

Statutes, November 2020

SIRGAS and its objectives

Art.1. The **Geodetic Reference System for the Americas**, from here on called **SIRGAS**, is a non-profit organization set up for the Americas, driven by a voluntary agreement among the agencies of the Americas and the Caribbean responsible for the definition of the geodetic reference frames. SIRGAS supports cartographic production and research centers that perform activities linked to geodesy and geophysics. Its main objectives are the following:

- a) Establish and maintain a continental geocentric reference frame (a network of stations with geocentric coordinates [X, Y, Z] of high precision and their variation over time [Vx, Vy, Vz]), in accordance with the recommendations of the International Association for Geodesy (IAG¹).
- b) Define, put into effect, and maintain a unified vertical reference system by means of physical and geometric heights that are consistent at the global level, in accordance with the recommendations of the IAG.
- c) Develop and update a gravimetric geoid model for continental coverage, in accordance with the recommendations of the IAG.
- d) Establish and maintain a continental absolute gravity network, in accordance with the recommendations of the IAG.

Art.2. The specific objectives of SIRGAS are all closely involved with the accomplishment of the main objective. Among these, the following may be mentioned:

- a) Participate permanently in the IAG and in the Pan American Institute for Geography and History (PAIGH²) to exchange up-to-date information and knowledge about technical and scientific matters related to the objectives of SIRGAS.
- b) Promote and closely cooperate in the implementation of the Resolution made by the General Assembly of the United Nations titled "Global Geodetic Reference Frame for sustainable development" (A/RES/69/266³), working in terms of the "Roadmap of the Global Geodetic Reference Frame for sustainable development" (E/C.20/2016/4/Add.1⁴), while responding to the "Implementation Plan for the roadmap of the Global Geodetic Reference Frame for sustainable development⁵" drafted by the Sub-Committee on Geodesy of the UN Committee of Experts on the Global Geospatial Information Management of the United Nations (SCoG UN-GGIM⁶).
- c) Coordinate, together with the "Geodetic Reference Frame for the Americas" (GRFA⁷) Working Group of the Americas Regional Committee of the Group of Experts on the Global Geospatial Information

¹ https://www.iag-aig.org/statutes-and-by-laws/33

² https://www.ipgh.org/assets/estatuto_organico_2018_esp.pdf

³ https://ggim.un.org/documents/A_RES_69_266_S.pdf

⁴ https://ggim.un.org/meetings/GGIM-committee/documents/GGIM6/E-C20-2016-

^{4%20}Global%20Geodetic%20Reference%20Frame%20Report.pdf

⁵ https://ggim.un.org/meetings/GGIM-committee/8th-Session/documents/Road-Map-Implementation-Plan.pdf

⁶ https://ggim.un.org/documents/Subcommittee on geodesy-Terms of Reference.pdf

⁷ http://www.un-ggim-americas.org/en/contenido/GT-

Geodesia/pdf/Terms%20of%20Reference%20GRFA v10 final 8-31-2020.pdf

- Management of the United Nations (UN-GGIM: Americas⁸), efforts to guarantee the sustainability of the geodetic frame of reference in the Americas.
- d) Provide a forum for cooperation and dialogue about issues involved with the maintenance, sustainability, and improvement of geodetic reference frames.
- e) Contribute to the drafting and implementation of the "Joint Action Plan for accelerating the development of the Spatial Data Infrastructures of the Americas".
- f) Plan, encourage and coordinate the scientific and technical tasks required for reaching the main objectives.
- g) Encourage and make widely known the progress, results, and significance of SIRGAS, to achieve the implementation of the SIRGAS reference frame in the Member States.
- h) Encourage and promote, among the Member States, homogeneity in the scientific and technical knowledge involved in the sphere of SIRGAS, including bringing professionals up to date and training human resources, by means of public outreach and training campaigns that make it possible to contribute to society via the use of SIRGAS and of the national reference frames that constitute its networks.
- i) Encourage and provide mechanisms for developing capabilities and the transfer of knowledge in the field of geodesy between the Member States.
- j) Promote and coordinate all activity that contributes to achieving the proposed objectives in reality, including, among them, the connection of SIRGAS to the pre-existing geodetic systems.
- k) Encourage the open exchange of geodetic data and information.
- I) Organize biennial scientific symposiums that address the activities in progress at national and continental levels related to the work and objectives of SIRGAS.

About the Members

Art.3. Member States of the Americas and of the Caribbean region⁹ are represented by their Agencies responsible for their national geodetic reference systems. In order to represent their Member States, these agencies must send an official communication to the Executive Committee of SIRGAS (defined in Art.20) and be willing to work actively towards the fulfillment of the objectives of SIRGAS (defined in Art.1 and 2). The Member States' Agencies should designate their main and alternate National Representatives to the Directing Council of SIRGAS (described in Art.8), bearing in mind that these Representatives should, preferably, fulfill the following requirements:

- a) They should be working at the agencies responsible for setting up the national geodetic frames in the Member States or working closely with those frames, and have a high degree of responsibility and active participation in the definition and the maintenance of their geodetic reference frames in their countries.
- b) Have specific knowledge of geodesy and its applications.
- c) Have skills for management, administration, and communication.

⁸ http://www.un-ggim-americas.org/contenido/estatuto/pdf/ESTATUTOS%20ENE19-2.pdf

⁹ It should be noted that, in accordance with point 2.1.3. of the GRFA Terms of Reference, "given the general objective described in point 1.1.1., the Member States are encouraged to participate as national representatives to SIRGAS in order to be able to work on the development of scientific policies for the Americas".

- **Art.4.** The IAG and the PAIGH are members of SIRGAS with the same rights and responsibilities as the Member States. for this reason, they should propose their own Representatives to the Directing Council by means of an official communication addressed to the Executive Committee.
- **Art.5.** Other States, agencies, institutions, or persons may be members, if they are without profit-making aims. Through an official communication addressed to the Executive Committee, they must state their intention of participating in the Directing Council, and their entry must be approved by that same Directing Council.
- **Art.6.** Certain States, agencies, institutions, or persons may be contributing partners if they state, through an official communication addressed to the Executive Committee, their willingness to contribute in scientific, technical, or economic terms to the projects that SIRGAS is putting into effect in order to achieve the objectives described in Articles 1 and 2.

About the Organization

- **Art.7.** SIRGAS is made up of the following component bodies:
 - a) Directing Council
 - b) Executive Committee
 - c) Scientific Council
 - d) Working Groups

About the Directing Council

- **Art.8.** The Directing Council is the final decision-making body of SIRGAS that has responsibility for setting scientific, technical, and administrative policies and instructions to fulfill the objectives of SIRGAS, described in Articles 1 and 2, in agreement with the other constituent bodies of SIRGAS.
- **Art.9.** The Directing Council is made up of:
 - a) One (1) National Representative for each Member State of the Americas and the Caribbean, each one of which has speaking rights and (1) vote.
 - b) One (1) Representative of the IAG, with speaking rights and a vote.
 - c) One (1) Representative of the PAIGH, with speaking rights and a vote.
 - d) The Executive Committee's Authorities, with speaking rights but no voting rights (except when also acting as National Representatives for one of the Member States, in which case he/she may make use of voting rights).
 - e) Members of the Scientific Council, with speaking rights but no voting rights.
 - f) Observers, with speaking rights but no voting rights.
- **Art.10.** The Directing Council should meet, in normal circumstances, every year. These meetings should be chaired by the President and the Vice-President of SIRGAS. If possible, the regular meetings will be held in conjunction with the Scientific Symposium of SIRGAS.

- **Art.11.** The Directing Council's special meetings take place when they are scheduled by the Directing Council itself or are called by the Executive Committee.
- **Art.12.** The quorum for the Directing Council to be in session during regular or special meetings is reached when half, plus one, of the members with voting rights are present, whether in person or by virtual media.
- **Art.13.** At the meetings of the Directing Council in which a formal vote is needed for decisions, based on the quorum in accordance with Art.12, that proposal which receives a simple majority of the votes in favor will be approved, whether the votes are cast in person or by virtual media. Normally, the votes are run by a show of hands.
- **Art.14.** The preliminary agenda of each ordinary meeting will be prepared by the Executive Committee and it will be made known to the members of the Directing Council two months in advance. The preliminary agenda will be submitted to assessment by the Directing Council and will need its approval to become the final version. The Executive Committee will consider only those items included in the final version of the agenda. Any additions to this agenda made during the meeting need to be approved by two-thirds of the members with voting rights present.
- **Art.15.** On a biennial basis, during the regular meeting of the Directing Council, the host and location where the Scientific Symposium of SIRGAS will be determined. The choice is made among the various cities that may be offered by the members of the Directing Council.
- **Art.16.** The Organizing Committee of the Scientific Symposium of SIRGAS will be made up of the Executive Committee and a Local Committee designated by the institution that offers to host the event. In addition, any governing documents related to the running of SIRGAS events shall be considered.
- **Art.17.** In the case of the absence of the main and alternate National Representatives of a Member State at a regular or special meeting of the Directing Council, the primary National Representative may designate an assistant Representative (with speaking and voting rights) by means of an official communication addressed to the Executive Committee.
- Art.18. The Directing Council is responsible for:
 - a) Electing the President and the Vice-President of SIRGAS.
 - b) Proposing and assessing the naming of members to the Scientific Council.
 - c) Assessing the Work Plan and the Annual Reports of SIRGAS.
 - d) Creating new Working Groups or Special Commissions that are considered necessary for the success of the activities of SIRGAS.
 - e) Assessing new projects or research processes issued by the Working Groups.
 - f) Dissolving Working Groups whose objectives have been achieved.
 - g) Determining or reforming its own Statute.
 - h) Approving the Resolutions that are issued from the meetings of the Directing Council.
 - i) Designating the host and location for the following Scientific Symposium of SIRGAS and meeting of the Directing Council.
 - j) Awarding special, honorary recognitions.
 - k) Approving the agenda for the meetings of the Directing Council.

I) Providing a forum for cooperation and dialogue about matters related to the maintenance, sustainability, integration, and the improvement of geodetic reference frames.

About the Executive Committee

- **Art.19.** The Executive Committee has the responsibility for putting into effect those administrative tasks needed for SIRGAS to continue operating well; for coordinating the activities of the other constituent bodies and providing the assistance necessary for these activities to function and to carry out the tasks entrusted to them; and for verifying the fulfillment of the agreements adopted; to fulfill the objectives of SIRGAS described in Articles 1 and 2.
- **Art.20.** The Executive Committee is made up of the authorities of SIRGAS, who are its President, Vice-President, and the chairs of the Working Groups, also the Social Networks Manager.
- **Art.21.** The President and Vice-President of SIRGAS are elected at the Directing Council's regular meetings, remain for four (4) years in these functions, and may be re-elected for a second period.
- **Art.22.** An Electoral Committee will be established on a temporary basis by the Executive Committee, in order to coordinate the process of elections for the President and Vice-President of SIRGAS, four (4) months before the regular meeting where the evaluation of the electoral process will take place and the new authorities of SIGAS will start to exercise their functions.
- **Art.23.** The Electoral Committee should submit the candidates for President and Vice-President to the Directing Council three (3) months before the regular meeting, for its evaluation and vote, with all the supporting information: a) curriculum vitae. b) Work Plan proposed for the coming period. c) brief statement from the agency where the candidate works that indicates a commitment to supporting the candidate for the fulfillment of the functions established in this Statute.
- **Art.24.** The persons who occupy the positions of President and Vice-President of SIRGAS should comply with the following requirements:
 - a) Be employed at the agencies responsible for determining the national geodetic reference frames.
 - b) Have specific knowledge of geodesy and its applications.
 - c) Have a high degree of responsibility in the definition and the maintenance of the Geodetic reference frames in their Nations.
 - d) Have skills for management, administration, and communication.
 - e) Have the endorsement of the entities that support and promote them.
 - f) The President and the Vice-President should have different nationalities.
- **Art.25.** The President and the Vice-President of SIRGAS are responsible for:
 - a) Putting into effect a Work Plan aligned with the objectives proposed by the Implementation Plan of the "Road Map" developed by the Geodesy Sub-committee of the UN-GGIM.
 - b) Acting as the link between the constituent bodies of SIRGAS, keeping the Directing Council informed about the progress of the Work Plans.
 - c) Preparing the draft agendas and the schedules for the meetings of the Directing Council.

- d) Presenting the Work Plans and Annual Reports of SIRGAS at the meetings of the Directing Council.
- e) Drafting and submitting for the consideration of the Directing Council the Resolutions that are issued from the regular or special meetings of the Directing Council, and those technical communications that the Working Groups require to be submitted.
- f) Coordinating, together with the Local Committee, the organization of the Scientific Symposia of SIRGAS.
- g) Exercising, extrajudicially, the legal representation of SIRGAS.
- h) Acting as co-chair of the GRFA Working Group.
- i) Acting as a liaison between SIRGAS and UN-GGIM: Americas.
- j) Proposing persons to be named as members of the Scientific Council.

Art.26. The Presidents of the Working Groups and the Social Networks Manager are designated by the President of SIRGAS for a period of 4 years, with the possibility of renewal for another period.

Art.27. The Chairs of the Working Groups should comply with the following requirements:

- a) Have the nationality of any of the Member States comprised within SIRGAS or work professionally in one of those states.
- b) Have specific knowledge of geodesy, its applications, and the activities performed by the Working Groups.
- c) Have skills for management, administration, and communication.
- d) Have the endorsement of the entities that support and promote them.

Art.28. The Chairs of the Working Groups are responsible for:

- a) Participating in the meetings of the Directing Council.
- b) Regularly reporting the activities performed and their results to the Executive Committee.
- c) Submitting, annually, to the Directing Council a report about the activities undertaken and their results.
- d) Representing SIRGAS before the International Association of Geodesy (IAG).
- e) Submitting, annually, to Commissions 1 and 2 of the IAG a report about the activities undertaken in SIRGAS and the results obtained.
- f) Drafting, together with the Scientific Committee the communications or technical guides that are necessary for achieving the objectives of SIRGAS, described in Articles 1 and 2.
- g) Proposing the creation of those new Working Groups or Special Commissions that are considered necessary for the success of the activities of SIRGAS.
- h) Proposing the dissolution of those Working Groups whose objectives have been achieved.
- i) Proposing the awarding of special, honorary recognitions.
- j) Proposing to the Directing Council the inclusion of items onto the agenda of the meetings of the Directing Council.
- k) Coordinating the running of workshops, courses, and other types of training related to the main objectives of SIRGAS as described in Articles 1 and 2.
- I) Providing technical assistance and training so that the Member States may develop capabilities in geodesy and expand their basic geodetic infrastructure.
- m) Proposing and assessing, together with the Scientific Council, new proposals for research that can be incorporated into the activities of SIRGAS. These proposals should contain the objective, background information, results expected, and examples of applications in geodesy.

n) Keeping an updated list of the members that make up the Working Groups.

Art.29. The Social Networks Manager of SIRGAS is responsible for:

- a) Keeping and publishing content aligned with the vision of SIRGAS and that may be made public through the official channels.
- b) Responding and clarifying information that affects the reputation of SIRGAS, interacting with the public by means of positive conversations that contain links to the assets belonging to SIRGAS.
- c) Systematically tracking down sources of information for creating content

Art.30. The authorities of SIRGAS should, in decision making and in drafting Resolutions, consider especially the opinion of the Scientific Council, given the recognized professional status of its members.

About the Scientific Council

Art.31. The Scientific Council has the responsibility of advising the authorities of SIRGAS about technical matters, research, projects, and activities related to geodesy to fulfill the objectives of SIRGAS, described in Articles 1 and 2.

Art.32. The members of the Scientific Council are proposed by members of the Directing Council, the Executive Committee, and the Scientific Council, bearing mind the following considerations:

- a) The designation of the members of the Scientific Council is permanent after the Directing Council has given its approval.
- b) The proposal for naming to the position should be accompanied by a report with the professional background that proves a recognized suitability and experience, enabling the person to take up the position.

Art.33. The Scientific Council is responsible for:

- a) Participating in the meetings of the Directing Council.
- b) Regularly reporting to the Executive Committee the activities performed for the fulfillment of the objectives of SIRGAS, described in Articles 1 and 2.
- c) Give advice to the authorities of SIRGAS about research and best geodetic practices that contribute to the achievement of the objectives of SIRGAS, described in Articles 1 and 2.
- d) Proposing and assessing, in conjunction with the Working Group Chairs, new proposals for research that could be incorporated into the activities of SIRGAS.
- e) Cooperating with the Working Groups and the National Representatives in order to give them guidelines (from practical and scientific points of view) for their activities in the way that best contributes to achieving the objectives of SIRGAS, described in Articles 1 and 2.
- f) Drafting, in conjunction with the Working Group Chairs, the communications or technical guides that are necessary for the objectives of SIRGAS, described in Articles 1 and 2, to be achieved.
- g) Presenting, at the regular and special meetings of the Directing Council and at the scientific and technical meetings of the Working Groups, the opinions, and insights of this council about the progress being made in the activities, also their recommendations that, as they understand it, may improve efficiency and their own analyses about the possible courses of action that enable the optimization of results and which benefit future activities.

h) Setting up and keeping updated an inventory of education and grant programs linked to the activity of SIRGAS.

About the Working Groups

Art.34. The Working Groups (WG) have the responsibility of putting into effect the scientific activities and practices approved by the Directing Council for the fulfillment of the objectives described in Articles 1 and 2.

Art.35. At the time of drafting this Statute, the Working Groups established are the following:

- 1. WG I Establishment and maintenance of the Geocentric Reference Frame for the Americas and the Caribbean, for which the main objectives are the following:
 - a) Coordinate the implementation and maintenance of the geocentric reference frame.
 - b) Coordinate activities at the data centers and the analyses by the Working Group.
 - c) Develop the tools, applications, technical guides and training linked to the activities performed by this Working Group.
- 2. WG II National Integration to the SIRGAS Reference Frame, for which the main objectives are:
 - a) Encourage the integration of the pre-existing geodetic networks of the Member States to SIRGAS.
 - b) Develop the tools, applications, technical guides and training linked to the implementation of the SIRGAS reference frames.
- 3. WG III Definition, establishment and maintenance of the Vertical Datum for the Americas and the Caribbean, for which the main objectives are the following:
 - a) Define, maintain and update a unified system of physical heights.
 - b) Coordinate the implementation of a network of stations linked to the international system for heights.
 - c) Develop and update a model of a gravimetric, high-resolution geoid.
 - d) Establish and maintain an absolute gravity network.
 - e) Develop the tools, applications, technical guides and training linked to the activities performed by this Working Group.

Art.36. The Working Groups are made up of their respective chairs and by specialists who have proven scientific and practical knowledge, also experience, in the subject matter, and who work at universities, academic institutions, research centers and national geodetic agencies, directly linked to the thematic areas of interest to SIRGAS. These specialists may be proposed by any of the component bodies that are part of SIRGAS. In all these cases, the effective inclusion of a specialist into a Working Group is carried out by the corresponding Working Group Chair and ratified by the President and Vice-President of SIRGAS.

Art.37. The Working Groups will be able to establish specific projects directed towards a given issue of interest. Such projects will be coordinated by a person (called the Project Coordinator) assigned that task by the Chair of the Working Group that determines its creation. The Project will have an initial duration of four years. If the results of the projects tend to perform routine activities, these will be integrated into the structure of the respective Working Group.

About the Data Policy

Art.38. The National Representatives are committed to managing, in relation to the corresponding authorities within their agencies, the authorizations necessary for the aim of making as widely available as possible all data that may prove to be of interest for the activities being undertaken in the sphere of SIRGAS. This contributes towards the fulfillment of that recommended by the General Assembly of the United Nations in point 3 of the operative clauses in resolution A/RES/69/266¹⁰.

Art.39. The use and distribution of the national data referred to in Art.38, that is used for achieving the objectives of SIRGAS, described in Articles 1 and 2, is governed by the rules and procedures specific to each one of the Member States. The National Representatives are entrusted with the task s of the widest possible release of this data to the public.

Art.40. The National Representatives should cooperate with the publication of the respective metadata on the SIRGAS web site, including the conditions required for using the metadata.

Art.41. The data and analysis centers should facilitate access by the Executive Committee, the Scientific Council and the Working Groups to: a) data. b) calculation procedures. c) results. d) all available information related to SIRGAS.

About the Language

Art.42. The official languages within SIRGAS are Spanish, Portuguese, and English. In all cases the Spanish-language text will be the primary, definitive source of this statute.

About the web site and social networks

Art.43. SIRGAS should have available a web site, for which the editing and updating will be the responsibility of the President and Vice-President of SIRGAS. The content of the web site should be updated constantly, with a thorough assessment recommended for at least twice a year.

Art.44. SIRGAS should have available official media channels in the most relevant of the social networks, that should be administered by the Manager of the SIRGAS Social Networks in line with the policies indicated by the President and Vice-President of SIRGAS.

Art.45. Every report, presentation or publication created by any constituent body of SIRGAS should be made public through the web site. At the same time, the chairs of the Working Groups, the Social Network Managers and the Project Coordinators should provide fresh and innovative content to be distributed

¹⁰ The General Assembly of the United Nations "encourages the Member States to openly share data, standards and geodetic conventions, in a voluntary way, in order to contribute to the world reference frame and to regional network densification by means of the relevant national mechanisms and inter-governmental cooperation, and in coordination with the International Association for Geodesy" (https://ggim.un.org/documents/A RES 69 266 S.pdf)

through the official channels of SIRGAS.

Art.46. The Member States, the Observing members and the Contributing members may contribute relevant news and technical reports of interest to be made public through the web or the official channels of SIRGAS.

On the modification or updating of the Statute

Art.47. The decision-making bodies of SIRGAS should review the existing statute at least every eight years and propose those changes that are necessary for keeping the structure and functions of SIRGAS up to date. To this end, suggestions for the modification, addition to or removal of articles should be submitted to the President of SIRGAS at least four (4) months in advance of the running of a regular or special meeting of the Directing Council, at which the changes will be discussed. The President of SIRGAS will gather together all the proposals and distribute them among the members of the Directing Council so that, at the end of 6 weeks, they can issue their vote either in favor or against, or to abstain. This vote can be given differentiating between the articles, that is, it may support some modifications and oppose others. The new version of the statute will enter into force as from the regular or special meeting of the Directing Council that follows immediately after.