
Cabbage, production	2775	Vegetables
Cabbage, seeds and propagation material	2776	Vegetables
Brussels sprout, production	2777	Vegetables
Brussels sprout, seeds and propagation material	2778	Vegetables
Green beans, production	2779	Vegetables
Green beans, seeds and propagation material	2780	Vegetables
Flat beans, production	2781	Vegetables
Flat beans, seeds and propagation material	2782	Vegetables
Carrot, production	2783	Vegetables
Carrots, seeds and propagation material	2784	Vegetables
Winter carrot, production	2785	Vegetables
Winter carrot, seeds and propagation material	2786	Vegetables
Chicory root, production	2787	Vegetables
Chicory root, seeds and propagation material	2788	Vegetables
White cabbage, production	2789	Vegetables
White cabbage, seeds and propagation material	2790	Vegetables
Other leaf crop not mentioned, production	2791	Vegetables
Other leaf crop not mentioned, seeds and propagation material	2792	Vegetables
Other vegetable crop not mentioned, production	2793	Vegetables
Other vegetable crop not mentioned, seeds and propagation material	2794	Vegetables
Cauliflower, winter, production	2795	Vegetables
Cauliflower, winter, seeds and propagation material	2796	Vegetables
Cauliflower, summer, production	2797	Vegetables

Cauliflower, summer, seeds and propagation material	2798	Vegetables
Leek, winter, production	2799	Vegetables
Leek, winter, seeds and propagation material	2800	Vegetables
Leek, summer, production	2801	Vegetables
Leek, summer, seeds and propagation material	2802	Vegetables
Bulrush	3055	Arable crops
Clover, Alexandrian, clover seed	6757	Arable crops
Clover, Alexandrian, green manure, catch crop	6756	Arable crops
Meadow long flower, grass seed	6746	Arable crops
Meadow long flower, green manure, catch crop	6748	Arable crops
Leaf cabbage	3502	Arable crops
Leaf turnip	3503	Arable crops
Leaf radish	3504	Arable crops
Camelina	3505	Arable crops
Perennial ryegrass, grass seed	6750	Arable crops
Perennial ryegrass, green manure, catch crop	6751	Arable crops
Ethiopian mustard	3507	Vegetables
Lacy phacelia	3508	Arable crops
Festulolium, grass seed	6752	Arable crops
Festulolium, green manure, catch crop	6753	Arable crops
Buckwheat	3510	Arable crops
Clover, incarnate, clover seed	6759	Arable crops
Clover, incarnate, green manure, catch crop	6758	Arable crops
Italian ryegrass, grass seed	6754	Arable crops
Italian ryegrass, green manure, catch crop	6755	Arable crops
Westerwold ryegrass, grass seed	6790	Arable crops
Westerwold ryegrass, green manure, catch crop	6791	Arable crops
Niger	3514	Arable crops
Clover, Persian, clover seed	6761	Arable crops
Clover, Persian, green manure, catch crop	6760	Arable crops
Chinese mustard	3517	Arable crops
Seradella	3518	Arable crops
Sudan grass/Sorghum	3519	Arable crops

Spurry	3520	Arable crops
Turnip	3521	Vegetables
Herd's grass, green manure, catch crop	6787	Arable crops
Herd's grass, grass seed	6786	Arable crops
Smooth meadow grass, grass seed	6788	Arable crops
Smooth meadow grass, green manure, catch crop	6789	Arable crops
Clover, white, clover seed	6765	Arable crops
Clover, white, green manure, catch crop	6764	Arable crops
Flax	3736	Arable crops
Temporarily uncultivated land, due to public works	3801	Set aside
Temporarily uncultivated land, reason other than public works	3802	Set aside
Tall fescue, industrial grass	3805	Arable crops
Tall fescue, grass seed	6782	Arable crops
Tall fescue, green manure, catch crop	6783	Arable crops
Red fescue, grass seed	6784	Arable crops
Red fescue, green manure, catch crop	6785	Arable crops
Azolla	6520	Arable crops
Wild rice	6521	Arable crops
Reed	6522	Arable crops
Sweet potatoes	6632	Arable crops
Naked oats	6636	Arable crops
Field divisions	6808	Landscape elements
Lentils	6767	Arable crops
Samphire	6792	Arable crops
Sea lavender	6766	Arable crops
Rice	6799	Arable crops
Chive	6749	Arable crops
Footpath	6801	Arable crops
Plot covered with crop residues (mulching)	6798	Set aside
Cutting rye	6806	Arable crops
Green fallow, spontaneous emergence	6794	Set aside
Other grass seed	6768	Arable crops
Other clover seed	6769	Arable crops

Liatris, other floriculture crops	6797	Arable crops
Liatris, dried flowers	6796	Arable crops
Liatris, flower bulbs and tubers	6795	Arable crops
Snowdrop, other floriculture crops	6805	Arable crops
Snowdrop, dried flowers	6804	Arable crops
Snowdrop, flower bulbs and tubers	6803	Arable crops
Food hedge	6809	Landscape elements
Sedum	6802	Arable crops
Sunken lanes	6793	Landscape elements
Meadows on agricultural plots	6800	Landscape elements
Strips of wild grass	6807	Landscape elements

Appendix H – Measurement instructions (buffer tolerance)

As a Member State, you can base your uniform buffer tolerance on the worst-performing measurement equipment or the lowest resolution.

An example showing the use of the uniform buffer tolerance:

Trimble measurement
Classified in the ≥ 0.5 m buffer tolerance.
uniform buffer tolerance 1 m
No objects are found during physical inspection that will lead to an assumed deviation from the statement.



Plot is measured as 1.00 ha.
Plot is perfectly square and has a perimeter of 400 m.
This leads to a tolerance of 0.04 are.
As long as the plot assignment remains within the range of 0.96 to 1.04 ha, this can be approved.
If the measurement result falls outside this range, the measurement result determined with the Trimble should be used.



Plot is measured as 1.00 ha.
Plot is elongated and is 500 metres long and 20 metres wide.
This means a circumference of 1040 m.
As long as the plot assignment remains within the range of 0.9 to 1.1 ha, this can be approved.
If the measurement result falls outside this range, the measurement result determined with the Trimble should be used.

Example applying uniform buffer tolerance

For measurements based on VHR images, the resolution is 0.5 m. In this case, the uniform buffer tolerance is 0.75 m. In this context, refer to the tables provided in the OTSC guidelines (2015) DS-2014-32_OTSC guidelines 2015, paragraph 5.1. The tolerance of 0.75 m can be seen below with a scale of 1:5000 and a pixel size of 0.5m:

Table 1. Tolerance equated to map scale and pixel size

Map scale	Equivalent pixel size (m)	Calculated tolerance, on-screen (m)	Tolerance, on-screen (m)
1:10,000	1.0	1.5	1.5
1:5,000	0.5	0.75	0.75
1:2,000	0.25	0.40	0.50

Table 2. Tolerance to be used with VHR prime sensors

VHR sensor (GSD at nadir)	Tolerance, on-screen
Worldview 1 & 2, Geoeye-1 (0.5m)	0.75 m
Quickbird (0.6m)	0.9 m
Kompsat 3 (0.7m)	1 m

Tables from the DS-2014-32_OTSC guidelines 2015 showing the uniform buffer tolerance (tolerance on-screen).

Uniform buffer tolerance 1.0 or 0.75 m?

If images with lower resolutions are used in the measurement process, the tolerance for all measurements should be adjusted to that lower resolution. For example, if Kompsat-3 images are used alongside the VHR images, the tolerance of the VHR images will have to be adjusted to that of the Kompsat-3 images. These have a buffer tolerance of 1 metre because of their resolution of 0.70 m.

The uniform buffer tolerance referred to here is about the re-drawing of plots *from scratch) by the Contractor which, according to Paragraph 38(4), cannot exceed 1.25 m.

Because the measurement methods used are better, the 1.25 metre tolerance no longer applies. The worst-performing measurement method now provides a uniform buffer tolerance of 0.75 metres.

There is also a maximum areal tolerance independent of plot perimeter, which is set at 1.0 hectare. The final areal tolerance is calculated as the minimum value between the uniform buffer tolerance multiplied by the perimeter of the plot and the threshold of 1.0 hectares. If the difference between the declared and measured eligible areas is less than the areal tolerance, the eligible area is assumed to be equal to the declared area.

Using a uniform buffer tolerance instead of a buffer tolerance per measurement method avoids unequal treatment (based on satellite data in one farmer and Trimble in another). The uniform buffer tolerance example explains this.

The uniform buffer tolerance applies to the Netherlands as a Member State.

Appendix I – List of reference documents

Below you can find a list of documents relevant to monitoring agricultural activities and quality assessment. This list is by no means complete, but it should give the Contractor more background information and context related to the activities described in this annex.

Legislation

- Regulation (EU) 2021/2116 of the European Parliament and of the Council of 2 December 2021 on the financing, management and monitoring of the common agricultural policy and repealing Regulation (EU) No 1306/2013
- Commission Delegated Regulation (EU) 2022/1172 of 4 May 2022 supplementing Regulation (EU) 2021/2116 of the European Parliament and of the Council with regard to the integrated administration and control system in the common agricultural policy and the application and calculation of administrative penalties for conditionality
- Commission Implementing Regulation (EU) 2022/1173 of 31 May 2022 laying down rules for the application of Regulation (EU) 2021/2116 of the European Parliament and of the Council with regard to the integrated administration and control system in the common agricultural policy

Guidelines

Background information with regard to guidelines and best practices can be found at:

<https://wikis.ec.europa.eu/display/GUIDANCEANDTOOLSFORCAP>

- ASTRAND P.J, DEVOS Wim, LOUDJANI Philippe, Controls with Remote Sensing in the CAP2020+, EUR 30967 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76- 46708-3, doi:10.2760/117692, JRC127690
- Devos W., Sima A. and Milenov P., Conceptual basis of checks by monitoring, 2021, JRC127678
- Zieliński R., Milenov P., Sima A., Devos W, Structured template for documenting agricultural land monitoring systems, Ispra, 2022, JRC130662
- MILENOV Pavel et al., Assessing the Validity of the Feature of Interest in the context of the CAP Checks by Monitoring, Ispra, 2021, JRC123711
- SIMA A. et al., Use of geotagged photographs in the frame of Common Agriculture Policy checks, Ispra, 2020, JRC120223
- Borio D. Sedano F., Zielinski R. and Devos W., Collection of Methods for Data Analysis: from Signal Selection to Marker Detection, Joint Research Centre, Ispra (VA), Italy, 2022, JRC130244.
- Zieliński R., Skøien J. O., Acquafresca L., Devos W., Proposed workflow for optimization of land monitoring systems - Copernicus Sentinel time series analysis within the Checks by Monitoring framework, European Commission, Ispra, 2022, JRC130659
- GUIDANCE DOCUMENT ON THE LAND PARCEL IDENTIFICATION SYSTEM (LPIS) UNDER ART. 5, 9 AND 10 OF COMMISSION DELEGATED REGULATION (EU) NO 640/2014 AND ON THE ESTABLISHMENT OF THE EFA-LAYER REFERRED TO IN ART. 70(2) OF REGULATION (EU) NO 1306/2013