

Guidelines for CIGRE SC B5 Members & Observers

Summary

The first part of this document gives a brief overview over the CIGRE organisation and activities. In the second part, the particular working practice of Study Committee SC B5 is described.

Detailed information on CIGRE rules is provided in the following official documents that can be downloaded from the CIGRE web site www.cigre.org:

- Statutes
- Rules of Procedure
- Rules for Study Committees
- General Rules for Sessions
- Guide for Special Reporters
- Guide for Speakers at CIGRE Sessions
- Instructions for the Presentation of Papers at CIGRE Symposia
- Organisation of CIGRE Symposia
- Organisation of CIGRE Regional Meetings
- CIGRE and Internet (Objectives, Principles and Organisation)

1. CIGRE Organisation and Aims

CIGRE (The International Conference on Large High Voltage Electric Systems) is a non-governmental and non profit-making International Association. Its aims are to:

- Facilitate and develop the exchange of engineering knowledge and information, between engineering personnel and technical specialists in all countries as regards generation and high voltage transmission of electricity.
- Add value to the knowledge and information exchanged by synthesizing state-of-the-art and world practices.
- Make managers, decision-makers and regulators aware of the synthesis of CIGRE's work, in the area of electric power

More specifically, issues related to the planning and operation of power systems, as well as the design, construction, maintenance and disposal of equipment and plants are at the core of CIGRE's Mission.

2. CIGRE Scope

CIGRE activities are particularly concerned with:

- the electrical aspects of electricity generation;
- the construction and operation of substations and transformer stations and their associated equipment;
- the construction, insulation, and operation of high voltage electrical lines;
- the interconnection of systems and the operation and protection of interconnected systems.

3. Cigré Organisation

CIGRE has about 4000 individual members and about 700 collective members¹ world-wide, in over 80 countries and it is well represented by National Committees in more than 50 countries. The operations of CIGRE are administered by the Administrative Council (50 members) elected by the General Assembly. The chairman of the Administrative Council is the President of CIGRE.

The Administrative Council appoints an Executive Committee (15 members) consisting of the President, the Treasurer, the Secretary General, the Chairman of the Technical Committee, and other elected members.

The Central Office (CO), located in Paris and headed by the Secretary General, is in charge of the day-to-day administrative matters and the liaisons with National Committees, with CIGRE governing bodies, international organisations and the media. (The CO staff members and their tasks are presented in the CIGRE web site.)

The technical work is performed through 16 Study Committees:

- SC A1 Rotating Electrical Machines
- SC A2 Transformers
- SC A3 High Voltage Equipment
- SC B1 Insulated Cables
- SC B2 Overhead Lines
- SC B3 Substations
- SC B4 HVDC & Power Electronics
- **SC B5 Protection & Automation**
- SC C1 System Development & Economics
- SC C2 System Operation & Control
- SC C3 System Environmental Performance
- SC C4 System Technical Performance
- SC C5 Electricity Markets & Regulation
- SC C6 Distribution Systems & Dispersed Generation
- SC D1 Materials & Emerging Technologies
- SC D2 Information Systems & Telecommunication

The study committees are co-ordinated and supervised by the Technical Committee, which is also responsible for the technical direction and work of the Association according to a set up and regularly renewed strategic plan.

4. Events

The main event is the biennial CIGRE Conference in Paris. In between, additional Symposia and Colloquia on specialised topics are organised in different countries. Also Regional Meetings take place.

CIGRE Plenary Sessions in Paris

In even-numbered years (2002, 2004,..), CIGRE holds a Plenary Session (CIGRE Conference) in Paris. About 2500 delegates attend this one-week conference in the Palais des Congrès. Participation is open and there is a registration fee. Several sessions (3 to 4) run in parallel in larger conference rooms. The themes dealt with during this event cover the overall technical scope of the Association.

¹ Collective members are administrative bodies, scientific or technical organisations, research institutes and private or public companies.

SC members and observers should attend the following sessions and meetings:

Study Committee Group session (open discussion meetings)

The study committees each hold a Group Session with open discussion of selected preferential subjects. These preferential discussion subjects are selected by the Study Committee and they are distributed in advance to the National Committees with the call for papers. The discussion follows the questions selected by an appointed Special Reporter, based on the submitted papers. The papers and special reports are published by CIGRE. Discussion summaries are written by the Special Reporters and later published conference “proceedings”.

The session time schedule of the conference is planned by the CIGRE Executive Committee. In general, a one day session is assigned to each Study Committee. Also Joint Sessions of two or three Study Committees may be organised for more comprehensive themes. In addition, workshops and panel discussions on particular themes take place.

The attendance of Group Sessions is voluntary and the delegates can choose which of the parallel running sessions they want to visit.

It is however recommended that the members and observers contribute to the Group Session of their own Study Committee, through papers and discussion statements. (see Guide for Speakers at CIGRE sessions).

Study Committee meeting (closed meeting, for SC Members and Observers only)

It is held once a year.

In this meeting, the organisation and working schedule of the study committee are discussed and agreed (membership issues, state of working groups, publications, external co-operations, new work items, preparation of sessions and colloquia, etc.) The attendance at this meeting is restricted to Members and Observer members of the Study Committee and to the Working Group Convenors. Other experts can additionally be invited by the Chairman.

Decisions are sought in a democratic way. Only the 24 Study Committee Members are entitled to vote.

Working Group meetings

Working groups normally take the opportunity to meet before, during or after the CIGRE conference.

Members and Observers may join WG meetings. (The WG convenors should however be contacted in advance.)

Colloquia

In odd-numbered years (2001, 2003, ...) the Study Committees meet independently in different countries at the invitation of National Committees.

Besides the one day SC Meeting, a colloquium is normally organised at the same time. This colloquium follows basically the same rules as the Group Sessions in Paris, but it generally lasts for two days and is less formal (see “Rules for Study Committees”, Rule 14). Also, Working Group meetings can be held before or after the colloquium, as appropriate.

A Colloquium is organised by a Local Committee in co-operation with the SC B5 Chairman and Secretary. This committee may also arrange local sponsorship to cover the cost of hosting the Colloquium. Participation is based on member countries sending a number of experts in addition to SC members, observers and WG

members. The number of participating experts is officially limited to three per country (except the host country).

However, the permitted number of participants depends on the final decision of the NC of the host country (typically a number of countries send less than 3 participants, so that there is an additional margin for other countries who may wish to send more). Colloquium papers are not published and cannot, therefore, be purchased. It was agreed at the 2001 SC B5 meeting that abstracts of Colloquium papers should be posted on the SC B5 web-site, together with the e-mail addresses of authors and the Local Organising Committee, for the benefit of any non-participants who would like to obtain a copy of a paper.

Symposia

In the odd years, one or two conferences may also be organised by CIGRE as common events of several study committees. Such conferences follow similar formal procedures as the CIGRE Conference in Paris. They are called symposia (see CIGRE document "Organisation of CIGRE Symposia") and they are arranged through the CIGRE Central Office. There is a registration fee for participation and symposium papers are published.

5. Rules for Study Committees

The "Rules for Study Committees" are available as an official CIGRE document and can be downloaded from the CIGRE Internet homepage www.cigre.org.

In the following, the key points applying to members and observers are summarised:

- Rule 5.2: Basic conditions for membership
 - sufficient knowledge in the English language (speaking and writing)
 - sufficient experience within the scope of the Study Committee
 - experience of international team work
 - a proven ability and experience to present country or personal opinions concerning subjects related to the scope of work of the Study Committee
 - support of the candidate's Company.

- Rule 5.2 and 5.3: Appointment and terms of office of Regular Members and Observers:

The appointment of SC Members and Observers by the Executive Committee is based on proposals from the National Committees and the recommendation of the SC Chairmen in agreement with the TC Chairman and the Secretary General. The term of office of regular and observer members is six years. In case of exceptionally active members one two-year extension may be granted. Regular and observer members must be individual members of CIGRE.

- Rule 4.1, 4.2 & 7: Appointment and terms of office of the SC Chairman and Secretary

The SC Chairman is elected by the Administrative Council upon proposal of the Executive Committee.
His term of office is four years with an exceptional extension to 6 years.

The SC Secretary is chosen by the SC Chairman. There is no limitation for his term of office.

- Rule 5.4: SC meeting attendance
Regular members should attend every SC meeting
If a member misses two consecutive meetings the chairman will consider recommending that his term of office be curtailed.

- Rule 5.5: Active participation in the Study Committee work
Every member shall contribute actively to the work of his Study Committee mainly by means of:
 - Participating in the regular Study Committee meetings as defined in Rule 5.4. and actively contributing to the discussions
 - Conveying the views, concerns and needs of the National Committee from which they have been appointed and presenting proposals for new work based on this.
 - Communicating the activities, outcomes of studies, availability of technical papers throughout their National Committee.
 - Evaluating and commenting upon the draft documents which are circulated among Study Committee members and ensuring in his National Committee efficient processing of questionnaires issued by the working bodies of the Study Committee .
 - Joining at least one Working Body of the Study Committee and seeking technical specialists from his National Committee to recommend as members of Working Bodies.
 - Actively assisting in the preparation and conducting of Symposia ,Colloquia organised by the Study Committee and Regional Meetings.
 - Considering at a National/Regional level what subjects are most appropriate for adoption as Preferential Subjects at biennial Sessions in Paris.
 - Actively participating in the discussion at the biennial CIGRE Group Sessions in Paris and write, or encourage others to write papers for these Sessions.
 - Representing, whenever requested, the Study Committee at international level.

- Rule 6: Observer Members (Observers for short)
The Observer status implies the following:
 - Taking part in the work of the Committee, either in the context of Working Group activities, or by responding to queries or enquiries launched by the Committee. The Observer Member's answer should reflect the view of the experts in the National Committee he is representing.
 - No right of vote.
 - The Observer Member receives information on the work of the Committee in the same way as any regular member.

6. ELECTRA, the CIGRE Journal

The ELECTRA Journal is issued every two months.

It is only distributed to CIGRE members.

As Study Committee members must be individual members of CIGRE, they will get their personal copy.

Individual copies of the journal may be purchased from the Central Office.

ELECTRA contains general information about CIGRE as well as previews to upcoming events. It also reports on past conferences. Progress reports of the Study Committees are also published.

A great part of the journal is dedicated to technical reports (e.g. Final Reports of Working Groups).

7. CIGRE in the Internet

The URL of the CIGRE homepage is www.cigre.org

The following documents can be viewed and downloaded:

- Information about CIGRE
- Preview to CIGRE events
- Conference papers
- Available Brochures
- Official CIGRE documents.

A number of Study Committees and National Committees already have their own Web Sites which can be reached via links from the CIGRE home page.

SC B5 was the first Study Committee to offer a Web Site. It can be directly reached under the domain URL www.cigre-b5.org

SC B5 members are advised to regularly visit the site. It contains valuable information about the organisation and the activities of the SC, including a comprehensive list of e-mail addresses.

8. Organisation and Working practice of SC B5

Study committee SC B5 is sub-structured in Advisory Groups (AGs) and Working Groups (WGs) as shown in figure 1.

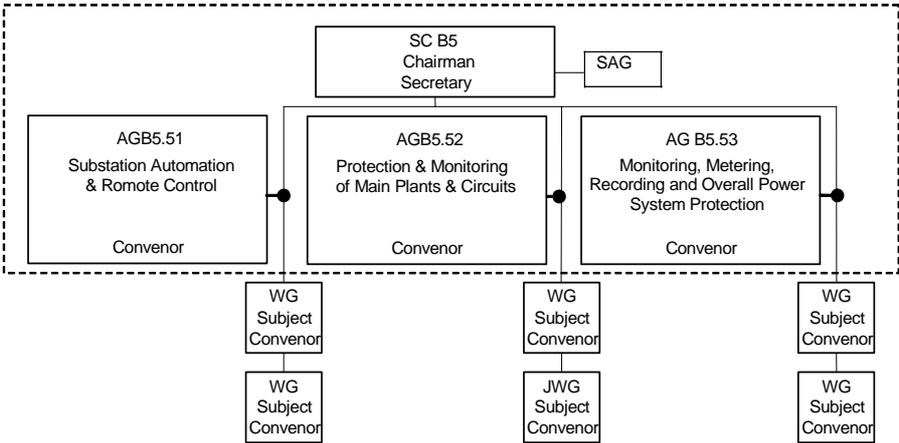


Figure 1: Organisation of SC B5

Advisory Groups

The duties of the Advisory Groups, in co-operation with the Chairman, are:

- to assess the need for further work in the assigned area,
- to suggest formation of working groups and after ratification by the SC, to issue terms of reference, to fix the time schedule and to supervise the work process,
- to issue a biennial state-of-the-art report,
- to upgrade the strategic plan every three years.

Each Advisory Group is composed of the convenor and six regular members; observer members are also “distributed” in the different AGs..

Each Advisory group is responsible for an assigned field of activity (technical direction):

AG51: Substation Automation and Remote Control

Comprises all aspects of co-ordinated and integrated systems for protection and control of substations including the associated communication within the substation and SCADA.

AG52: Protection and Monitoring of Main Plant and Circuits

Covers relaying and monitoring of all power system components necessary for generation, transformation and transmission of electric energy. Included are measuring transformers and sensors from the point of view of accuracy, dynamic range, transient response and interface requirements.

AG53: Monitoring, Metering, Recording and Overall Power System Protection

Refers to all aspects of system wide protection policies, strategies and co-ordination questions, together with system monitoring and energy metering. The scope also includes methods and equipment for detection of abnormal operating conditions and protection against system instability and wide-area disturbances.

The Advisory Groups should co-operate via phone and Internet and only meet before the Study Committee meetings to discuss proposals for new working groups, and preferential subjects for discussion in the Paris Group sessions or at Colloquia. The proposals of all AGs are then presented in the SC meeting. Final selection is based on voting.

Strategic Advisory Group

The Strategic Advisory Group (SAG) consists of Chairman, Secretary and Advisory Group Convenors. It's purpose is to widen the input into strategic decision making for the SC.

Working Groups

Working groups are proposed by the Advisory Groups and they are finally selected in the Study Committee meeting by voting. The interested countries are recorded by. They must later nominate their experts for participation as Convenor, Regular Member, or Corresponding Member.

The AG has to complete the standardised WG/TF proposal sheet (task, time schedule, name of convenor) for the official approval of the WG by the Technical Committee (after final approval of the Chairman).

A working group is only started if the convenor and sufficient regular members (4 to 5) are available.

The working groups shall mainly communicate via Internet. About two meetings per year are reasonable for an effective work progress.

There are no formal rules for the WG working procedure.

The work shall be organised by the convenor in accordance with the WG members. The workload should be equally distributed between the WG members, as far as possible.

The WG must decide if a questionnaire shall be issued to the National Committees (for collection of information about the current practice or trends).

The convenor reports once a year at the SC B5 meeting about the state of the WG work.

The work should be completed within a time frame of not more than 3 years.

Normally the WG submits a final report to be published as a brochure by the CIGRE Central Office in Paris. Additionally, a summary article shall be provided for publication in ELECTRA.

Interim reports may also be produced as a basis for the discussion in SC Group meetings.

For detailed information, the “Guidelines for WGs should be referred to.

Joint Working Groups

Joint groups may be installed by co-operation of several study committees on wider subjects concerning the scope of more than one SC.

SC B5 Study Committee meeting

The SC B5 meeting is held once a year, either in Paris, during the CIGRE conference (even-number years), or in other countries (odd-number years) in combination with a colloquium, on the invitation of a National Committee.

The meeting lasts one day. Regular members and Convenors of WGs must attend.

Observers should attend but they are not obliged to.

Only regular members have the right to vote.

The meeting agenda normally covers the following points:

- Current SC B5 membership
- Introduction of new members
- Review of the action list (actions agreed on in the last meeting)
- Approval of the minutes of the last meeting
- Report on the Technical Committee meeting
- SC B5 Strategic and Action Plan
- Report of the 4 Advisory Groups
- Future SC B5 activities
- Next Group Session in Paris (preferential subjects for discussion)
- Next Colloquium (organisation, preferential subjects for discussion)
- Suggestions for and selection of new working groups

- WG progress reports (by convenors)
- Liaison with other organisations (IEC, IEEE, ... by liaison officers)
- Information on Regional Meetings (by members of the region)
- News-items, incidents, projects of common interest (by all members)
- Communications (Publications in ELECTRA, Contents of the SC B5 Web-Site)

The members should be prepared to comment on the various subjects (to portray the views their Country or National Committee). They should also seek experts in their country who are prepared and supported to serve as WG members or authors of papers.

The SC members should also be prepared to function as Special Reporters in Group meetings or as convenors of working groups. Alternatively they can offer suitable experts of their country.

SC B5 Group Session

Group Session at the CIGRE conference in Paris

The group sessions in Paris are scheduled for one full day.

Normally two or three preferential subjects are proposed for discussion.

The preferential subjects are distributed about one year before the CIGRE conference to the National Committees with the call for papers.

The session papers are divided in four categories:

- National Committee allotment
- International papers
- Additional allotment
- Study committee papers

Paper proposals shall be submitted to the National Committees. Only authors in countries without a National Committee can directly submit their papers to the Central Office in Paris.

Each country has only a limited number of papers in its NC allotment, depending on its number of members . The acceptance of these papers rests completely with the NC.

International papers must have authors of different countries.

The additional allotment is composed of NC proposals in addition to their allotment and of papers from countries without National Committees.

Study committee papers are normally submitted by working groups.

From the proposals suitable papers are additionally selected by the Technical Committee, based on a proposal of the SC Chairman.

For each preferential subject a Special Reporter is appointed by the Study Committee. He/She writes a summary of the accepted papers (Special Report) and formulates a number of questions as guidance for the session discussion.

The special report is sent to the registered conference delegates in advance.

Written contributions to the discussion can be sent to the CIGRE Central Office or to the SC Secretary no later than one week in advance of the conference and they shall be discussed with the SC Chairman, Secretary and Special Reporter in a briefing room one day before the session. (see Guide for Speakers)

Each speaker is allotted some agreed time for his/her contribution, depending on the number of contributions (generally 2-5 minutes).

Some time is also reserved for spontaneous contributions from the floor.

The session is normally structured as follows:

- Introduction by the chairman including a short Progress Report of the Study Committee
- Special Report of the 1st preferential subject
- Discussion of the first preferential subject
- Summary report of the Special Reporter
- Lunch break
- Special Report of the 2nd preferential subject
- Discussion of the 2nd preferential subject
- Summary report of the Special Reporter
- Final discussion
- Session closure by the chairman

Study Committee members and observers should diligently contribute to the discussion based on the practices and experiences in the country they represent. It is also the task of SC members to stimulate authors in their countries to write papers and to contribute to session discussions.

SC B5 Group Sessions at colloquia

Similar rules to the Paris sessions apply for the organisation of the Colloquium sessions. The procedure is however less formal. SC B5 has also decided to introduce poster presentation facilities for papers at Colloquia and authors are encouraged to present their paper to interested groups or individuals in this manner

SC B5 Members and Observers seek authors for papers and collect the paper proposals in their Countries. The selection of the papers is conducted by the SC B5 chairman in accordance with the Organising Committee in the host country. In general, three preferential subjects are chosen for the two or two-and-a-half days discussion.

9. SC B5 Strategic and Action Plan

According to Item 9 of the CIGRE “Rules for Study Committees”, SC B5 maintains a strategic and action plan.

The strategic plan is set up by the SC B5 Chairman with the assistance of the SC B5 Secretary and the AG convenors (SAG Strategic Advisory Group). It is renewed every 3 years and looks 10 years ahead.

The action plan is derived from the strategic plan and contains the current and future SC B5 activities agreed on in the SC B5 meetings. It is also renewed every 3 years and covers a time span of 3 years.

Both plans can be downloaded from the SC B5 Web-Site (action plan only in the restricted part for B5 members).