The living strength of the Union:

The UCTE Working Groups have been restructured and given a higher flexibility to develop their activities. As competence centers of UCTE, they made a cooperative contribution to the following objectives:

- Maintain the reliability of the power system in order to create and operate a robust, competitive, and non-discriminatory electric power market
- Gain and maintain the confidence of network users, government entities and market participants by providing them in a non-discriminatory way with high-quality data and information services
- Address the needs and requests of network users or neighboring systems to extend the UCTE synchronous area without jeopardizing the high quality standards developed by UCTE.
The established TSO operating standards, procedures and mechanisms from the past have to be critically reviewed and may be adapted to support the international transmission of electricity within the new frameworks. This is the main scope of the Working Group »Operations & Security« which succeeded the former Working Group on »Interconnected Operation« in September 2001.

In 2001, the main activity of the Working Group and its sub-groups focused on regular tasks and reports and the internal re-organisation of work. Two permanent Sub-groups »TSO-Forum« (succeeding the former Sub-group on »Interconnection«) and »Network Models & Forecast Tools« (succeeding the former Sub-group on »Network Models«) were set-up to continue the previous work.

The Sub-group »TSO-Forum« provides a platform for the exchange of experience gained in operation with a view to guaranteeing regular monitoring procedures, reviews and reports on important operational aspects affecting the UCTE network as well as on special operational events such as frequency quality, control performance, and disturbances. The evaluation of the last frequency measurement campaign as well as the preparation of the next campaign planned for 2002 were performed in 2001.

The Sub-group »Network Models & Forecast Tools« prepares, on a regular basis, reference network data sets (load-flow models, snapshots) and completes UCTE network models that are required for load-flow analyses, congestion forecasts and short-circuit calculations. Furthermore, the Sub-group started to work on UCTE reference documents for procedures on congestion management, day-ahead congestion forecasts, usage of the UCTE-format and network modelling.

Specific individual conditions and requirements for access to the national grids are defined in national Grid Codes. To guarantee the overall reliability and security of the interconnected synchronous system of UCTE, additional technical requirements need to be defined, implemented by each individual TSO and evaluated by authorised UCTE bodies with a view to assuring the quality standards defined in technical standards and recommendations. In this context, the Working Group has started the development of a »UCTE Operation Handbook« that comprises all current UCTE standards and recommendations, updated to the new TSOs’ environment and framework.
During its long history, UCTE has always welcomed applications for the extension of the interconnected network. Whenever an extension was proposed, appropriate solutions were designed for the interconnection of new systems, together with the requisite forms of organization and cooperation. UCTE has contributed to build one of the largest synchronous interconnected systems in the world, supplying electricity to hundreds of millions of customers in a secure and reliable way.

Until now, the overall advantages of controlled extension which did not jeopardize the global security of the interconnected operation have been sufficient to offset or outweigh any drawbacks encountered by members in the center of the system.

In the light of liberalization and increasing requests of countries to be interconnected to the existing system, UCTE has to face a major challenge.

Although many valuable studies have been carried out on the subject, UCTE decided to create a specific Working Group on »System Development« charged to:

- draft quick answers to immediate requests for interconnections
- propose a medium-term strategy (two to three years ahead)
- develop a prospective vision for the far future.

In particular, the topics discussed refer to:

- the general prerequisites as well as the organization of relations between neighbouring TSOs
- the various types of agreements to be signed between all parties involved
- the general sequence of operations to be carried out before and after interconnection
- the implementation of the organization to monitor the development process

The program of work comprises three phases: first, making an inventory of all the projects, available studies, partners and requests for interconnection; second, a study phase leading to detailed strategies, and finally the implementation and monitoring phase.

The general approach of the Working Group is characterized by:

- a pragmatic approach based on transmission projects and requests for interconnection
- answers and strategies based on system studies conducted or carried out by UCTE.
The terms of reference as well as the organization of work of the Working Group have been approved in September 2001. The «System Development» Working Group is composed of one main group which sets the general framework and supervises the work of the four Sub-groups: «Turkey», «Mediterranean Ring», «East of CENTREL» and «Study Tools».

The «Turkey» Sub-group is studying the request of Turkey to be interconnected with the UCTE system. The inventory phase has been finished, and the definition of the strategic approach is being developed. Two studies have been performed in the scope of the Trans European Networks Program to investigate the possibilities for connecting the Turkish network.

The UCTE system is already synchronously interconnected with Morocco, Algeria and Tunisia. Libya, Egypt, Jordan and Syria are already interconnected with one another, so that a special Sub-group for the Mediterranean area has been set up. Interconnection lines have been built between Tunisia and Libya, and the four eastern countries have made a request for interconnection with the UCTE system.

One study has been performed by Red Eléctrica de España and Hydro Québec, to analyze the impact of this interconnection. The «Mediterranean Ring» Sub-group is waiting for the results of this study to define the process of interconnection of the four candidate countries.

The «East of CENTREL» Sub-group investigates the possible interconnections towards the Baltic countries, Ukraine and Russia. The inventory phase is still in progress and should be finalized by 2002. Furthermore, the Sub-group examines the request of Romania to connect a passive load of 200 MW at Rosiori. The Sub-group has listed the technical requirements which have not been completely satisfied yet; Romania is working on their accomplishment.

All studies performed for the interconnection of new systems have been initiated by TSOs or by the European Commission under the TEN program. The aim of the «Study tools» Sub-group is to enable the UCTE to carry out studies with a view to analyzing the impact of new interconnections on the UCTE system.

This Sub-group also studies the strategy of reconnection of the second UCTE area to the first one. An assessment of the existing study is in progress, taking account of the present schedules of reconstruction of the destroyed lines and substations which are needed for the reconnection of the second area.
The UCTE information system, with particular regard to the UCTE Extranet Web Site, represents the most cost-efficient platform for the dissemination of internal UCTE documents among partners and for facilitating contacts among the TSO members. In this respect, the Working Group has undertaken various activities to improve the functionality and increase the benefit of the internal information system:

- to support the external representation of UCTE;

- to ensure that UCTE is recognised by market participants and other organisations as the responsible Association in terms of operational, technical and reliability issues of the interconnected system and its development;

- to optimise the flow of information and its impact (internal and external) with regard to UCTE standards, recommendations and positions.

The main tasks supported by the »Communication Policy« Working Group have been to propose an integrated communication plan for UCTE and to support the UCTE bodies in drafting position papers, in the choice of communication channels for appropriate dissemination of standards, recommendations, decisions towards market participants, associations and authorities.

Starting from the existing level of communication tools and from the UCTE information products, the Communication activities of UCTE have been refocused and extended based on a specific communication strategy in order to optimise the flow of information and its impact on the different audiences.

During the first year of activity, the Working Group focused its work on the identification of actions to be taken with a view to improving the UCTE communication system.

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Based on the definition of a corporate identity for all UCTE matters, a clear internal information distribution policy has been implemented.

External communication is of prime importance to promote the mission of UCTE towards potential interlocutors. The main objectives of external communication are to promote and increase public perception and awareness of UCTE’s standard-setting role for the operation and transmission system and for system adequacy. Therefore, UCTE should endeavour to gain increased recognition by authorities, network users and other organisations.

To improve communication policy, the Working Group is focusing its activities on defining a global communication strategy for UCTE through different projects.
The deregulation of the European electricity market has had an influence upon the UCTE statistics. High expectations of market participants, consultants, political and regulatory bodies in terms of statistical information put a great challenge on the Working Group. On the other hand, unbundling of the European industry and an increasing share of renewable energy sources and dispersed generation made it more difficult to collect important statistical data.

One of the means applied to meet the expectations of market participants and regulatory bodies are statistics on unavailability of international tie-lines, network reliability and scheduled electricity exchanges. These statistics were collected throughout the year 2001 on a trial basis. Collection of the data for new statistics is fully based on Internet technology. Regular reports including these data will be published in monthly statistics as from January 2002.

The Working Group has defined new terms of reference and a strategic plan for the next years. The new terms of reference take into account the following goals:

- making statistical data available:
  - in order to support interconnected operations and network planning,
  - to market participants about the interconnected networks and their use,
  - to political and regulatory decision makers about the interconnected networks and especially system security,
  - to the public in order to improve the understanding of interconnected operation, and of the importance of reliable and secure operation,
- collecting data for which the benefits exceed the costs.

The main tasks of the Working Group refer to:
- optimal management of the UCTE statistics in the transition to liberalised power markets and increased co-operation of TSOs in Europe;
- maintenance of the quality and consistency of the existing statistics, their usefulness, and the ability of the TSOs to collect the necessary data;
- definition and implementation of new TSO statistics where needed, especially implementation of the decisions regarding «Statistics in the liberalised electricity market»;
- regular publication of power balance forecasts and retrospectives;
- close co-operation with the Secretariat on methods of data collection and data consistency.

The Working Group’s strategy focused on the provision of reliable information on transmission systems operation in the deregulated electricity industry. The main strategic goals for the next few years are:

- to maintain accuracy of UCTE statistical information;
- to make this information easy to access, understand and use, utilising mainly Internet technology;
- to remain the main source for comprehensive information on transmission system operation.

The «Power Balance» Sub-group has prepared the reports «UCTE Power and Energy balance – Retrospect for the year 2000» and «UCTE Power Balance – Forecast for 2002-2004» on the basis of current operating data, and by using the new methodology for the second time. These reports providing an assessment of system adequacy, have been published in the Half-Yearly Reports I and II, as well as on the UCTE Web site.

By assessing the medium-term adequacy between generation and load (3-year power balance forecast) the Working Group meets one of the main missions of the UCTE as the organisation responsible for the security of interconnected system operation.