Security of Supply
- the ETSO Perspective

Oslo, April 26, 2005
Sture Larsson

Technical Director, Deputy Director General
Svenska Kraftnät
Member of ETSO Task Force on Security of Supply
ETSO was established in 1999 at the request of the European Commission.

Direct membership of all independent TSOs in the EU and associated countries.

ETSO is the only EU wide organisation specifically for TSOs.

38 members at present and growing.
Main Objectives of ETSO

- To ensure the development of the EU Internal Electricity Market while maintaining the security of supply
- To co-operate with organisations and institutions having similar objectives: EC, ERGEG/CEER
- The investigation and solution of regulatory issues of common interest to the TSO industry
A single internal electricity market to be built ... with:

- many congested borders
- market power issues
- cross-border trade arrangements in place
To maintain balance between supply and demand, ETSO considers, as essential elements:

- The establishment and maintenance of an **efficient electricity market**
- A **market based pricing of electricity** in competitive markets
- A **clear definition of the roles and responsibilities** between the TSOs and market players
- **Consistency of definitions** of the TSOs' system responsibility
- A **TSOs' active involvement in market design** to ensure system integrity
Pre-requisites for an efficient and attractive market

- Stable investment climate and regulatory framework with transparent and enforceable rules that are respected by all market players
- Competitive power market structure to ensure easy access for all players
- Market places that cover all time horizons
  - for physical power trade/contracts and balancing power
  - for financial instruments to be used in risk management
- No restrictions on the choice of instruments to manage the risks
- Consistency of regional rules to ensure a neutral and non-distorted playing field for competition
Market based pricing of electricity in competitive markets

- Market places should be able to provide credible prices for electricity and financial products in a market-oriented way without any intervention by the authorities or the TSOs.

- Market prices reflect as far as practical also consumers' willingness to pay for electricity.

- Market based prices incentivise generators and suppliers to meet their delivery commitments.
Definition of the roles and responsibilities is a precondition for economic incentives to become efficient driving forces.

In order to give the right signals for the market a clear distinction of the roles and responsibilities between the market players, TSOs and the authorities is needed:

- Market players are responsible to meet their commitments in power deliveries in all time scales.

- TSOs' responsibility to maintain the instantaneous balance between supply and demand should in principle be directed only to correctly applying the operational procedures and utilising the available operational reserves necessary to fulfil this task within given operational security constraints.

- Authorities are responsible for the overall market design and framework for security of supply with a duty to react if needed.
Core tasks of the TSOs’ system responsibility are:

- To maintain with the available means
  - the operational security of the power system
  - the instantaneous balance between supply and demand
  - the adequacy of the transmission system in the long term
- To facilitate efficient functioning of the electricity market
Consistency of definition of system responsibility in regional markets with several TSOs is a precondition to avoid different risk exposures of the market players.

Other duties in addition to the core tasks of the system responsibilities can be justified due to special national circumstances. These duties must be clearly separated from the system responsibility and financed transparently.
TSOs' active involvement in market design to ensure system integrity

TSOs should ensure that the market design is consistent with the principles for securing system integrity

• by contributing to the development of market mechanisms

• by contributing to further consistency of the regional rules and regulation

• by facilitating efficient functioning of the market

• by utilising market oriented approaches in procuring of operational reserves and in running the balancing market

• by contributing to enhancement of demand side bidding and response in all market places and their own procurements
First draft version in 2003 and several amendments.
ETSO involved in the process.

Presently two proposals:

- **Council of the European Union,**
  version of 10 February, 2005

- **European Parliament,**
  consolidated version of 20 April, 2005
Main Articles:

1. Subject Matter and Scope
2. Definitions
4. Network Security
5. Maintaining Balance between Supply and Demand
6. Network Investment
7. Interconnector Construction/Investment
The EU Council version: (abbreviated)

- **Member States shall**
  - Encourage a market framework that provides suitable price signals for generation and consumption
  - Require TSOs to ensure that an appropriate level of reserve capacity is available for balancing purposes

- **Member states may also take additional measures**
  - Facilitate new generation capacity and companies
  - Removal of barriers that prevent the use of interruptable contracts
  - Tendering procedures in accordance with the IEM Directive
The European Parliament version: (abbreviated)

- Member States shall ensure a balance within their own supply area

- In particular MS shall:
  - Encourage a market framework that provides suitable price signals for generation and consumption
  - Require TSOs to verify generation reserves for operational balancing purposes
  - Remove barriers that prevent the use of interruptible contracts
  - Encourage real-time demand management technologies such as advanced metering systems
Conclusion:

The importance of developing Market oriented solutions and Demand Response Resources are clearly observed on European level

- in the work of ETSO
- in the SoS Directive proposals