ANTAM
Asian and Pacific Network for Testing of Agricultural Machines

Meeting of the ANTAM TWG

Los Baños, Laguna, Philippines
24 – 28 July 2023
The presentation will be focused on the QUALITY MANUAL as follows:

- Why a Quality Manual and benefits
- Content and updates in ver. 02
- Practice and examples
The ANTAM Quality manual has been made in order to assure the same level of competences and technical reliability of all activities and test results.
Assure that:

Technical requirements as performances and safety are equally assessed regardless of the testing station.
QUALITY REQUIREMENTS FOR TESTING STATION

In every network it is necessary that every participant takes part using **the same rules and competences** in order to assure the best compliance to **common regulations** and provide for complete **trust**.
WORKING ACCORDING TO THE QUALITY MANUAL

SAME LEVEL OF COMPETENCES

+ 

SAME LEVEL OF TECHNICAL RELIABILITY

+ 

TRUST EACH OTHER
Identification (chapters in the Quality Manual)

2.1 General Information
2.2 General Requirements
2.3 Technical References
2.4 Terminology
2.5 Certification Management Requirements
2.6 Management of Testing Activity
2.7 Certification process
2.8 Quality Management
ANTAM QM – Identification

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*Necessary to provide for a clear identification of the reference document and assure that the proper version is being used.*
A **wrong version** may contain an expired version of a standard and/or different procedural requirements.

This situation leads to an **un-fair application** of procedures and may offer an **un-fair advantage** to some manufacturers and provide for **un-trust** among testing stations.
The preliminary information should match and be updated for every Testing Station according to date, version etc.

In case of “non-conformity” and a wrong version is being used then no certification number can be issued and the NDA should be immediately informed.
ANTAM QM – 2.1 General Information

a - Country
b - Testing Station
c - Types of machines being tested
d - Location (if more than one list all of them with their specialisation)
e – Name of NDA (as notified to CSAM)
f - Accreditation by NDA
g – Date of Accreditation
h - ANTAM Codes being used (version as listed in “c”)

*Necessary to provide for a clear identification of the testing station and its accreditation by the NDA according to the ANTAM rules.*
ANTAM QM – 2.2 General Requirements

- **Person responsible (reference for ANTAM - NDA)**
- Person responsible for Financial Aspects (budget etc.)
- Person responsible for Legal Aspects (contracts, privacy etc.)
- Person responsible for keeping all documents related to testing activity
- Person responsible for Tests (devices, reports, technicians etc.)
- Personnel performing Tests (technicians ....)
- Quality Manager
- Periodical evaluation of requirements (location, date)
- Description of the Testing Station

* Necessary to provide for a clear description of the testing station and its organisation.*
For each of them a clear document stating CV, expertise and updating should be kept.
Person responsible (reference for ANTAM – **NDA**)

The ANTAM Network has defined the NDA (National Designated Authority) as the person for every country responsible for the proper functioning of the system.
Person responsible for financial aspects

Will be responsible for all financial issues as the budget to be used for upgrading of equipment, payments of customers (manufacturers, importers etc.) ...
Person responsible for legal aspect (contracts etc.)

Will be responsible for the proper content and timing of contracts, privacy etc.
Person responsible for keeping all documents related to testing activity

Will be responsible for the management of all documents (Codes, standards etc.) and the **use of the proper version** during activities.
Person responsible for tests

Will be responsible for technical issues including technicians, reports, equipment (including necessity to upgrade it), proper application of the ANTAM Code and coordinate the personnel involved in the testing activities.
Personnel involved in the testing activities

A list of all technicians including their competencies and training demonstrating the ability to properly apply the ANTAM Quality Manual
The Quality Manager **is** responsible of all aspects related to quality and will supervise their proper application and report to periodically to the NDA.

The Quality Manager will also be responsible for all updates of reference documents and their commitments too.
Some of the mentioned tasks can be performed by one person but s/he should be able to demonstrate the ability to manage all of them.
In order to assure the proper level of competence a periodical evaluation of all personeel requirements has to be scheduled and reported regularly.
ANTAM QM – **23 Technical references** (to be considered during the process of Quality management)

- OECD Standard Codes for the Official Testing if Agricultural and Forestry Tractors Appendix 4 to the decision – Quality Control Management
- ISO 17065/2012 Conformity Assessment – Requirements for bodies certifying products, processes and services.
- ISO 17025/2018 General Requirements for the competence of testing and calibrating laboratories.
- ISO 17020/2012 Conformity Assessment – Requirements for the operation of various types of bodies performing inspection.
- ISO 19011/2018 Guidelines for auditing and management systems.
- ISO 17000/2020 Conformity Assessment – Vocabulary and general principles.
- Antam Testing Code - (specify version/date etc.)
- Antam Training Manual – (specify version/date etc.)
- Antam Test Report – (specify version/date etc.)
- Antam Quality Manual - (specify version/date etc.)
- ...

*Necessary to provide for a clear identification of the standards and their version being used – to be performed by the “person in charge for keeping documents“ and supervised by the “quality manager“.*
- Certification
- Accreditation
- Agricultural machines
  Agricultural machines components
- Audit
- Calibration
- Complaints (or Dispute)
- Conformity
- Extension
- Identification
- Inspection
- Location of the testing
- Manufacturer
- Methodology (or Code)
- Mutual recognitions
- NDA
- Privacy
- Procedure
- Registration
- Renewal
- Standard
- Surveillance
- Technical reference
- Technician
- Test
- Testing Station
- Testing Equipment
- Tolerances
- Quality Manager

*Necessary to provide for a clear interpretation of terms.*
It is the provision by an independent body of written assurance (the certificate) that the product, service or system in question meets specific requirements (ANTAM Test Codes in this case)
It is the independent third-party recognition that an organisation has the competence and impartiality to perform specific technical activities such as certification, testing and inspection.
- Applicant

The manufacturer/importer or its legal representative in the country is the only legal entity that might ask for an ANTAM certification.

This is to avoid confusion and un-fair competition.
ANTAM QM – 2.4 Terminology

- Agricultural machines/components

Machines, implements and tools and their components including hardware/software that are used in the production, harvesting and care of agricultural productions.
- Audit

Systematic independent and documented process to obtain evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled.
- Calibration

It is the comparison (according to metrology) of measurements values performed by device under test compared with those of a calibration device of known accuracy.
- Complains (and/or dispute)

May arise from the applicant that might not agree with some parts of the process or the interpretation of results. They must be recorded as well as actions undertaken to solve them.
- Conformity

Is the main keyword in a certification process. According to ISO “it demonstrates whether a product, service ... meets the relevant requirements”.

It can be applied to a serial production as a declaration to assess the total equivalence with the sample being tested.
- Extension

It is the possibility to “extend” a certification to other machines having only small differences to be defined in the testing methodology.

Same machine with different boom width.
A product should be clearly identified in terms of manufacturer, make, model and serial number.
- Impartiality

It is the legal principle that decisions should be based on objective criteria rather than based on prejudice etc.
Importer/Manufacturer

It is the company trading officially a product in a country and being legally responsible of all related issues including safety of operators.
- Indicator

A quantitative or qualitative variable which can be measured or described providing for mean of judging.
- **Inspection**

  It is the regular checking of a product to make sure it meets specific criteria and requirements.
- Location of the test

It is the place where the test has been performed.

*In case of harvesting machines it might not be the same as the testing station.*
It is the document containing all information on the testing activity to be performed.
- Mutual Recognition

It is the process providing for the recognition by other bodies signing an agreement (ANTAM agreement) to recognize the test results and certification made by other institutions.
- NDA (National Designated Authority)

Is the person authorized by the Ministry to refer as responsible for the country inside the ANTAM network and its regulations and procedures.

He will be legally responsible for the proper use of all ANTAM documents inside the country.

He is the only person that might contact the ANTAM Secretariat.
- Privacy

It is the regulation providing for clear rules on the use and storage of personally identifiable information and data.
ANTAM QM – 2.4 Terminology

- Procedure

It is the document that specifies how to carry out an activity or process. It can be a testing methodology (or Code) or a document containing instructions for the international recognition of tests.
- **Registration**

It is the process to record and track all documents to their release date and version number.
- **Renewal**

It is the regular checking of a product to assess the conformity to the product (sample) being tested and certified.

Is similar to the “inspection” but it is a condition for the validity of a certification.
ANTAM QM – 2.4 Terminology

- Standard

It is the document providing requirements, specifications that can be used consistently to ensure that materials, processes and services are fit for their purpose.
- Surveillance

It is the regular checking of a product to assess the conformity to the sample being tested and certified.
ANTAM QM – 2.4 Terminology

- Suspension

Action to be undertaken if there have been non-conformities during inspection activities and/or complains.

If a certificate is suspended it means that it is not valid for a certain period.
- Technical reference

It is the related standard or regulation containing the specification being used.
Critical evaluation or a means of determining the presence, quality or truth of something. It has the purpose to determine one or more characteristics of a product.
- Testing Station

Laboratory able to perform a specific testing activity having competences and proper “testing equipment”.
- Testing Equipment

Equipment being used for the testing activity according to the ANTAM Codes fulfilling tolerances, calibrations etc.).
- Tolerances

Limits within an equipment should be calibrated as stated in the ANTAM documents.
ANTAM QM – 2.5 Certification Management Requirements

- Documents
- Checking of documents
- Checking of testing equipment
  – Testing equipment (according to ANTAM Codes)
- Checking of personnel skills
- Checking of procedures
- Management of test results
- Conformity assessment
- Privacy
ANTAM QM – 2.5 Certification Management Requirements

– Documents

All documents relevant for the ANTAM certification (with proper version):

- ANTAM Codes
- ANTAM Test Reports
- ANTAM Training Manual
- ANTAM Regulations
- ANTAM Quality manual
  - ...

- Checking of documents

Internal audits should be performed by the Quality Manager in order to verify that the proper documents are used.
- Checking of testing equipment

Internal audits should be performed by the Quality Manager in order to verify that the proper testing equipment is used according to the proper ANTAM Code.
Testing equipment has to be listed and notes on the updating as well as calibration should be included.

The responsibility is of the Personnel keeping documents and Quality Manager.
- Checking of personnel skills 1/2

Internal audits should be performed by the Quality Manager in order to verify that the personnel has the proper competences according to the work being performed.
- Checking of personnel skills 2/2

Competences of personnel should include a CV and records of updates according to the equipment they are using.
- Checking of procedures

The procedures have to be fulfilled and updated through regular checks performed by the Personnel keeping documents and finally checked by the Quality manager too.
- Management of Test results

Test results have to be properly managed taking into account privacy regulations. If a result does not match the ANTAM Code then the manufacturer should have the possibility to propose a solution according to the contract signed with the testing Station but the decision is always of the personnel responsible of the test.
- Conformity assessment

Conformity is at the basis of certification:
- a machine has to be conform to the ANTAM Code
- all machines with the same certification number have to be conform to the machine being tested.
Privacy regulations according to the management of data concerning the manufacturer and the test results cannot be published without the written permission of the manufacturer/legal representative in the country.
ANTAM QM – 2.6 Management of testing activity

The Management of testing activity is regulated according to the diagram of the personnel where responsibilities are clearly identified.

Of course proper competences have to be assured according to the role.
Responsibilities

Working according to the Quality Manual is a good system to provide for clear responsibilities as they are well defined in the contract and in the procedural aspects of the process.
Periodical evaluation of competences of Testing Stations Technicians

A periodical evaluation has to be performed and registered. As a good practice we may propose an evaluation every 2 years.
ANTAM QM – 2.7 Certification process

- Request of certification by applicant (manufacturer/importer etc.)
- Evaluation of the request
- Financial management of the process
- Documents to be provided to the customer
  – Performing of tests
  – Approval of test results by customer and NDA
  – Approval of test results by ANTAM/Secretariat
  – Release of certificate
- Validity (define precisely the timing according to the needs)
- Surveillance
- Technical modification on the product affecting the validity
- Suspension of the certification
  – Management of non – conformities
- Registration of the Certification
- Timing of the process
ANTAM QM – 2.7 Certification process

- Request
- Targeted offer
- Test
- Evaluation Deliberative Comm.
- Certificate Release
- Official List
- Surveillance

Evaluation/Cost

Testing Station Report for surveillance
- Request of certification

The request should be made on a proper form where it should be stated clearly the make and model of the machine, the manufacturer or legal representative, the compliance to ANTAM Code.
7.2 - Evaluation of the request

The Testing Station (Personnel responsible for the Test) should check the request and evaluate it according to the compliance with the ANTAM Code) and provide for the contract.
Cost management of the process

In a free market the manufacturer should be able to test his machines in every ANTAM Testing Station. There might be differences in price but at the end he will always go where it’s more convenient because of the price but also for other reasons as the best market for his machines etc.
- Documents to be provided to the customer

The customer (manufacturer) should be informed in advance about the content of the test. Therefore he can receive a copy of the ANTAM Test Codes or a summary.
- Performing of tests

After the Contract has been signed and arrangements have been agreed with the testing station tests might start.
– Approval of test results by Customer and NDA

When testing activity is finished test results will be evaluated and the approval for publishing and sending of the draft certificate to the ANTAM Secretariat – CSAM is necessary by the Customer and NDA.
ANTAM QM – 2.7 Certification Process

– Approval of test results by ANTAM/Secretariat (CSAM)

Evaluation of all procedural aspects.
ANTAM will release a certificate according to the model provided in the official documents. The certificate will include all the necessary information to identify the machine, testing station, date of issue and number.
Every certificate must have a validity that usually is 5 years unless there is a change in the ANTAM Test Code and/or surveillance records non-conformities.

If a new version of a Code is issued a new test should be performed in order to maintain validity even inside the 5 year period.
- Surveillance

Periodical checks that the manufacturer is fulfilling the contract signed according to the CONFORMITY. Periodical checks (every year) can be made even by a Dealer but the manufacturer should not be able to change the machine and therefore he should be informed at very short term as 2 days in advance)
- Technical modification on the product affecting the validity

This point is strictly related to CONFORMITY. What does affect conformity: everything that changes the safety, the performance, the technical specs etc. of the machine.
- Suspension of the certification

In case of a non-conformity during the surveillance or in case of any structural as well as documental change type A the certificate will be suspended.
ANTAM QM – 2.7 Certification Process

- Management “of non-conformities”

**Type A = Non Conformity** – no certificate can be issued until the problem has been solved or in case of surveillance the certificate will be suspended.

**Type B = Observation** – the certificate can be issued but the manufacturer has to send the testing station the missing documents etc.
- Management of non-conformities

Type A = *Non Conformity* – no certificate can be issued until the problem has been solved

During the testing activity according to the ANTAM Code some limits are exceeded (see tolerances) or parts of the machine are missing = the machine is not conform to the ANTAM Code
- Management of non-conformities

Type B = *Observation* – the certificate can be issued but the manufacturer has to provide for the compliance as soon as possible (define deadline)

During the testing activity according to the ANTAM Code some *minor* aspects (to be defined) are not conform to the ANTAM Code but do not affect the overall results.
- Registration of the certification

All documents concerning the certification processes and certified products have to be registered in order to provide an easy access in case of controls by Authorities or Accreditation bodies.
- Timing of the process

A proper timing is strictly necessary in order to provide for a good service and avoid endless situations (changes to be made on the machine by the manufacturer in order to comply to requirements etc.)
ANTAM QM – 2.8 Quality Management

- Certification process
  – Personnel
  – Documents
ANTAM QM – 2.8 Certification process

Request → Targeted offer → Test → Accredited Test Centre → Evaluation Deliberative Comm. → Certificate Release

Procedures to be managed according to the Quality Manual

Official List → Surveillance → ANTAM Web Site
ANTAM QM – 2.8 Personnel

For each of them a clear document stating CV, expertise and updating should be kept.
ANTAM QM – 2.8 Documents

- Request
- Targeted offer
- Test
- Evaluation Deliberative Comm.
- Certificate Release
- Official List
- Surveillance
- Testing Station Report for surveillance

Application form

Documents necessary for the approval

Other documents
– Application form & Contract

The application form should contain information on the possibility to perform a test.

The contract should include the following information: Name of the manufacturer/legal representative in the country, model of the machine, ANTAM Code being applied, timing, location of tests, privacy, use of test results, surveillance, validity, complaint, suspension, payment etc.

For the above listed documents the personnel legal aspects will be responsible.
ANTAM QM – 2.8 Documents

– Testing Station Documents

The documents of Testing Station should be:

- ANTAM Codes and other ANTAM documents (Test Report, Training Manual Regulations ...)
- Data on the Testing Station
- Equipment list and calibration (date, expire etc.)
- Personnel in charge and their updating
- ...

For the above listed documents the personnel keeping documents will be responsible.
– Documents necessary for the Approval
Deliberative Committee Documents

The documents of the Deliberative Committee should be:

- ANTAM Codes and other ANTAM documents (equipment, tolerances etc.)
- Data on the Testing Station to verify if the ANTAM accreditation given by the NDA matches
- Documents sent by the NDA for the certification application (privacy documents, test results with signature for declaration of conformity to ANTAM procedures and Codes).

For the above listed documents the Deliberative Committee will be responsible.
ANTAM QM – 2.8 Documents

– Certificate release

The ANTAM Certificate/Test Report model should be adopted in the latest version according to the ANTAM specimen.

*The adoption of the latest layout is under the responsibility of the Secretariat.*
ANTAM QM – 2.8 Documents

– Surveillance Specimen

A standard specimen should be adopted and used in its latest version.

*The adoption of the latest version is under the responsibility of the testing station – Personnel keeping documents.*
8.3.6 – Other documents

Complain list document containing a list of the actions undertaken too.

*Under the responsibility of the Quality Manager (4.20)*
Thank You

Technical Reference Unit – ANTAM
Sandro Liberatori
sliberatori81@gmail.com