Charter Approved by COMAR: December 15, 1997 Approved by IEEE EMBS AdCom March 27, 1998 Approved by IEEE EMBS AdCom November 8, 2016

COMMITTEE CHARTER

IEEE-Engineering in Medicine and Biology Society

Committee on Man and Radiation

1.0 General

The Committee on Man and Radiation (COMAR) is a Technical Committee of the Engineering in Medicine and Biology Society (EMBS) of the Institute of Electrical and Electronics Engineers (IEEE). It reports to the EMBS Vice President for Publications and Technical Activities, through the Technical Activities Committee.

2.0 Objectives and Scope

COMAR has as its primary area of interest the biological effects of non-ionizing electromagnetic energy, examining and interpreting the biological effects, and presenting its findings in an authoritative and professional manner.

While COMAR may address all aspects of the biological effects of non-ionizing electromagnetic energy, the principal focus will be on the electromagnetic spectrum from DC to sub-millimeter wavelengths. The Committee will also include within its purview sonic, ionizing radiation and higher-frequency non-ionizing radiation (e.g. IR, visible and UV radiation) when one of these forms of energy are potential accompaniments of exposure to the lower-frequency non-ionizing radiation under focus.

COMAR is not charged to establish safety standards per se, although it will have an inherent interest in the standards activities within its scope.

3.0 Functions

COMAR will conduct its activities in accordance with IEEE Policies and Procedures - Section 15 - IEEE Position Papers, Technical Information Statements (TIS's) and Testimony before Government Bodies in the development of documents premised on the work of the Committee.

The following are specific functions of COMAR:

- 3.1 The Committee will be prepared to offer knowledgeable individuals who can properly describe and explain, to government officials at all levels, the present state of scientific knowledge concerning the biological effects of non-ionizing electromagnetic energy. These individuals will not necessarily present an official COMAR position.
- 3.2 The Committee will strive to keep the general public, including non-technical leadership, informed on pertinent matters regarding non-ionizing electromagnetic energy.
- 3.3 The Committee will prepare statements on the biological effects of non-ionizing electromagnetic energy suitable for promulgation as IEEE and EMBS documents.
- 3.4 The Committee may undertake specific actions in the form of preparing accurate and factual reports, news releases, etc., which are readily understandable to the layperson, so as to further the public understanding of the biological effects of non-ionizing electromagnetic energy.
- 3.5 In furtherance of its work, the Committee shall cooperate with other technological societies in advancing the worldwide exchange of information on the biological effects of non-ionizing electromagnetic energy.
- 3.6 The Committee should be alert to actions proposed by Governmental Bodies or standards development organizations that may pertain to the biological effects of non-ionizing electromagnetic energy. If action is deemed desirable, COMAR may address comments to the appropriate agency.

4.0 Organization

4.1 Membership - The active membership of COMAR shall consist of two classes, Elected Members and Liaison Members. Each class shall have identical rights and privileges. Members of either class who have not contributed to COMAR activities, or responded to requests for communication with COMAR during a period of twelve consecutive months, shall be considered inactive and subject to release from Committee membership by appropriate COMAR Administrative Committee (AdCom) action that is consistent with IEEE established policies. Immediately prior to being declared inactive, an attempt will be made to communicate with the member at his/her last known email address to determine if there is a legitimate reason for not being declared inactive. If there is no response, the inactive status will be invoked.

COMAR will strive to keep a balance between its engineering, physical sciences and life sciences constituencies. Non-IEEE members shall be eligible to join COMAR, although these members shall be encouraged to join the IEEE. A target of 75% IEEE membership is an ongoing goal for the most effective operation of the Committee.

At the beginning of each calendar year, the current COMAR membership will be submitted for confirmation to the Vice President for Publications and Technical Activities of the IEEE EMBS. Any updates of membership during the calendar year shall also be submitted to the Vice President for Publications and Technical Activities of the IEEE EMBS.

- 4.1.1 Elected Members The Elected Members of COMAR will either be IEEE members, or members of another scientific or technological society recognized by COMAR as having expertise in the use, safety, engineering or life sciences relevant to non-ionizing electromagnetic energy. Up to three nominations per year may be made by any IEEE member of COMAR. Screening of prospective members will be made by the COMAR Administrative Committee (AdCom), plus two members representing the engineering and life sciences constituency of the membership. Final membership selection will be by majority vote of at least 67% of the active COMAR members.
- 4.1.2 Liaison Members The Liaison Members of COMAR shall be individuals with both interest and expertise in COMAR activities. They shall be appointed to represent the IEEE Standards Board, IEEE Societies, or other entities with an interest in non-ionizing electromagnetic energy. Liaison status is not meant to apply to specific companies or businesses. Appointment will be on a one-year basis by electronic communication in January of each year from the presiding officer of the sponsoring organization. The designated liaison may be renewed annually at the option of the entity.
- 4.2 Tenure of Membership The tenure of Elected Members shall be for three years. Each elected person shall be eligible to serve two additional sequential three year terms. Each term shall require approval by a majority of members voting at a meeting of COMAR or by electronic vote

5.0 Officers

The Officers shall be the Chair, Vice Chair, Past Chair, and Secretary. The Chair, Vice Chair, and Past Chair shall be members in good standing of the IEEE (member grade or higher category).

- 5.1 Chair The Chair of COMAR will normally have served as Vice Chair preceding his or her appointment. The appointment shall be made by the Vice President for Publications and Technical Activities of the IEEE EMBS, who may, given exigent circumstances, follow the procedure of Paragraph 5.2 in appointing the Chair. The COMAR Chair's term will be for three years, with a limit of three consecutive terms.
- 5.2 Vice Chair The Vice Chair of COMAR shall be appointed by the Vice President for Publications and Technical Activities of the IEEE EMBS, after being nominated by COMAR. The nominee shall have been approved by a majority vote of the voting members of COMAR at a meeting or by electronic ballot from a list of at least two candidates, who have previously been nominated by electronic communication by COMAR members to the Secretary of COMAR, and who have agreed to serve if elected.

In the event that only one candidate is willing to serve, approval by a majority of voting members is required. In the event that COMAR is unable to submit a nominee, the Vice President for Publications and Technical Activities of the IEEE EMBS may select an individual who was not formally endorsed by the Committee.

- 5.3 The Vice Chair of COMAR will normally succeed as Chair. In the absence of the COMAR Chair at a meeting of the COMAR membership, the Vice Chair will assume the responsibilities of the Chair. The primary responsibility of the Vice Chair is to gain and to maintain an awareness of all transactions, correspondence, and exchanges involving the Chair.
- Past Chair The immediate Past Chair may serve for the term in office of the current Chair, in order to advise the current Chair and provide continuity. The specific responsibilities of the Past Chair shall be designated by the Chair. If the Past-Chair is not available to serve, activities will proceed without this Officer position being filled.
- 5.5 Secretary The Secretary shall be appointed by the Chair from COMAR members who volunteer to serve in this capacity. The Secretary's term of office will be renewable two-year terms, normally coinciding with that of the Chair, but may be extended by mutual agreement with the incoming Chair. The primary responsibilities of the Secretary are to prepare minutes of COMAR meetings, insure maintenance of a file of correspondence, and keep open the lines of communication among the COMAR Administrative Committee, COMAR members, and EMBS officials.

6.0 Administrative Committee (AdCom)

An Administrative Committee (AdCom) shall be comprised of the Chair, the Vice-Chair, the Past-Chair, and the Secretary of COMAR, and the Chairmen of any *Ad Hoc* Subcommittees approved by the AdCom. It shall be under the direction of the Chair, and shall function as the administrative nucleus of the COMAR. Decisions of import that require rapid action, not permitting the full assembly or vote of the COMAR membership, will be made by the AdCom, and will require majority AdCom accord. Examples of circumstances or issues that require action by the AdCom include requests for testimony before Congress, press releases on highly sensitive subjects, and appearances in major legal proceedings - where these or any other developments impact on the image of the IEEE.

7.0 Ad Hoc Subcommittees

The Chair of the COMAR, with majority approval of the AdCom, may create Ad Hoc Subcommittees to address specific topics or to deal with special situations as deemed appropriate. Ad Hoc Subcommittees may also be established by majority vote of attendees at regular meetings of COMAR. Such subcommittees may include individuals

who are not IEEE or COMAR members, but each subcommittee will be chaired by a COMAR member and, when feasible, by an IEEE member of COMAR.

8.0 Conduct of Business by COMAR

- 8.1 Transactions of business at meetings of COMAR, the COMAR AdCom, and any *Ad Hoc* Subcommittees of COMAR shall follow Robert's Rules of Order. The quorum for any meeting of COMAR, or of any of its *Ad Hoc* Committees, shall be a majority of the voting members of the group which is meeting. Balloting consensus shall be by a majority of the members present or voting electronically. Decisions of special working groups established by the COMAR AdCom or by a COMAR membership vote shall be in accord with the mission statement establishing that specific working group.
- 8.2 Balloting on the election of members to COMAR requires a minimum of 67% returns from those members eligible to vote, and a simple majority of these returns for election.
- 8.3 Balloting on the adoption of formal COMAR approved documents intended to be published or distributed externally shall require for adoption a minimum return of 75% of those eligible to vote and a favorable response of at least 75% of those voting. Submitted abstentions shall require an accompanying explanation to be accepted. Actions to resolve negative ballots must be undertaken, but with a limit of three months, after which the COMAR AdCom must assess and announce the results of the balloting. Included in the documents requiring these balloting rules are Technical Information Statements, draft position statements submitted to USAB entities for adoption, and any formal statements of COMAR positions submitted to organizations, e.g., the U.S. Congress.
- 8.4 COMAR recognizes that procedures for transaction of business must follow the By Laws of the IEEE EMBS and those of the IEEE itself. Procedures in place at the time of the adoption of the present revision of the COMAR Charter are believed to conform to IEEE EMBS and IEEE requirements. The COMAR AdCom will conduct an annual review (at the first AdCom meeting during the calendar year) to ensure that these rules continue to be consistent with those of the organizations to which COMAR is responsible.
- 8.5 COMAR Recommended Information Statements COMAR may establish a procedure for allowing informative statements to be rapidly prepared and distributed when one or more COMAR members learn that incorrect information about non-ionizing electromagnetic energy is being presented to the public, or government or agency officials. After first receiving approval of an *ad hoc* committee of members which recommends the preparation of such a statement, a designated COMAR officer will solicit other COMAR members to self-identify themselves as potential co-authors directly to the identified lead author. This authorship group, after preparing an information document, shall forward it to the designated COMAR officer for distribution to the membership for consideration and suggested changes; these suggestions shall be

directed to the lead author. A final document will be prepared by the authors, and returned to the Chair of COMAR for an electronic vote of approval to allow the paper to be distributed, under the signature of the final authors, as a "COMAR Recommended Information Statement." Such statements shall not be distributed as official COMAR TIS documents. If not approved by a simple majority vote of (no less than 50% of the current COMAR membership) the members voting electronically (by a date certain), the document as submitted could not be distributed as indicating any relationship to COMAR. If allowed, the Chair of COMAR will still have final right of approval of such documents, and responsibility for the distribution thereof.

9.0 Financial and Administrative Support

- 9.1 Financial support for COMAR will be provided through the normal budgetary process of the IEEE EMBS and by specific COMAR fund-raising activities. To keep the budget within practical limits, travel expenses are not provided for COMAR members and travel expenses for COMAR officers will be limited to an amount decided upon by EMBS.
- 9.2 The Chair of COMAR will be expected to monitor Committee expenses to keep them within budget.
- 9.3 The IEEE EMBS Secretariat may provide certain administrative support.

10.0 COMAR Meetings

Except under unusual circumstances, COMAR will meet twice a year. The AdCom will meet four times a year; three such meetings may be by teleconference or equivalent. The minutes of such meetings will be prepared by the Secretary and will be distributed to all COMAR members and the Vice President for Publications and Technical Activities of the IEEE EMBS. As much business as possible will be conducted by telephone and/or via electronic or surface mail.

11.0 Changes to this Charter

This Charter and any changes thereto must be approved by a majority of the COMAR membership, voting either electronically or at a scheduled meeting, and the IEEE EMBS Administrative Committee.