



THE GLOBAL STANDARD
FOR LIVESTOCK DATA

Terms of Reference for Measuring, Recording & Sampling Devices Sub-Committee

Version October 2024

Network. Guidelines. Certification.

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1 Background

The following sections cover the key elements of the Terms of Reference for the Measuring, Recording & Sampling Devices Sub-Committee (MRSD-SC). These revised ToR have been approved by ICAR Board at its meeting on 29th November of 2022.

2 Context

The MRSD-SC is one element of ICAR's Group structure as elaborated [here](#) on the ICAR website. As a subcommittee:

- a. It is a permanent,
- b. Its members are appointed by the Board of ICAR, and
- c. It is responsible for policy relating to services to members.

The main purpose of the MRSD-SC is to achieve a number of objectives related specifically to measuring, recording and sampling devices.

3 Objectives of the MRSD-SC

The objectives of the MRSD-SC are to:

- a. Provide a forum for ICAR members for collaboration, knowledge sharing, and organizational growth in all aspects of measuring, recording and sampling devices used on cattle, sheep, goats and buffalo.
- b. Maintain, update, promote and extend universal guidelines for the evaluation and certification of recording devices used to collect data on cattle, sheep, goats, camelids, and buffalo with the purpose of aiding decisions in genetic improvement, farm management, animal health, animal welfare, and product quality assurance.
- c. Maintain, update, promote and extend universal guidelines for the evaluation and validation of measuring or sensing devices used to collect data on cattle, sheep, goats, camelids, and buffalo with the purpose of aiding decisions in genetic improvement, farm management, animal health, animal welfare, and product quality assurance.
- d. Maintain, update, promote and extend universal guidelines for the evaluation and certification of sampling devices used to collect milk, blood, hair, fibre, tissue or other animal product where the resulting analyses are used with the purpose of aiding decisions in genetic improvement, farm management, animal health, animal welfare, and product quality assurance.
- e. Conduct and report the results of periodic international surveys on relevant aspects of animal measuring, recording and sampling devices.
- f. Develop, provide, engage, and promote a system that includes standards, guidelines, and protocols for measuring, recording and sampling device testing and evaluation, which will form the basis of the service that ICAR will provide to device manufacturers on a user-remuneration basis.
- g. Facilitate and coordinate the international communication, outreach and collaboration in the research and development of measuring, recording and sampling devices.

4 Governance

The MRSD-SC will comprise a Chairperson and members appointed by the ICAR Board. The term of membership and voting rights of members will be determined at the time of appointment and may be reviewed from time to time.

All ICAR Group members are required to comply with the most recent version of ICAR's Conflicts of Interest Policy as [here](#).

The MRSD-SC will comprise members who represent some or all, depending on the level of interest and participation in ICAR activities, of the following interests:

- a. Geographical regions including Europe, North America, South America, Central America, Asia, Africa, and Oceania.
- b. Technical expertise in animal measuring, recording and sampling devices with respect to device accuracy, reliability, reproducibility, functionality, evaluation and certification.
- c. Recording data and sampling of milk, blood, hair, fibre, or tissue in cattle, sheep, goat and buffalo.

The MRSD-SC, may from time to time, create expert task forces or advisory/specialist teams to provide expert advice on topics of relevance to achieving the objectives of the MRSD-SC. These experts will function on a limited-term basis without formal or permanent appointment by the ICAR Board and will not have voting rights on the decisions of the MRSD-SC.

The MRSD-SC is encouraged to have at least once a year a formal meeting with ICAR associate members to provide a forum for feedback, collaboration, knowledge sharing and technology and market updates.

5 Chair duties

- a. Group Composition – in consultation with ICAR Secretariat and ICAR Board ensure membership is comprised of interested and enthusiastic members representing active stakeholders.
- b. Business and Group Meetings – takes initiative for dates, agenda and minutes in consultation with Secretariat. Organise at least two meetings per year, 3 to 4 meetings per year are recommended.
- c. Coordinate relationships with other ICAR groups (see paragraph 9). Have awareness of activities going on in other groups.
- d. Group activities - in consultation with the group members, establish priorities with agreed duties of group members and agreed deliverables and timescale. Accomplishment of the tasks in time and activities leading to a satisfactory outcome.
- e. Communications with the ICAR Board. See paragraph 8.

6 Secretariat & Reporting

Role of the Secretariat with the MRSD-SC:

- a. Business and Group Meetings
 - i. agree on meeting date(s) and venue(s) in consultation with Chairperson,
 - ii. provide notice of meetings to members,
 - iii. agree and distribute the agenda with Chairperson,
 - iv. record minutes, review minutes with Chairperson, and distribute minutes.
- b. Group Composition
 - i. maintain list of MRSD-SC members with up-to-date contact details,
 - ii. consult with Chairperson and ICAR Board to ensure membership is comprised of interested and enthusiastic members representing active stakeholders.
- c. Website
 - i. maintain website of MRSD-SC certifications, guidelines, processes, and protocols,
 - ii. provide a forum ensuring contents are current and relevant related to the ToR.

7 Communications with the ICAR Board

Communication with the ICAR Board will be:

- a. Annual report of the MRSD-SC Chairperson to the ICAR Board.
- b. ICAR staff support person as identified from time to time by the ICAR Chief Executive, with all communications for the MRSD-SC are to be copied to this person.
- c. Participation of the Chairperson in meetings with the ICAR Board, normally on an annual basis coinciding with the ICAR annual meeting.

8 Relationships with Other ICAR Groups

Relationships between MRSD-SC and other ICAR Groups are as summarised in Table 1.

Table 1. Relationship with other ICAR Groups.

Group	Purpose of Relationship	Method of maintaining relationship
Milk Analysis Sub Committee (MA-SC)	Ensure quality samples for milk analysis and collaborate on guidelines for in-line and at-line milk analysis.	<ul style="list-style-type: none"> • Overlapping membership. • Joint expert advisory group(s) as required.
Dairy Cattle Milk Recording Working Group (DCMR-WG)	Ensure measuring, recording and sampling devices used for dairy herd recording produce high quality information.	<ul style="list-style-type: none"> • Overlapping membership. • Joint expert advisory group(s) as required.
Animal Identification Sub Committee (ID-SC)	Development of ICAR guidelines and standards for tissue sampling devices	<ul style="list-style-type: none"> • Overlapping membership • Ad-hoc committee for background research and guidelines development

Sheep, Goat and Camelid Working Group (SGC-WG)	Ensure measuring, recording and sampling devices used for sheep, goat and camelid data collection produce high quality information.	<ul style="list-style-type: none"> • Overlapping membership. • Joint expert advisory group(s) as required.
Animal Data Exchange (ADE-WG)	Ensure data flows according to best practice standards between electronic measuring, recording and sampling devices and central databases.	<ul style="list-style-type: none"> • Overlapping membership. • Joint expert advisory group(s) as required.
Others	Ensure any other standards, guidelines and services involving a measuring, recording or sampling device are developed using a shared ICAR philosophy.	<ul style="list-style-type: none"> • Overlapping membership. • Joint expert advisory group(s) as required.

9 Priorities

Priorities are to be established by the MRSD-SC and are reviewed on an annual basis, taking account of its terms of reference and any requests from the ICAR Board.

The priorities for MRSD-SC in the next year can be found in Table 2.

Table 2. Priorities for MRSD-SC in 2025-2026.

Priority	Description	Collaborating Group	Timeline
1	Alignment and technical update of Section 11 Guidelines with the proposed revisions to Section 12 on terminology and internal document links.	MA-SC	Led by MA-SC Winter 2025
2	Strategic planning related to MRSD-SC Test Centres including location, resource utilisation and results delivery.		Fall 2024
3	Review and update of the ICAR website for accuracy of device listings, periodic check procedures and other information as necessary.		When ICAR resources allow
4	Engagement and potential testing of recording & sampling devices for sheep, goats and buffalo.	Sheep, Goats & Camelids WG	Ongoing
5	Focus and cooperative effort on standards for data definitions, data quality and data handling. This includes a recent request from ADE-WG on parlour messages where in-place measuring or recording devices are used (and tested by ICAR)	ADE-WG DCMR-WG	Led by ADE-WG

Priority	Description	Collaborating Group	Timeline
6	Support development of tools for monitoring data quality from devices & systems.	DCMR-WG	Late 2025 Early 2026
7	Development of reference ID system for a data source coding system to allow organisations & databases track the source of the data through systems as needed.	ADE-WG	When ICAR resources allow
8	Continued research and modeling on carry-over in recording devices and development of ICAR “best practices” publication for MROs.		Delivery Late 2025
9	Continue project on quantification of milk component composition across the milk out in dairy cattle.		Delivery ICAR 2026
10	Continue research and understanding of the effects of air admission levels exceeding ISO guidelin on the the performance and accuracy of ICAR-tested OEM equipment with goal to deliver “best practices” publication for MROs.		Ongoing Delivery ICAR 2026
11	Update to ICAR test centre software e-tool to include additional milk components, expand to all species referenced in ICAR guidelines and potentially include carry-over estimation.		Start Fall 2024 Delivery July 2025
12	Next steps and follow-up meeting in response to the AMS Manufacturer/HRO Summit held in 2023.		Fall 2025