CIGRE MasterPlan

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PART I

WORK ENVIRONMENT

1.1 - THE PLACE OF INTERNATIONAL ELECTRICITY ORGANISATIONS IN A FAST CHANGING INDUSTRIAL AND INSTITUTIONAL CONTEXT WORLDWIDE

Whether under the effect of institutional constraints (European Union with the Directive on liberalisation of the internal electricity market, United States with the Energy Policy Act...) or affected by the trend towards a market economy, the electricity sector is undergoing profound changes :

- With developing competition on a national and international level Companies are growing more attentive to certain aspects of industrial property and technological heritage. Confidentiality regarding information is becoming automatic and circulation of technical, statistical or financial data is deliberately controlled and limited.
- Pressure on costs which results from competition, a concern to reduce staff, the essential need for gains in productivity, all lead companies to cutting their financial contribution to the work of scientific organisations, more especially by reducing the participation of high level experts in joint activities.
- Internationalisation of Companies is already in place and can only continue to spread. We note the setting up of bilateral, and sometimes even multilateral joint projects giving all partners the opportunity to discover the electricity scenario on a world-scale. Following this trend, International Organisations will gradually lose the exclusive character they have acquired and maintained over decades in this area.

These issues inevitably give rise to a number of questions regarding scientific organisations :

- How useful are these organisations for electrical engineers – system or equipment manufacturers and utilities ?
- Should the organisations define (or redefine) their field of activity in order to avoid redundancy and the resulting waste of money ?
- Should a priority area be identified where the exchange of ideas is of utmost importance and can really be of added value for equipment manufacturers and utilities ?
- How can CIGRE ensure that it is relevant to the new players in the electricity market, especially the new owners and decision-makers whose primary concerns may relate more to profitability and return on investment, than to engineering considerations ?

The International Conference on Large High Voltage Electric Systems is not safe from the new threats mentioned above. Despite the many assets of the Association : a relatively well identified technical area avoiding scatter, its unique character as a permanent forum for equipment manufacturers and utilities, a membership counting over 833 companies and 3760 high level experts from 80 different countries, a vast and constantly increasing technical heritage made available to all, revisiting the situation may be necessary to maintain and possibly strengthen the position of CIGRE as the primary international technical Association in the area of HV and EHV power systems.

1.2 - GENERAL PLAN OF THE STUDY

This document contains ideas which could serve as a basis for CIGRE's MASTERPLAN over the period 1999-2009.

Taking as a starting point CIGRE's MISSION, as it is formulated in the Statutes, we may wonder if this MISSION is being fulfilled today. An analysis of the strong points and especially of the weaknesses of the Association should lead us to identify the areas where changes or innovations are required. This approach should allow us to define a VISION for CIGRE for the next ten years.

Means of achieving this VISION in the medium term, in all non technical areas: setting up of a clear policy for internal and external communication, developing ties with the Universities, strengthening the role of National Committees, providing more active participation of developing countries and newly developed countries, examining the mode of selection of experts for Study Committees... to quote but a few will form the backbone of the MASTERPLAN.

Mission, Vision and Strategy are the three cornerstones of the MASTERPLAN.

PART II

CIGRE TODAY

2.1 - CIGRE'S MISSION

The objects of the International Conference on Large High Voltage Electric Systems (CIGRE) as given under Article 2: "OBJECTS" of the Statutes are to facilitate and promote the interchange of technical knowledge and information between all countries in the general field of electricity generation and transmission at high voltages. Its 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.

2.2 - METHODS

CIGRE achieves its objects by all appropriate methods, notably as follows:

a) every two years it organises conferences known as 'Sessions';

b) in the years without a Session it organises 'Symposia';

c) it organises Regional Meetings;

d) it facilitates international investigations by the Study Committees continuously between the Sessions

e) it creates and maintains cooperation between associations, administrations, engineers, academics, researchers and manufacturers in all countries, experienced in matters related to high and extremely high voltages;

f) it collaborates with other international organisations with related interests;

g) it encourages international investigations and research;

h) it publishes the proceedings of the Sessions and Symposia, a periodical bilingual journal titled 'Electra' and other documents, papers and reports concerned with its own activities and especially with the work of the Study Committees; A data base (4000 titles) is accessible to all members;

i) it publishes a Membership Directory - both a link and a powerful tool for contacts between members.

2.3 - WEAK POINTS AND STRONG POINTS

2.3.1 Preliminary remarks

We must consider if there are any alarm signals indicating that urgent and drastic measures are required to avoid collapse of the organisation , or even in the longer term, its disappearance...

Among the most immediate indicative factors to be readily analysed are:

- Evolution in the Association's membership (Appendix 1). Figures since 1980 both for collective (Companies and Educational Bodies) and individual members show a gradual rise with peaks at the end of the eighties, and again a sharp rise in 1994 and 1996. 1998 is showing a record figure for equivalent members.
- Evolution in the number of National Committees. These Committees are showing a constant rise. With three National Committees officially recognized by the Administrative Council in 1996, one in 1997 (Libya) and one in 1998 (Ivory Coast) CIGRE counted 52 National Committees in 1998.
- Evolution in the number of countries counting CIGRE members. Also showing a regular rise, 80 countries today count members of CIGRE.
- Participation at CIGRE General Sessions (Appendix 2).

  Despite the fact that more countries are represented (78 in 1998), the number of Delegates has been decreasing since 1990 and this is no doubt a source of concern; an accurate assessment of this data requires a closer study of participation by each country.

  First of all, we note that the number of participants from industrialised countries is still declining. On the other hand, participation from countries of Central and Eastern Europe is increasing, as is that from a number of newly developed and developing countries .

  This point will be developed further with comments suggesting ways to give a new thrust and/or enhance this scientific and technical event.

Without drawing any hasty conclusions and before any close examination of these figures, we can safely say that there is no general erosion of the interest felt for CIGRE among experts in large electric systems. Nor is membership static. It is rising regularly. There were 124 new individual members in 1998, which number more than makes up for the number of members who ended their membership the same year. We note, however, an obvious shift in interest, from industrialised to newly developed and developing countries. This important issue is discussed further below.

2.3.2. Weaknesses

We may identify, by order of decreasing importance, and through a somewhat subjective and arbitrary analysis, points which appear rather weak:

1) The field of action not sufficiently clear today, namely at natural borderlines: generation and distribution.

If technical issues related to HV and EHV are the very nucleus of CIGRE studies, the development of electrical systems (See introduction) implies the examination of institutional and structural aspects, economic and social problems, pertaining to both System (e.g. distributed generation) and Components (e.g. overhead lines and the environment).

These subjects have been evoked as CIGRE is legitimately entitled to consider such issues as part of its area of interest.

2) CIGRE's work, though excellent, is not sufficiently utilised by standardisation organisations, such as IEC, for the apparent lack of well structured cooperation agreements and monitored follow-up procedures. The same criticism applies to relationships with UNIPEDE and the IEEE whose area of concern is somewhat similar to CIGRE's, and with CIRED although in this case the area of concern is slightly different,

3) Because of its long-standing technical tradition, CIGRE does not seem to have an established strategy in the recruitment of members outside the base of experts who take part in its work. There is need to open up CIGRE membership to company management, and decision-makers ; confinement of CIGRE activity to the traditional technical field could lead to sclerosis and in the longer term to declining interest from managers of electric systems at the highest level.

4) On account of the nature of the subjects tackled today by CIGRE and despite a will to extend its area of concern to a number of non technical issues, CIGRE does not appear to be sufficiently outgoing when engaging in strategic studies. Consequently managers of companies and large group managers are sceptical as to CIGRE's efficiency and ability to analyse problems and present solutions.

As a result, in OECD countries where the electricity sector is being fully reorganised, and with the present productivity concerns, there is a tendency to reduce the participation of experts in CIGRE events and to reduce contribution to the work of Study Committees and Working Groups, work which is effected on a voluntary basis. This latter situation could have the most serious consequences.

5) CIGRE has no clearly stated policy in the way of recruiting young engineers. No special rate is allowed to attend technical meetings and no special "Junior Member" status exists. The lack of such enticement is no doubt prejudicial to maintaining and increasing membership in the long term.

6) CIGRE is not sufficiently attentive to the needs of the universities, although in most countries these are the places where future electrical and electrotechnical engineers are trained. Ties with universities today are not strong and there is a risk of waning interest in CIGRE by these theoreticians.

7) CIGRE is not sufficiently involved in the field of "Innovative Technologies", that is in technologies which might require two or three decades before materialisation, but which could have a profound influence on future power systems. The technical community worldwide should be aware that CIGRE continually assesses the state of the art in these areas and their possible effect on the future of the electricity supply industry.

8) CIGRE on account of its technical speciality appears to stand apart from the world of electrotechnology and International Associations in the field. Like a private club it does not strive to be better known, confident of its membership renewal by co-option and of its permanent existence. A short-sighted view by many company heads may cause them to turn to the World Energy Council or to EURELECTRIC which they may consider to be of more renown and of higher strategic interest for them.

9) Governing Bodies and even Study Committees of CIGRE are not as international as they could be in that the choices and general orientations (technical, administrative and strategic) of the Association reflect the views of OECD countries representatives (who also make the greatest financial contribution to CIGRE). The risk in the long term is the emergence of parallel and competing organisations who may be more attuned to the problems of developing or newly developed countries, countries who could posssibly rely on the participation of some OECD countries to represent their interests in CIGRE.

We must be aware of the fact that CIGRE should endeavour to meet the expectations of countries where consumption is growing at a much faster rate than can ever be expected again in North America or Europe. Our approach must take this factor into consideration.

2.3.3 Strengths

1) CIGRE's highly structured organisation brings together the best world experts, from wide-ranging technical and geographical backgrounds. These experts who, together, within Study Committees and Working Groups, contribute voluntary work on problems related to HV and EHV systems and arrive at solutions available to all, no doubt constitute CIGRE's strongest asset.

This advantage could be particularly useful in newly developed or developing countries looking for solid technical background and experience from more technically advanced countries. It would also be of considerable use to them to be able to share experiences when refurbishing or extending their power systems or interconnections; developed countries in their long-term planning will also need to share experiences in order to achieve the most efficient and economical strategy and technology.

2) CIGRE's technical meetings aim to circulate knowledge and information at an international, regional or national level (Plenary Sessions, Symposia, Regional Meetings, Colloquia, joint meetings with other organisations) and are of a unique character. They feature continuity of action and good adaptation of subjects to current general issues (interconnections, DC...) and to specific problems encountered in the field (planning in developing countries, Mediterranean interconnection...).

3) The quality of technical papers presented in Electra, in technical brochures and of course reports drawn up for CIGRE technical meetings (See Par. 2) makes CIGRE one of the top reference Associations in the area of HV and EHV. CIGRE's data Base, with over 4000 references and 7500 authors with new additions every year is a real thesaurus accessible to all.

4) The Technical Strategic Plan covering the period 1999-2009, which has been drawn up democratically by Study Committee members, warrants CIGRE's remarkable adaptation ability to act as a unique and essential Users' Club which cannot be replaced in the current environment. This Plan allows members to follow, adapting to and handle change in real time following the identification of new problems and the implementation of solutions that result from technical evolution as well as from new needs that will emerge following major structural changes in electricity systems.

5) Cigreans over the world form a close-knit international community as a result of a relatively small membership (833 collective members and 3760 individual members in 80 different countries).The CIGRE "network" responds very quickly to members' requests. Personal contacts play an important role in the formulation and solving of problems by avoiding an excessively formal procedure. Moreover, contacts are facilitated by continuity of actions undertaken and by the relative stability of the "body of technical experts" within Study Committees.

6) CIGRE's status as a non-governmental and non-profit making Association makes it a relatively non costly organisation to join - considering the quality and range of services provided - when compared to other similar organisations. The same advantages can be claimed for participation in technical events.

7) Another major asset for CIGRE's development is the existence of National Committees in 52 countries. These have a simple and efficient relay action between the Central Office and present and potential members. Hosting of Symposia and organising Regional Meetings (to which the Central Office can contribute its support) constitute a powerful tool for National Committees to circulate technical information and make the Association and its cooperative spirit better known locally.

8) Electra, the journal of the Association is an essential link between members. 6000 copies are printed. Its high quality papers give the results of Study Committee work and constitute the basis of CIGRE's technical heritage. Opening columns to invited papers on issues other than the purely technical should be an additional asset. In playing its role as a link with members it must also include general information on the life of the Association. The advertising rates of the journal are among the lowest on the market.

PART III

MASTERPLAN

3.1 - INTRODUCTION

The above diagnosis on the strengths and weaknesses of CIGRE, though imperfect and at times somewhat subjective, still allows us to prepare a MASTERPLAN to cover the period 1999-2009.

The ideas developed will attempt to show how CIGRE membership can be developed by capitalising on CIGRE's strengths. Anyone closely involved with the HV, EHV and UHV systems scene who is not a CIGRE member today, either because he is uninformed on our services, or in doubt as to the Organisation's ability to solve his problems, must become convinced that CIGRE is the world reference Organisation which can best bring solutions or at least clarify a number of points which will allow him to make the right decisions.

3.2 - MISSION, VISION AND STRATEGY

3.2.1 General

CIGRE's MASTERPLAN should, for the period 1999-2009, meet the following basic requirements:

1) Meet the expectations of high voltage system managers and operators and in doing so, be in a position to enable equipment manufacturers to produce equipment, techniques, systems which will allow developing countries, fast growing electric power consumption countries, large present and future interconnected systems, to develop under the best possible technical conditions regarding efficiency and reliability, yet at the lowest possible cost for the consumer.

2) Express a strong will to be the international reference organisation on all issues related to electrical systems, including the impact of non-technical issues, to appeal to decision-makers at the highest level with electricity companies, equipment manufacturers, regulation and control departments in the new structures now emerging throughout the World.

3) Extend CIGRE's field of action to adjoining technical areas (distribution, primary energy issues...) or to specific fields (financing investments, costs, price of electricity, tariffs...)

4) Take steps to strengthen the representation of fast developing regions on CIGRE groups such as the Executive Committee, the Administrative Council, and the Study Committees.

Achieving the above, even if only partially, will allow de facto:

1. Redefinition (or confirmation) of CIGRE's MISSION which is the basic objective of the Association.

2. Defining a VISION, that is the position which the Association should have reached by the end of the period considered. This is the target on which all efforts must focus, be it

expressed in terms of membership (e.g. 10 000 members in 2009), of National Committees, of countries represented...

3. Preparing an overall STRATEGY, with implementation of action programmes and work methods, to the end of achieving the Association's objectives in the framework of its general MISSION and with a VISION of its structure in the long term.

3.2.2 CIGRE's Mission

If CIGRE's MISSION will always be the development of knowledge and exchange of information, its object - that is mainly its field of activity - must be redefined.

Beyond the restricted area of "systems", a notion which today is rather outdated, CIGRE should look at the "ELECTRICAL SYSTEM" as a whole, that is all interconnected components whose role is the conversion of primary energy sources into electricity, transmission and distribution of electricity.

Upstream, questions and problems related to primary energy sources are obviously within the scope of the WORLD ENERGY COUNCIL (WEC). Should the extension of CIGRE's field - though desirable - imply overlaps with the WEC, then it would not be judicious to tackle such issues directly.

Downstream, questions related to medium and low voltages are handled by the INTERNATIONAL CONGRESS ON ELECTRIC DISTRIBUTION SYSTEM (CIRED). However, it is undeniable that decentralised generation, with such strong impact on electricity system planning and operation, is an example of a subject which is quite within CIGRE's field of concern.

The MISSION for CIGRE can thus be formulated as follows:

CIGRE aims to :

- ***Facilitate and develop the exchange of engineering knowledge and information, between engineering personnel and technical specialists***
- ***Add value to the knowledge and information exchanged by synthesizing state-of-the art and world practices***
- ***Make managers, decision-makers, regulators and Academia aware of the synthesis of CIGRE's work, in the area of electric power.***

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

It should be noted here that the term "electrical system" can cover many different subjects and other themes well within the area of action quoted above which could be handled by CIGRE:

- Prospective studies (INDUSTRIAL, STRATEGIC, PROSPECTIVE) which anticipate a technological "revolution", new technical risks, the emergence of a single equipment supplier, dwindling research investment... around 2010-2020.

- Studies related to the institutional evolution of electric systems (although these subjects have already been touched upon in Study Committees 37, 38 and 39).

- Studies related to transmission pricing and interconnector trading.

- Studies related to problems of public opinion in connection with the development of systems (beyond aspects tied to environment), focusing on the issue of vulnerability of importing countries (technical and political risks)...

The above suggestions aiming to help principally managers of electricity companies should of course be first carefully examined by the Executive Committee together with the Technical Committee.

3.2.3 CIGRE's Vision

If CIGRE's Mission is to be in a position to answer the questions of managers at all levels and in all areas of electric systems, CIGRE's VISION could then be:

CIGRE shall be recognised as the leading worldwide Organisation on Electric Power Systems, covering their technical, economic, environmental aspects and taking account of the impact of organisational and regulatory aspects.

The Organisation must be present in all countries with HV systems; in concrete terms the target could be set at 10 000 members in the year 2009.

3.2.4. – CIGRE's Objectives and Strategy

Three major objectives are defined, all concurring to widening CIGRE's audience, as detailed below.

1 - Increase CIGRE's influence throughout the world

The aim is to increase CIGRE's influence and the dissemination of relevant information. CIGRE has not yet capitalized on its character of worldwide Organisation. 70% of its members in 1998 are from OECD countries. But growth per se is not a goal. Growing will mean bringing in new experts to feed the SC expertise. Growth will benefit new countries in helping them find the answers to their problems. In this process new ideas and solutions will emerge, hence widening technical competence and knowledge. All participants in the power system should be involved and opening into new fields will allow drawing new people.

Another reason for emphasis on effort to recruit new members is to compensate for outgoing members. New generations must be groomed to take over.

- ***Growth of the Organisation*** *:* National Committees are undoubtedly instrumental in ensuring the growth in membership. Their undertaking is to make potential and new members aware of the value of CIGRE membership. Among new members must be generating companies, transmission system operators (TSO), regulators....
- ***Rejuvenation of membership*** *:* Present membership consists of people who are knowledgeable and well established. There are few young people. CIGRE therefore has to cater for a continual development of members, starting with students. One may point out that regrettably, in the present context there are few engineering specialists as engineers turn to business.
- ***Decentralised activities*** *:* The aim is to reach a larger audience on a world-wide basis and allow specific issues to be discussed in areas where they are of central importance.
- ***Improve communication with decision-makers*** *:* The difference from the past when decision-makers were within CIGRE is noted. Today decision-makers are different people. Decision-makers to be reached are not only the traditional utilities and manufacturing companies but also the new owners and other new players in the electricity market. It is essential that they see the value in CIGRE as they release the

financial support for experts to work in CIGRE. Work carried out for CIGRE being voluntary, CIGRE's experts need to have the approval of the Company Heads for the expenses incurred. Consequently CIGRE must be able to demonstrate to decision-makers the value of being a member. Means for effective communication with decision-makers must be added as a matter of urgency.

- ***Improve communication with non members and among members and experts :*** This objective is a corollary of the wish to increase our audience and contributes to making new members aware of the value of membership. Improved communication among members and improved exchange of information between the different parts of our technical structure (system competence) will mean reducing time and cost for the experts participating in the work. An active communication is a key factor, and particularly the use of modern communication tools, concerning all Bodies of CIGRE (Governing Bodies, Central Office, National Committees, Study Committees). This should also allow to easily access the data produced by the various CIGRE bodies, while saving paper work and mailing. Another communication item is the CIGRE Membership Directory identifying the CIGRE community.
- ***Change of name to "International Council on Large Electric Systems" :*** The aim of this change is to reflect the true image of CIGRE which is far more than a conference. Response from CIGRE's community to this proposal has been unanimously positive.

2 - Continuously develop the organisation to match the mission and ambition of CIGRE

- ***Review the engineering coverage of CIGRE :*** the engineering approach and vision of CIGRE cover not only the technical expertise but also includes the economic and environmental aspects, and take the impact of organisational and regulatory aspects into account. This coverage allows to respond to changes in the structures of the energy market, as well as to provide responsive and focused information regarding emerging issues (e.g. issues of growing importance such as impact of organisation of power systems, impact of development of dispersed generation, independent generation, or integration of oil and gas into the electricity sector, etc.)
- ***Support a more decentralised/regionalised approach :*** The purpose is to reach members who want to contribute to CIGRE, but work on a local basis.
- ***Increase the flexibility of CIGRE's structure :*** There is need to promote communication between Study Committees and enable a holistic view to be developed within the Technical Committee; a "project management and customer approach" is to be promoted for the engineering studies, including definition of the lifetime of working groups to ensure better efficiency and control of work schedule.
- ***Review the structure of the Governing Bodies*** *to ensure that all CIGRE's members/customers are adequately represented.* This move is in relation to the Officers of CIGRE and the representation of countries and regions in the Governing Bodies.

3 - Strengthen the links with other international organisations of the electric power sector

Ways of strengthening ties could be through merging or collaboration, provided such mergers or collaboration allows CIGRE's influence to spread. The strategy for mergers or joint activities must be defined on the basis of reciprocal exchange.

- ***Exploiting synergies between CIGRE and other Organisations*** : the aim is to identify areas where both Organisations are interested to either share the work in a specific

area or concentrate it to one Organisation, so as to avoid unnecessary overlap and duplication.

As regards the character of neighbouring Organisations, it is important for CIGRE to consider which are viewed as opportunity or as competitors. The list briefly covered below is not exhaustive.

CIRED : contact should be renewed to examine present relations and determine future objectives and interrelations.

WEC : no overlap because they are concerned with other forms of energy; this Organisation is important in the attraction it exerts on regulators, managers, decision-makers...

EURELECTRIC : the level of technical expertise within EURELECTRIC has been changed, as well as the organisation; CIGRE should be able to take over part of EURELECTRIC's former work, and be involved in Studies for EURELECTRIC.

IEC : traditionally, close ties of CIGRE with IEC, whose President is guest participant at the Administrative Council of CIGRE. There is a need to revise mode of cooperation, particularly to clarify the use of CIGRE documents by IEC.

IEEE-PES: A policy for cooperation is in place since 1993. Cooperation with IEEE is to be strengthened.

AESIEAP: Need to develop contacts in view of future collaboration.

- ***Avoid duplication with other Organisations :*** Many Organisations are working in the same area, which is a threat as budgets are limited. Links with other international organisations must be strengthened to avoid duplication of work : availability of expertise is limited and duplication is time and money consuming. It should also allow to attain a more global view of energy, together with a clarification of the role of CIGRE with that of these organisations.
- ***Forging links to regulators :*** Regulators are important players in the electricity sector. CIGRE can bring some valuable feedback on the impact of regulation on the performance of power systems.
- ***Forging links to financing institutions :*** The aim is to allow some countries to seek economic support from funding organisations in order to facilitate their participation in the work of CIGRE.

MASTERPLAN - October 2000
3.2.4. - CIGRE's Objectives and Strategy

Objectives	Strategy	Action Plan
1 - Increase CIGRE's influence throughout the world		
1.1 Growth of the organisation	• **Publicising CIGRE through National Committees**	• **National Committee Representatives meeting**
1.2 Rejuvenation of membership	• **Develop links with Universities…** • **To cater for a continual development of members, starting with students**	• **LUC/EPEE initiative (TC)** • **ELECTRA distr. To students** • **Preferential rates (?)** • **Development of a "Service Oriented Approach" at the Central Office**
1.3 Decentralised activities	• To reach a larger audience on a world-wide basis and allow specific issues to be discussed in regions where they are of central importance.	• **Involvement of NCs, SCs and TC** • **TC Strategic & Action Plans**
1.4 Improve communication with decision makers	• **Publication policy** • **CIGRE on the Web** • **Web communication** • **Improve access to the data produced by the various CIGRE bodies**	• **ACOPPE** • **« CIGRE and the Internet » initiative** • **Development of electronic access to documents and computer hosted data bases**
1.5 Improve communication with non members and among members and experts		
1.6 Change of name to "International Council on Large Electric Systems"	• **To reflect the true image of CIGRE which is far more than a conference**	• **Proposed to the General Assembly in 2000**

2 - Continuously develop the organisation to match the mission and ambition of CIGRE		
2.1 Review the engineering coverage of CIGRE	• Engineering approach covering the technical, economic, environmental, safety and reliability aspects, taking account of the impact organisational and regulatory aspects.	• Technical Committee Strategic plan and Action plan
2.2 Support a more decentralised / regionalised approach	• To reach members who work on a local basis • Develop regional activities	• AHGOM • Role of NCs, SCs and TC into decentralised activities
2.3 Increase the flexibility of CIGRE's structure	• Develop a "project management and customer approach" for the engineering studies within the Technical Committee	• TC strategic & action plan • Updating of SC rules
2.4 Review the structure of the Governing Bodies	• Enhance representation of regions • Clarify the role of Officers	• AHGOM
3 – Strengthen links with other International Organisations of the Power sector		
3.1 Exploiting synergies between Cigre and other organisations	• Strategies with IEEE/PES, IEC, CIRED, EURELECTRIC, IGU, EPRI, EFET, ETSOA, CIER, AESIAP, WEC…to be clarified on the basis of reciprocal exchange	• In 1999 - 2000: clarifications of cooperation with IEC, EURELECTRIC, CIRED, IEEE/PES, CIER, World Bank • Update Protocoles
3.2 Avoiding overlaps with other organisations		
3.3 Forging links to regulators	• Bring feedback on the impact of regulation on the performance of power systems.	• Invite Regulators to the 2000 Session
3.4 Forging links to financing institutions	• To allow some countries to seek economic support from funding organisations in order to facilitate their participation in the work of CIGRE.	• Establish contacts with World Bank, EIB, EBRD, ADB…

CIGRE

SITUATION DES MEMBRES DEPUIS 1980 - MEMBERSHIP SITUATION SINCE 1980

YEAR ANNEE	COLLECTIVE MEMBERS MEMBRES COLLECTIFS				INDIVIDUAL MEMBERS MEMBRES INDIVIDUELS		TOTAL MEMBERS TOTAL MEMBRES Ind. + Col.(I) + Col.(II)		EQUIVALENT MEMBERS MEMBRES EQUIVALENTS		YEAR ANNEE
	(I) + (II)	(I)	(II)	(I) + (II)							
	31.12	10.01.01			*31.12*	10.01.01	*31.12*	10.01.01	*31.12*	10.01.01	
1980	708	718			3061	3075	3769	**3793**	6601	**6665**	1980
1981	731	759			3008	3073	3739	**3832**	6663	**6868**	1981
1982	750	778			3061	3115	3811	**3893**	6811	**7005**	1982
1983	747	766			2991	3062	3738	**3828**	6726	**6892**	1983
1984	763	795			3042	3103	3805	**3898**	6857	**7078**	1984
1985	740	790			3090	3104	3830	**3894**	6790	**7054**	1985
1986	792	812			3110	3138	3902	**3950**	7070	**7198**	1986
1987	797	811			3077	3164	3874	**3975**	7062	**7219**	1987
1988	788	825			3080	3205	3868	**4030**	7020	**7330**	1988
1989	734	803			3080	3265	3814	**4068**	6750	**7280**	1989
1990	772	797			3126	3256	3898	**4053**	6986	**7241**	1990
1991	733	783			3049	3180	3782	**3963**	6714	**7095**	1991
1992	771	788			3113	3159	3884	**3947**	6968	**7099**	1992
1993	756	807			3022	3130	3778	**3937**	6802	**7165**	1993
1994	796	767	55	822	3295	3319	4091	**4141**	7125	**7264**	1994
1995	816	781	71	852	3176	3255	3992	**4107**	7064	**7302**	1995
1996	861	794	78	872	3365	3373	4226	**4245**	7436	**7499**	1996
1997	843	772	81	853	3454	3474	4297	**4327**	7429	**7496**	1997
1998	831	775	75	850	3601	3642	4432	**4492**	7531	**7667**	1998
1999	815	751	84	835	3679	3762	4494	**4597**	7511	**7685**	1999

CIGRE Membership - Membres 1990-1999

CLASSEMENT par REGIONS - REGION RANKING

Membres Equivalents - Equivalent Members

10.01.2001

REGIONS	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Europe	4113	4055	4185	4299	4297	4282	4294	4268	4333	4268
Amérique *America*	1642	1568	1475	1415	1415	1359	1420	1479	1485	1537
Pacifique-Asie *Pacific-Asia*	917	888	852	834	857	972	1020	1054	1025	1040
Afrique-Moyen Orient *Africa-Middle East*	569	584	587	617	695	689	765	695	824	840
TOTAL :	7241	7095	7099	7165	7264	7302	7499	7496	7667	7685