



THE GLOBAL STANDARD
FOR LIVESTOCK DATA

Terms of Reference for the ICAR DNA Working Group

Version November, 2022

Network. Guidelines. Certification.

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1 Background

The following sections cover the key elements of the Terms of Reference for the ICAR DNA Working Group (DNA-WG).

These revised ToR have been approved by ICAR Board at its meeting on 29th November of 2022.

2 Context

The DNA-WG is one element of ICAR's Group structure as elaborated [here](#) on the ICAR website. As a working group:

- a. It is a permanent Working Group,
- b. Its chair is appointed by the Board of ICAR,
- c. Its members are appointed by the Chief Executive of ICAR,
- d. It is responsible for policy relating to services to members.

The main purpose of the DNA-WG is to achieve a number of objectives related specifically to DNA technologies.

3 Objectives of the DNA-WG

The objectives of the DNA-WG are to:

- a. Forum. Provide a forum for members of ICAR to collaborate, exchange information and learn from each other on all aspects using the DNA of farm animals.
- b. Guidelines. Maintain, update, promote and extend universal guidelines for laboratory techniques, data analysis techniques and tools for using the DNA of farm animals world-wide.
- c. Surveys. Conduct and report the results of periodic international surveys on the use of DNA of farm animals.
- d. Services. Develop, provide and promote user-pay services for the accreditation of systems for using DNA of farm animals. The goal of these services is to ensure that uses of DNA of farm animals are accurate, comparable around the world and shared efficiently.
- e. Innovation. Facilitate and co-ordinate international collaboration in research and development on the uses of DNA of farm animals.

4 Governance

The DNA-WG will comprise a Chairperson appointed by the ICAR Board and members appointed by the ICAR Chief Executive. 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](#).

Membership of the DNA Working Group to cover the following range of knowledge and expertise:

- a. Leadership - Chairperson
- b. Laboratory analysis of DNA - quality assurance
- c. Data processing - DNA validation, storage, retrieval, imputation
- d. DNA uses - including gene discovery, parentage discovery, parentage validation
- e. Innovation in opportunities for DNA use in farm animals.
- f. Administration - Secretarial support

The DNA Working Group is to be supported by ad-hoc expert groups which it may form from time-to-time with approval from the ICAR Board.

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 8). 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 7.

6 Secretariat

Role of DNA-WG Secretariat:

- a. Group Composition - maintain list of Group members with up-to-date contact details, in consultation with Chairperson and ICAR Board ensure membership is comprised of interested and enthusiastic members representing active stakeholders.
- b. Group Meetings - agree dates and venues in consultation with Chairperson, provide notice of meetings to members, agree agenda with Chairperson, distribute agenda, take minutes, agree minutes with Chairperson, and distribute minutes.
- c. Website - maintain website and forum ensuring contents are up-to-date and relevant according to the ToR.

7 Communications with the ICAR Board

- a. Annual report of the DNA-WG Chairperson to the Board.
- b. The ICAR Staff support person as identified from time to time by the ICAR Chief Executive. All communications for the Group are to be copied to this person.

- c. Participation of the Chairperson in meetings with the Board, normally on an annual basis coinciding with the ICAR Annual Meetings.

8 Relationships with Other ICAR Groups

Relationships between DNA-WG and other ICAR Groups are as summarised in *Table 1*.

Table 1. Relationship with other ICAR Groups and other institutions.

Group	Purpose of Relationship	Method of maintaining relationship
Interbull Sub Committee (IB-SC)	Ensure ICAR standards, guidelines and services relating to DNA technologies are best practice for dairy cattle.	<ul style="list-style-type: none"> • By providing leadership for DNA technologies. • Overlapping membership. • Joint expert advisory group(s) as required.
Interbeef Working Group (Interbeef-WG)	Ensure ICAR standards, guidelines and services relating to DNA technologies are best practice for beef cattle.	<ul style="list-style-type: none"> • By providing leadership for DNA technologies. • Overlapping membership. • Joint expert advisory group(s) as required.
Breed Associations Working Group (BA-WG)	Ensure ICAR standards, guidelines and services relating to DNA technologies are best practice for Breed Associations.	<ul style="list-style-type: none"> • By providing leadership for DNA technologies. • Overlapping membership. • Joint expert advisory group(s) as required.
Others	Ensure any other standards, guidelines and services involving a recording or sampling device are developed using a shared ICAR philosophy.	<ul style="list-style-type: none"> • Effective communication of plans and progress. • Overlapping membership as needed. • Joint expert advisory group(s) as required.

9 Priorities

Priorities are to be established by the DNA-WG taking account of its terms of reference and any requests from the ICAR Board.

The priorities for DNA-WG in the next year can be found in *Table 2*.

Table 2. Priorities for DNA-WG in 2023.

Priority	Description
1	Issue the 2023 Call for ICAR Accreditations of Genotyping Laboratories.
2	Promote interest of laboratories performing SNP-based genotyping to apply for the

Priority	Description
	parentage verification accreditation as a DNA Data Interpretation Centre.
3	<p>Launch ICAR Accreditation services for Parentage Discovery</p> <ul style="list-style-type: none"> • Finalize fee structure for SNP-Based Parentage Analysis Accreditation • Identify an organization that can support the future maintenance of the SNP-based Parentage Analysis Accreditation software
4	Continue to evaluate the possibility of extending DNA services to other species, e.g., Ovine, Porcine & Caprine.
5	DNA WG discussions continue with ISAG to identify potential areas of collaboration and/or synergy.
6	<p>Finalize new guidelines related to:</p> <ul style="list-style-type: none"> • Tissue Sampling • ICAR Certification of Sequence-Based Genotypes • Standardization of Causal Mutation SNP for Genetic Defects