

MEMBERSHIP ARRANGEMENT

FOR PARTICIPATION IN AND CONTRIBUTION TO THE INTERNATIONAL NUCLEOTIDE SEQUENCE DATABASE COLLABORATION (INSDC)

This Membership Arrangement specifies terms for institutional participation in and contribution to the International Nucleotide Sequence Database Collaboration (INSDC).

Whereas the INSDC is a global collaboration of independent government or non-profit organizations that manage nucleotide sequence databases that capture, preserve, and present comprehensive nucleotide sequence information and annotations to preserve the scientific record and enable broad sharing of such data; and

Whereas Members see value in broad international collaboration to improve global coverage of genomic sequences from all regions of the world; and

Whereas, Members commit to the collection and distribution of nucleotide sequence data and related analyses; and

Whereas, Members adhere to the principles of free and unrestricted access and sharing of genomic sequence data; and

Whereas, Members commit to facilitate access to the data collected by INSDC Members; and

Whereas, Members have the scientific and technical capabilities and facilities needed to participate; and

Whereas, Members agree that this arrangement provides the general framework for collaborating on the collection and distribution of nucleotide sequence data and associated metadata.

NOW, THEREFORE, the Member agrees to the following:

1. Scope of INSDC

The International Nucleotide Sequence Database Collaboration (INSDC) is a global collaboration of independent government or non-profit organizations that manage nucleotide sequence databases that capture and preserve nucleotide sequence information and annotations to create a comprehensive collection that preserves the scientific record and enables broad sharing of such data. INSDC Members provide data resources that include raw sequence reads and alignments, structured metadata describing investigated samples such as taxonomic information, experimental, and project design, assembled nucleotide sequence data with functional annotation, and sequence-derived analyses. INSDC Members exchange data and make exchanged data freely accessible without restrictive licensing as part of the scientific record, including all corrections and updates.

INSDC services include provision of unique and persistent identifiers, use of community and INSDC defined standards for data description and sustainable management, tools and services to facilitate data

use and analysis, and support for relevant community standards and best practices. Through these services, INSDC data resources become fairly and equitably available to any user.

INSDC Members operate their participating INSDC data resources and services through their own stable and sustainable funding. Members have established governance practices that allow their data resources and services to be operated in alignment with the scope and principles of INSDC.

2. General Principles of Membership

Members commit to the following principles:

1. Provision of free and unrestricted access to INSDC data resources and services to members of the public;
2. Promotion of fairness and equity in access to INSDC data resources and services;
3. Upholding of the quality and integrity of INSDC data resources and services through quality assurance practices; and
4. Engagement with stakeholders including data depositors, data users, and journal publishers, to promote INSDC and represent its interests.

3. Responsibilities of the Members

INSDC Members work together to build a comprehensive collection of nucleotide sequence data and annotations, through data deposition, processing, accessioning, distribution, and exchange of participating INSDC data resources in ways that ensure data are findable, accessible, interoperable, and reusable to the greatest extent possible.

Each Member is expected to:

- Collect nucleotide sequence data and update data records as necessary;
- Provide mechanisms for submission of, and access to, data that are open to all users;
- Associate an INSDC accession number to submitted objects including but not limited to sequences, sample metadata, projects, that is citable in the literature and in other downstream analyses; support the user community through outreach and education;
- Build and operate services designed for long-term sustainability;
- Support INSDC-approved standardized formats for data and metadata to ensure data is interoperable and reusable;
- Ensure that submitted data meets minimal quality standards established by the INSDC EC;
- Update data services and systems to support newly emerging sequencing platforms and data types of relevance;
- Exchange data with other members at regular intervals at each site and sufficient redundancy in case of a catastrophic failure; and
- Follow data management conventions as established by the INSDC EC.

4. Membership Levels

INSDC Members support the deposition, discovery, retrieval, analysis, and reuse of nucleotide sequence data. INSDC Members will be named on the INSDC website. There are two levels of INSDC membership: Full and Associate.

1. Full Members collect, archive, and present for search, analysis, and retrieval all their nucleotide sequence data types in scope for INSDC as defined by the INSDC Executive Committee (EC) and documented on the INSDC website including providing access to all data submitted to other Members to enable reuse of the complete INSDC dataset.
2. Associate Members collect, archive, and present a subset of sequence data for search, analysis and retrieval that is limited in scope either by region, scientific domain, and/or by data type. Associate Members provide access to relevant INSDC datasets consistent with the scope of their collection.

5. Criteria for Membership

INSDC Members are required to demonstrate appropriate capacity, commitment, and activity in areas such as governance, technical infrastructure, data operations, and communications and engagement, according to membership levels based on Membership Acceptance and Performance guidelines established by the INSDC EC and maintained on the INSDC website. INSDC Members are expected to adhere to those criteria and participate in routine review based on the established guidelines.

Government or non-profit organizations that collect, archive, disseminate sequencing information are eligible for consideration as Members. Commercial entities will not be considered for membership in INSDC.

Criteria for consideration as a Member

1. Serve a geographical region, a global community, or constituency and provide equitable access to INSDC data and services;
2. Be a government or non-profit organization managing a nucleotide sequence database;
3. Provide data infrastructure that is responsive to changes in technology and evolving needs of the user community;
4. Operate with sustainable funding models to support long-term acquisition and hosting of nucleotide sequence data;
5. Establish contingency plans for smooth and controlled closure of services and handover of data in cases of catastrophic loss of funding; and
6. Ensure the security of the data collected and shared by and amongst Members.

6. Governance

Members may participate in two committees: Executive Committee and Implementation Committee, as detailed below.

- a. INSDC Executive Committee (EC)

Each Full Member plans to appoint not more than two individuals to the EC, which has responsibility for the overall governance of the INSDC. The EC is responsible for guiding the strategic direction of the INSDC. Each Full Member has one vote.

The functions of the EC comprise:

- Establishing the strategic objectives of INSDC;
- Directing INSDC administrative activities, including organizing meetings and ensuring that content for the INSDC website is comprehensive and reflects current policy;
- Maintaining awareness of new technologies to inform strategic direction of INSDC;
- Resolving any disputes that arise among INSDC members by reconciling differences of opinion or approach through consensus;
- Implementing a strategy to identify and invite organizations including those that represent geographical regions not well-served by current INSDC Members to apply for membership;
- Setting expectations and objectives for membership in the INSDC in consultation with the Implementation Committee (IC). The EC may evaluate potential INSDC members based on capacity and proficiency in the activities outlined in this Membership Arrangement and make recommendations to the IC; and
- Convening at least 4 meetings per year.

b. INSDC Implementation Committee (IC)

Each Full Member is expected to appoint not more than two representatives from each data resource or activity it contributes to INSDC. Each Associate may appoint not more than one representative from each data resource or activity it contributes to INSDC. Each Full Member will have 3 votes and each Associate Member will have 2 votes for decisions about policies, protocols, and procedures. The IC intends to meet at least once per year. Meetings will be chaired by an EC member. The EC will decide which agenda items require a vote.

The functions of the IC comprise:

- Reviewing and providing formal acceptance of INSDC-wide policies, protocols, and procedures, including the INSDC Membership Arrangement;
- Preparing for and responding to changes in sequencing and assembly technologies;
- Approving new modification for infrastructure requirements, features, standards and schemas used to build INSDC-participating repositories and their services;
- Training, assessing, and approving new INSDC members based on the recommendations of the EC by majority vote of Full Members; and
- Maintaining website content and internal documentation including meeting notes.

7. International Stakeholders Committee

The INSDC is intended to create an ad hoc International Stakeholders Committee (ISC) comprised of external experts who are expected to promote the principles and activities of INSDC and provide input

on different stakeholders' needs. Each Full Member is intended to appoint two ISC members, and each Associate Member is intended to appoint one ISC member for a term of 3 years. A chair is expected to be chosen by ISC members. The ISC is expected to convene annually to report on the needs of the external stakeholder community.

8. General Provisions

- Membership status may be granted or withdrawn upon approval by the IC in consultation with the EC based on the scope, principles, and guidelines of INSDC.
- Any Member may discontinue cooperation under this Arrangement at any time but should endeavor to give the EC sixty (60) days advance written notice.
- Only the EC may authorize public communications to be issued on behalf of the INSDC. Any public communications issued on behalf of the INSDC are expected to be reviewed and approved by the EC prior to publication.
- This Arrangement imposes no funding obligations on the Members to support INSDC functions. Nothing in this Arrangement authorizes or is intended to obligate the Members to expend, exchange, or reimburse funds, services, or supplies for INSDC operations.
- No indemnification for any loss, claim, damage, or liability is intended or provided by the Members under this Arrangement. Each Member is responsible for its own activities under this Arrangement.
- The Members intend to resolve any differences arising under this Arrangement amicably through mutual consultations and negotiations.
- This Arrangement reflects the intentions of the Member and does not create any legally binding obligations for the Member.