The »UCTE Operation Handbook« shall support consultation and provide assistance to different parties in issues of system operation, such as:

- Transmission System Operators (TSOs)/Grid Operators, Co-ordination Centres. Every TSO in the UCTE interconnected network (synchronous areas) has declared to follow the technical standards and procedures that are comprised in this »UCTE Operation Handbook« (main focus of the handbook). This operation handbook therefore serves as the reference (»legislation«) for the grid operation by the TSOs and guarantees the UCTE’s quality and reliability standards.

- Generation Companies (GENCOs). Every party operating a generating unit in the UCTE interconnected network (synchronous areas) makes use of the transmission network and may have to deliver products for the provision of system services that are indispensable for secure and stable grid operation. This operation handbook sets standards for the essential requirements and capabilities regarding generation that contribute to the operation of the grid by the TSOs.

- Other associations, traders, customers, politicians and decision makers. Operation of an interconnected transmission system is bound to physical principles and technical constraints, that differ significantly from other well-known technical or financial systems. This operation handbook explains these differences and characteristics in a transparent manner to the public for a better understanding. It can also serve as a general reference document.

Close co-operation of member companies is required to make the best possible use of benefits offered by interconnected operation. For this reason, the UCTE has developed a number of technical and organisational rules and recommendations in the past that constitute a common reference for smooth operation of the power system.

Only the consistent maintenance of the high demands on quality will permit in the future to set standards in terms of security and reliability as in the past. Moreover, the strong interconnections in the UCTE grid require common understandings for grid operation, control and security in terms of fixed technical standards and procedures. They are comprised in the »UCTE Operation Handbook« in an organised form to make consultation easier for members and the general public.

Target audience for the Operation Handbook

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- Transmission System Operators (TSOs)/Grid Operators, Co-ordination Centres. Every TSO in the UCTE interconnected network (synchronous areas) has declared to follow the technical standards and procedures that are comprised in this »UCTE Operation Handbook« (main focus of the handbook). This operation handbook therefore serves as the reference (»legislation«) for the grid operation by the TSOs and guarantees the UCTE’s quality and reliability standards.

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Main characteristics of the Operation Handbook

The following main characteristics of the «UCTE Operation Handbook» serve as a guideline for the development and set-up of the handbook:

– Transparency: Technical and physical principles of transmission grid operation in the UCTE are clearly described and published in the Operation Handbook also for non-experts.

– Liability: Following the Articles of Association of the UCTE, as they have been signed by all members, the standards and recommendations of the Operation Handbook were developed as binding for all members (including associated members) of the UCTE and their operation of the grid.

– Unambiguousness: All standards and recommendations of the Operation Handbook are written to be straightforward and unmistakable for the processes of secure operation of the UCTE SYNCHRONOUS AREA(S). All terms used in the handbook are defined only once.

– Relevance to the present: Standards and recommendations included in the Operation Handbook are continually adapted to the changed technical and legislative environment. A version «history» clearly shows the status of each part of the handbook.

– Minor Redundancy: The Operation Handbook is written to have only the minimum of redundancy that is required. For this purpose, references to other chapters within the handbook are used instead.

– Modularity: Each chapter, policy, rule and guideline of the Operation Handbook can be seen as a separate document that may be revised independently of the other parts. All chapters use a similar layout and internal structure.

Main scope of the Operation Handbook

The main objective of the «UCTE Operation Handbook» as a comprehensive collection of all relevant technical standards and recommendations is to provide support to the technical operation of the UCTE interconnected grid (synchronous areas), including operation policies for generation control, performance monitoring and reporting, reserves, security criteria and special operational measures. The basic subject of the Operation Handbook is to ensure the interoperability among all TSOs connected to the synchronous areas.

Standards for network access of customers, network tariffs, accounting, the commercial part of unintentional deviations, billing procedures and market rules as well as other standards that may be set by national GridCodes, laws or contracts are not within the scope of this Operation Handbook (see next figure).
**Legislative framework for making standards enforceable**

The conclusion of a multilateral agreement between TSOs should be completed by a framework of standards ensuring coherence and harmonization towards network users, as far as the reliability aspects of international interconnection are concerned.

Therefore, the institutional European organisms could acknowledge the UCTE standards (or, more general reliability principles applicable to the 4 European synchronous areas within the Union) in an apposite act (regulations, directives or simple recommendations). This solution could have the advantage of providing binding force to the UCTE rules within the EU States, but, on the other hand, this would apply only to EU member states. For non-EU member states whose electricity systems are synchronously coupled with one of the 4 synchronous areas, it might be advisable that the national grid codes provide for adherence to the minimum set of «reliability building blocks» which are necessary for international interconnection. Already today, several national grid codes have adopted such a position.

In the case of a European Directive or Regulation, it would be essential that TSOs’ responsibilities and liabilities be clearly defined, including the liabilities between TSOs of different member states and third countries adhering to the code.

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**Conclusions of the Regulatory Forum held in Rome on 18 October 2002**

»The Forum stressed that a comprehensive set of common security and reliability standards, to be observed by TSOs and network users, is necessary in order to ensure the efficient and secure functioning of the interconnected system and appropriate quality of electricity supply. UCTE presented proposals on how to further develop common security and reliability standards, which were welcomed by the Forum. UCTE was invited to continue its work, and continue to develop progressively more binding rules. This work would now be brought forward through regular meetings to be held at technical level between UCTE, CEER, NORDEL, other relevant regional TSO organisations and the Commission. Where appropriate, all relevant parties, including system users, will be invited to participate in these meetings. UCTE will present the further progress achieved during the next meeting of the Forum.«

Consultation is a key element of the development process of the Operation Handbook since it will contribute to identify issues and proposals of common interest with stakeholders, seeking ways to improve the quality of the document. The UCTE endeavours to ensure that all interested parties operating in the electricity sector express their views in this process.

In 2003, a series of meetings with key individual stakeholders took place in Brussels, where UCTE presented in detail the transformation of UCTE rules into enforceable reliability standards, and the fundamentals of the Operation Handbook. The parties were encouraged to actively participate in consultations. The consultation process is planned to start at the beginning of 2004, a new web-based technical tool «Consultation Process» will be launched at the address

http://www.ucte.org/ohb/consult_process.asp

UCTE encourages interested shareholders to participate actively in consulting the Operation Handbook. Participating in the process will require prior registration, and participants will be electronically kept informed about crucial events in the consultation process.