International Union of Geological Sciences Recognized Big Science Program
Deep-time Digital Earth (DDE)

Statutes

19/08/21
Preamble

- The Deep-time Digital Earth programme is an international consortium aiming to develop open digital platforms with full Findable, Accessible, Interoperable, and Re-usable (FAIR) data linking the various spheres of Earth’s of geological history.
- The Deep-time Digital Earth programme will provide a digital earth platform with multidisciplinary and multidimensional earth science data as well as facilities for Deep-time Digital Data Discovery for investigating the complete evolution of earth from past to present, and towards the future.
- The DDE program will build on several decades of programs promoted by IUGS in collaboration with UNESCO and other organisations including the International Geological Correlation Programme (IGCP), International Geosphere-Biosphere Programme (IGBP), the Global Sedimentary Geology Program (GSGP), the International Geoscience and Geopark Program (IGGP), the Commission of the Geologic Map of the World (CGMW), the Global Geochemical Baseline (GGB), the International Lithosphere Program (ILP), and OneGeology.
- The Deep-time Digital Earth (DDE) program will recognize and foster equality, diversity and inclusivity (EDI) as part of its mission to harmonize ‘deep-time’ digital geological data from around the globe. DDE is committed to respecting and embracing diversity in all its forms, and is against any type of discrimination. DDE will seek to raise awareness and promote equality, diversity and inclusivity throughout the geoscience community.
- The ‘big science’ program Deep-time Digital Earth is promoted and was approved by the International Union of Geological Sciences (IUGS) in December 2018, and initiated in Beijing on February 26, 2019.

Relationship to Other Organisations

- DDE adheres to the International Union of Geological Sciences (IUGS) and the International Union of Geodesy and Geophysics (IUGG) and maintains close contacts with other GeoUnions and scientific unions as well as with other non-governmental and inter-governmental scientific institutions, such as UNESCO, in order to cooperate in long-term scientific programmes and projects. It provides an opportunity for open partnership with scientific unions, their bodies and affiliated members, regional and international organizations including but not limited to associations, universities, geological surveys, publishers and data centres.
- As IUGS’ first Big Science initiative dedicated to data driven discovery, DDE has a special relationship with IUGS. DDE will display the IUGS logo in all its official documents and reports and acknowledge any funding received from IUGS for specific activities in the
manner required by IUGS. The President of IUGS or his representative will serve as an non-voting Member of the Governing Council of the DDE Program. DDE will submit annual reports to IUGS on its projects and activities and major achievements and outcomes. DDE will contribute information to IUGS E-Bulletins, websites, annual reports, outreach information and events. DDE will have access to the Geological Society of London Publishing House.

Domicile of DDE

- The Deep-time Digital Earth Research Centre of Excellence (DDE/RCE) in Suzhou China will act as the first Secretariat Office of the DDE on behalf its members. The Secretariat Office of the DDE will be reselected every four years by the DDE GC.

Membership

- Any scientific union, their bodies and affiliated members, regional and international organizations including but not limited to associations, universities, geological surveys, publishers and data centres may become members of DDE.
- All Members who join DDE prior to the end of 2021 shall be recognized as “Founding Members”. Others who join DDE from the beginning of 2022 shall be recognized as “Members”.
- All Members shall be required to pay a minimum membership fee. Those Members who are able and willing to contribute more to DDE activities, either to the DDE annual budget or in support of specific initiatives, shall discuss the terms and conditions for such additional contributions with the EC of the DDE Program.
- Applications for Membership of DDE shall be decided upon by the GC on the advice of the EC, and organisations may be given provisional membership by the Executive Committee subject to ratification by the Governing Council. All Founding Members and Members have the right to be represented in the GC of DDE. They will have equal voting rights.
- The Governing Council, on recommendation of the Executive Committee, may dissolve the Membership of an organisation which has been inactive as a DDE member.

Partners

- Partners of DDE are those organizations that do not commit themselves to full, paying DDE Membership but choose to work together with DDE on specific projects and initiatives and contribute to the implementation of such projects and initiatives in financial, human resources, data, technology or other relevant means approved by DDE EC.

Fiscal Policy

- The fiscal year of DDE is the calendar year. Subscriptions refer to 12-month periods starting
with the date of registration of Membership.

- The business of DDE shall be carried on without the purposes of financial gain for any individuals or organisations.
- DDE shall acquire revenue through subscriptions from Founding Members and Members in accordance with the terms and conditions of the agreement signed between DDE and the Founding Member/Member at the time when the DDE GC granted the membership.
- DDE financial matters shall be supervised by the Finance Committee, guided by the DDE Treasurer and audited annually.
- DDE may also acquire revenue from grants, contracts, royalties, donations, investments, or recovery of costs for publications or meetings. DDE shall not assume debts exceeding the sum of its assets, promised grants or contributions, and expected Member subscriptions. Only the assets of DDE may be held liable for DDE’s fiscal obligations.
- All income of DDE shall be deposited in accounts authorized by the EC and ratified by the GC. Only officers of DDE and other persons so authorized by the EC may be signatories to contracts and disbursements. All bank accounts and/or resolutions in the name of DDE shall be worded to ensure that in case of death of the authorized signatory, the funds revert automatically to DDE and do not become part of the estate of the said authorized signatory.
- Members that have not paid their dues for more than one year will be placed on inactive status for one year. While on inactive status Members will not have voting rights at GC meetings. Active status may be restored upon payment of at least two of all the outstanding dues of the concerned Members.

Working structure of DDE

- The DDE Advisory Board advises the DDE Governing Council.
- The Governing Council is the supreme decision-making body of DDE and oversees the implementation of all activities of the DDE. It will guide the work of Executive Committee and take initiatives to attract new Members, raise funding and financial resources and prescribe measures to strengthen and raise the international profile, status and visibility of DDE.
- The Executive Committee implements all decisions of the Governing Council. When the Executive Committee takes a decision on its own volition on urgent and critical matters related to the implementation of DDE between consecutive sessions of GC, the Chair of the EC will duly inform the Chair of the GC of the decision(s) taken and describe the urgent/critical nature of the issue(s) that necessitated the Executive Committee to act
without any time-delay.

- The Executive Committee carries out the administration of DDE, with the assistance of the Secretariat. The Secretariat is responsible for the day-to-day operations of DDE.

- The Science Committee, following decisions of the Governing Council and the Executive Committee, is responsible for ensuring the rigour and quality of scientific content of DDE sponsored projects, conferences, seminars and workshops and publications. It is responsible for evaluating project proposals submitted for financial support from and/or non-financial, in-kind sponsorship of DDE and ranking them in order of priority for further approval by the EC and GC

- Working groups focus on knowledge systems of disciplines and carry out the scientific activities of DDE to identify databases through projects and/or meetings arranged, if possible, in collaboration with the Member organisations, IUGS, other non-governmental and inter-governmental bodies.

- Task groups focus on exploring data bases and incorporating them within DDE through projects and/or meetings arranged, if possible, in collaboration with the Member organisations, IUGS, other non-governmental and inter-governmental bodies.

The DDE Advisory Board

- The Board shall consist of 5 members including standing representatives (one each) from IUGS and IUGG. Other members may include representatives from UNESCO and other intergovernmental and non-governmental organizations with on-going, earth science programmes and initiatives. Representatives of institutions to the Board will be at the highest level, for example, President of the organizations or Director Generals of Earth Sciences Programmes, or specialists of the institutions formally delegated to liaise with DDE on their behalf by such high-level Officials.

- The Board shall include individual members who need not necessarily be active geoscientists, but must have high international stature and influence and come from academia, Government or industry. Individual members to the Board shall be recommended by the Executive Committee and approved by the Governing Council. The Executive Committee shall establish a process, such as the setting up of a Nominating Committee, for identifying individuals who could be considered for appointment as Board Members. Nominations of individuals to the Board may be made by DDE Founding Members and Members, WTGs or other partners closely collaborating with DDE on specific projects and initiatives. Self-nomination by individuals shall not be permitted. Due consideration to gender, ethnic origin and geographical diversity will be given to selection of representatives to the Board.
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The function of the Advisory Board is to independently advise and guide the strategic development of DDE as a key international big-science initiative on data driven discovery in earth sciences. The Board does not have any decision making power or executive authority.

The Advisory Board shall meet once per year. Board members shall elect a Chair for the conduct of Board meetings. The Chair elect shall serve for a period of two years, renewable for one additional year only.

Individual members of the Board, representing organizations such as IUGS, IUGG and UNESCO will be determined by the President/Director General of that organization and the name, title and other details of the representative communicated to the DDE Executive Committee. For Members of the Board representing industry, academia or other sectors, the DDE Executive Committee shall make recommendations, based on suggestions received from Founding Members and Members, for the consideration and approval by the GC.

The members of the Board will use funds allocated to them by the Governing Council for DDE work related to travel or other activities as per the terms and conditions specified by the GC.

The Governing Council

The Council shall consist of

- One delegate nominated by each Founding Member and Member. Voting in the Governing Council will be on the basis of one vote per Member. The use of proxy voting will be allowed in ordinary sessions of the Council.
- All members of the Executive Committee, without voting rights.
- Observers (who may include Partners) from countries, regions or organizations which are not Members, but are collaborating or are interested in working with DDE. Observers do not have voting rights.
- President of IUGS or his designated representative without voting rights.

Due consideration to gender, ethnic origin and geographical diversity will be given to the constitution of the Council.

The Council is chaired by the President of DDE the Governing Council, or in case of his/her inability to govern, one of the two Vice-Presidents who serves on a pro-temp basis with the approval of the Council. In the case of permanent incapacity, the Council elects the substitute President of Governing Council. The President of the Governing Council shall be elected by the Council, from among the representatives of the Founding Members and Members.
Members of the Council and who have the right to vote at the time of the election. In the event, there are more than one candidates seeking the Office of the President of the GC, the candidate with the highest tally of votes shall be deemed the winner and elected as President. The President elect of the GC shall serve for a period of four years and shall be eligible for re-election for one additional term only. The President, in consultation with all Members of the Governing Council shall appoint two Vice-Presidents of the Council.

- Decisions on all matters brought to a vote will be determined by a simple majority. In the event of an equal division of votes, the President shall cast the deciding vote. Decisions of the Council shall be made only when the session constitutes a quorum consisting of one third of its Members. In financial matters all members will define the quorum and will be permitted to vote. The use of proxy voting will be allowed in ordinary sessions of the Council according to the following procedures and limitations. All Member organisations who wish to assign their proxy to another Member organisation must notify the President of the Council at least one week prior to the Council session of their intention and identify the name of the Member organisation who will execute their proxy vote

- Each Member organisation has one vote.

- The Council meets at least once a year in ordinary sessions. The Council may also make decisions in extraordinary sessions or by postal or electronic communication on questions put forward by the Executive Committee through the Chair of the Executive Committee. Sessions of the Council shall be called by the President of DDE Governing Council in consultation with the Executive Committee.

- DDE Founding Members and Members nominating their representatives to the Governing Council will recognize and respect the need to promote gender, ethnic and geographical diversities.

Powers and functions of the Governing Council

- The Governing Council elects the officers of the Executive Committee, after considering the recommendations submitted by Member Organisations. The GC will invite recommendations from Founding Members and Members six months prior to the end of the term of the current term of Officers holding positions in the Executive Committee.

- The Governing Council selects the venue of the next, and future, DDE scientific meetings with due consideration of international science meetings and recognizing the global character of DDE. The Council should consider a global rotation of venues so that all regions have an opportunity to host a DDE meeting as part of IUGS/IGC or other international events. The decision may be taken as early as 1 year in advance.

- The Governing Council may delegate to the Executive Committee matters of policy or
financial commitment that are too urgent to await a decision by the Governing Council. Actions taken on behalf of the Governing Council must be communicated to the Member organisations and are subject to ratification or amendment by the Governing Council.

- The Governing Council has the power to instruct the Executive Committee to institute any working group and task group that it deems necessary for the scientific work of DDE and to dissolve any instituted working group and task group whose performance the Council considers unsatisfactory.

The Executive Committee

- The Executive Committee shall consist of: The Chair, the Secretary General of DDE, the Head of the Secretariat, the Treasurer, and two Councillors.

- The Executive Committee shall meet at least twice a year, but more frequently if it considers such meetings necessary for the effective implementation of the DDE Program. At the end of each of its session, the Executive Committee shall define the date of its next meeting and inform its Members, Chairs of GC and SC and others whose participation in that meeting is required, accordingly. Five members shall constitute a quorum for a meeting of the Executive Committee.

- Members of the Executive Committee may not concurrently hold office in the working groups, or be representatives of Member organisations to the Governing Council. In proposing individuals for the election of Executive Committee, Members must give due consideration to maintain geographic, ethnic and gender balance.

- The Chair, the Head of the Secretariat and the Treasurer shall be responsible for day-to-day operations in accordance with the provisions of these Statutes and Bylaws.

- The Chair, the Secretary General of DDE, the Head of the Secretariat and the Treasurer shall hold office for a period of four years concurrent with that of the DDE Secretary General.

- The Chair and the Treasurer are eligible for re-election once only. The outgoing Chair shall remain an ex-officio member of the Executive Committee for a period of one year after the end of his/her term in office and may be invited to take part in further meetings of the Executive Committee on a consultative basis. The Secretary General shall serve for a period of four years concurrent with the Executive Committee.

- Two Councillors shall be elected, each to serve for a period of four years, but staggered in order to provide continuity. Councillors shall not be eligible for re-election, but they may however, be nominated for other positions of the Executive Committee.

- In the event of the death or resignation of an elected officer prior to the end of his/her term, the Executive Committee may designate a deputy to act in his/her place until the completion of his/her term of office or, if more than one year remains of his/her term,
arrange for his/her replacement according to the procedures described in the Bylaws.

- Officers should not serve on the Executive Committee in different capacities for more than 2 continuous terms.

- The Executive Committee shall present a report on its activities, including a financial statement of the current year and an outlook for the following years, at each session of the Governing Council. Minutes of all Executive Committee meetings shall be posted on the DDE website and shall be promptly circulated to members of the Governing Council.

- The Executive Committee has the power to propose any working groups and task groups that it deems necessary for the scientific, administrative and public awareness work of DDE, and to propose dissolution of any working group or task group that it had instituted and found to be not performing activities to enhance the vision and mission of DDE. These proposals need to be approved and ratified by the Governing Council.

- Due consideration to gender, ethnic origin and geographical diversity will be given to the constitution of the Executive Committee.

The Science Committee

- The Science Committee shall consist of 15 members with a wide representation of geographic, gender, ethnic and geo- and data-sciences disciplinary diversity. At least some members of the Science Committee must have proven international influence in other global initiatives that are relevant to DDE. Members should be the world's top scientists in their relevant fields and cover most areas of the earth sciences, but also focus on big data analytics, machine learning and artificial intelligence.

- Nominations to the Scientific Committee can be made by the Advisory Board, Founding Members and Members. Nominations must be made to the Executive Committee which will review all nominations and recommend finalists for inclusion of the Scientific Committee for approval by the Governing Council. The Executive Committee may, if it considers necessary, appoint a special Committee comprising of Founding Members and Members of the GC with voting rights, to review all nominations received and make recommendations to the Executive Committee of the finalists to be included in the Scientific Committee.

- Members appointed to the Scientific Committee will serve a period of 2 years; their tenure could be extended for one additional term of 2 years only.

- The Science Committee will rotate its membership to re-elect a third of its members every two years with each member allowed to be re-elected once so that each member serves a maximum of four years.

- The Scientific Committee shall elect its Chair, who shall be responsible for coordinating and
organizing scientific committee activities in accordance with these Statutes and Bylaws.

- The Chair shall hold office for a period of 2 years. The Chairperson may be re-elected once only.

- The Science Committee has the task of carrying out a thorough scientific evaluation of the individual proposals of Founding Members, Members, WGs and TGs submitted to DDE and to list their priority based on scientific needs and expected impact. It also has the responsibility to advise the Executive Committee with regard to academic and applied science questions that DDE must address in projects funded by DDE in order to build international credibility and influence.

Finance Committee

- The Finance Committee shall consist of 4 members of which at least two are individuals or representatives of organizations who are not part of the DDE Advisory Board, Governing Council and Executive Committee. It reports to the Executive Committee. Its primary role is to identify external financial opportunities for DDE projects and activities as well as to propose to the Executive Committee ways and means of assuring transparency and accountability in all DDE financial operations, including:
  - The allocation of funds in relation to the strategic priorities and initiatives adopted by the Executive Committee; and overseeing the conduct of an audit of DDE finances.
  - Presenting a report including the results of an audit to the DDE Governing Council every year
  - To review and comment on reports of the DDE Treasurer, who shall be a permanent member of the Finance Committee, as appropriate.

- The Finance Committee shall meet at least once a year to review the financial operations of DDE, including an audit of DDE financial operations, identify any critical problems that may negatively impact transparency and accountability and recommend remedial measures that must be put in place to the consideration of the Executive Committee.

- The Finance Committee will identify certified companies for undertaking the annual audit of the accounts and financial statements of DDE and make recommendations to the Executive Committee, including a ranking of the best two companies that be assigned the task of the audit. The Executive Committee will choose the auditor of the annual DDE accounts and financial statements.

Other Committees

- The GC, at the request of EC, may consider establishing other Committees to address specific themes, issues and problems to the effective functioning and long-term development of DDE. In establishing such a Committee, the GC will define its Terms of
Reference (TOR), including the time duration for the completion of the work of the Committee.

**Working groups (WGs) of DDE**

- The GC shall institute such working groups as necessary to study any particular field, methodology, or problem.
- A working group is composed of an appropriate number of geographically representative members, kept to the minimum consistent with its research agenda.
- The Executive Committee shall appoint a temporary Chair and Vice-Chair of each newly formed working group, until such time members of the working group can elect their own officers. Officers of existing working groups shall be elected by working group members and their election approved by the Executive Committee and ratified by Governing Council. They shall remain in office for four years and are eligible for re-election once only. Vacancies among the Chairs shall be automatically filled by a Vice-Chair until a new Chair is elected.
- Working groups shall submit to the Executive Committee annual written reports on their work, including progress in scientific activities on the DDE Microsoft Teams site, as well as on financial and administrative matters. They shall submit comprehensive reports, including a summary of scientific results, to the Council whenever the Executive Committee recommends that the working groups submit such reports.

**Task groups (TGs) of DDE**

- The GC shall institute such task groups as necessary to study and collate and harmonize data from any particular field or related to a methodology, or problem.
- The Executive Committee shall appoint a temporary Chair and Co-Chair of each newly formed task group, until members of the task group can elect their own officers and members. Officers of existing task groups shall be elected by task group members and their election approved by the Executive Committee and ratified by Governing Council. They shall remain in office until the end of the assigned task. Vacancies among the Chairs shall be automatically filled by a co-Chair until a new Chair is elected.
- Task groups shall submit to the Executive Committee annual written reports indicating progress in scientific activities on the DDE Microsoft Teams site, as well as on financial and administrative matters in addressing the particular task they were assigned and financial, and administrative aspects of their work. They shall submit comprehensive reports, including a summary of scientific results, to the Council as and when recommended by the Executive Committee.

**The Secretariat**

- The Secretariat of the DDE shall be constituted by the Executive Committee with the
approval of the GC. Staff of the Secretariat may be employed on a full or part-time basis. The Chair of the EC will communicate with the Head of the Secretariat on a regular basis in order to ensure that the Secretariat is implementing all decisions of GC/EC in a prompt and efficient manner.

The Head of Secretariat shall:

- take care of organisational issues such as meetings;
- organise logistic support and outreach materials;
- attend to correspondence, and preserve the records;
- ensure good staff morale and effective performance of assigned tasks and functions by Secretariat staff.

Dissolution of DDE

- DDE may be dissolved at a session of the Council at which the representatives of at least one-half of its Members are present, with the approval of three-fourths of the members voting. On dissolution, the financial assets of DDE shall be transferred to the International Union of Geological Sciences (IUGS) to finance work in disciplines related to the aims and objectives of DDE.