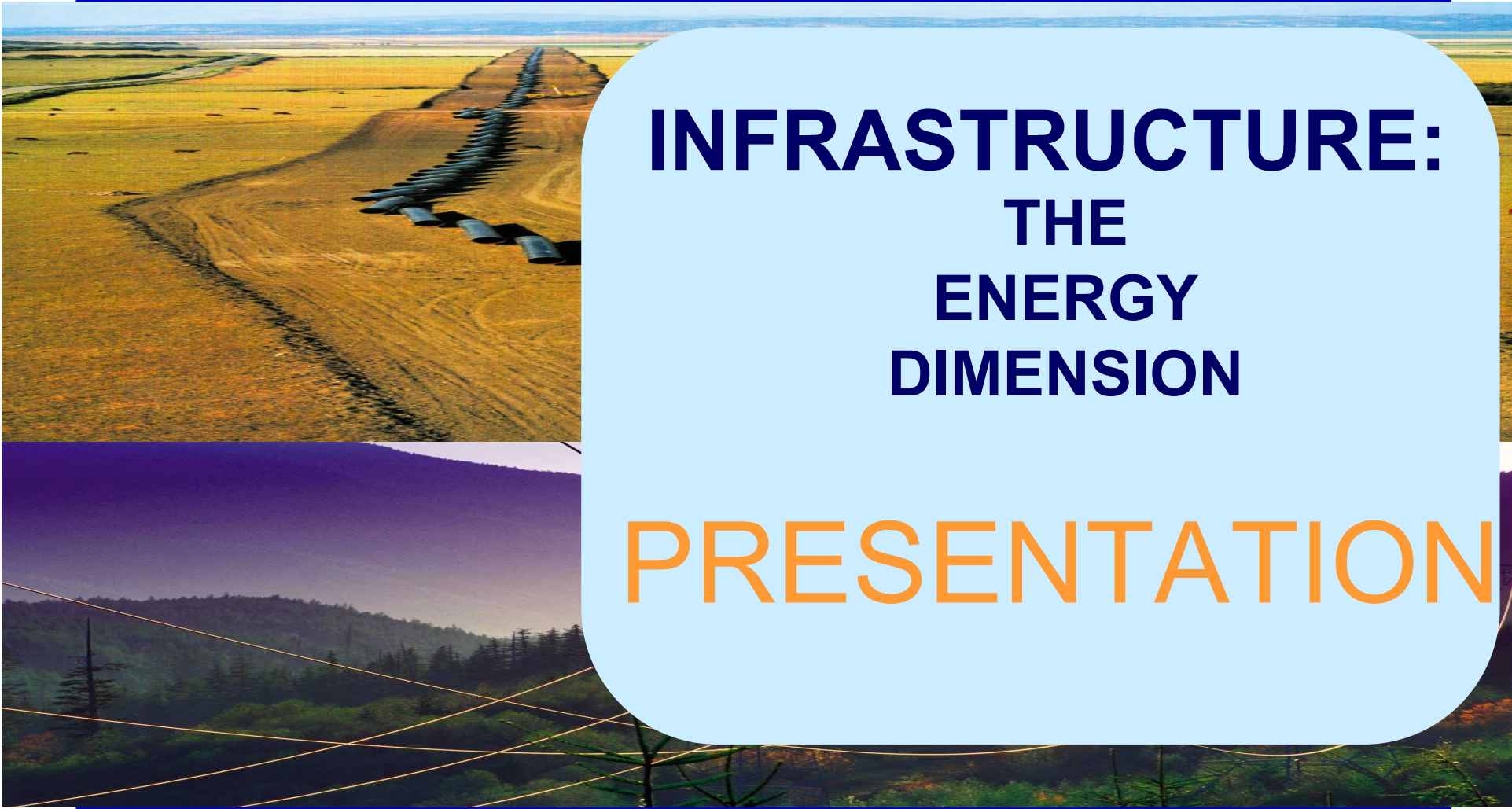




# European Commission

The background of the slide is a composite image. The top half shows a long pipeline stretching across a dry, yellowish-brown field under a clear sky. The bottom half shows a dense green forest with several high-voltage power lines crossing the scene.

## **INFRASTRUCTURE: THE ENERGY DIMENSION**

## **PRESENTATION**



Directorate General for Energy and Transport

Information and Communication



# Structure of the package

## A. Energy infrastructure: identifying the challenge

### Communication

*European energy infrastructure*

## B. Main findings

## C. Proposed actions

- Improved use of existing infrastructure
- Ensuring a stable regulatory environment favourable to infrastructure investments
- Community political and financial support of priority projects
- Political commitment
- Gas supplies to Europe

### Draft decision

*Revising TEN Energy guidelines*

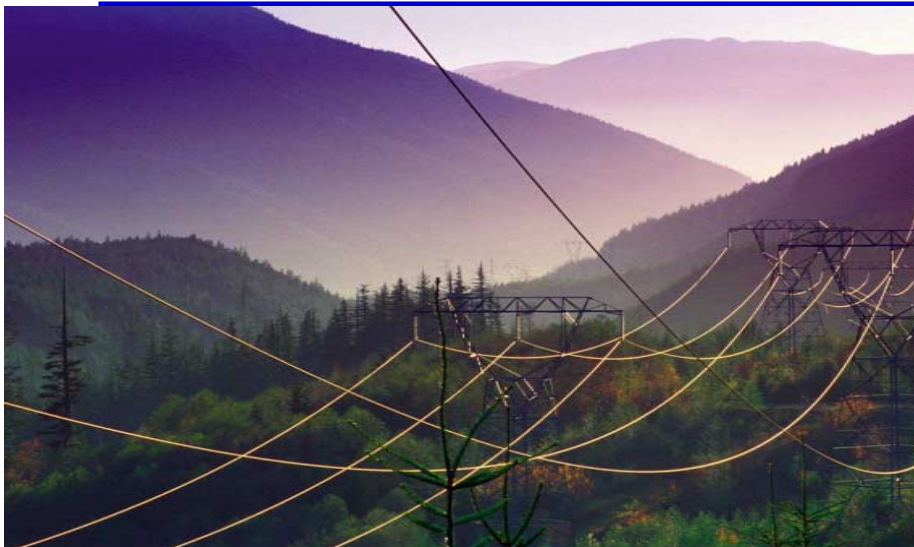
### Report

*on the implementation of TEN Energy guidelines 1996-2001*





# A. Identifying the challenge



## Electricity

- Segmented markets
- Levels of interconnection
- Security of supply issues
- Interconnector needs
- Critical bottlenecks

## Gas

- Gas market outlook
- Geographical overview
- The security of supply challenge





# Segmented markets

Electricity challenge 1/5

The European electricity system may be considered as consisting of one core area and six satellites with limited import capacity:

Ireland and Northern Ireland

Great Britain:  
import capacity 3%

Scandinavia/Nordel:  
import capacity 4%

Core area: Germany, France, the Benelux, Austria, Switzerland.

The Iberian peninsula:  
import capacity 2%

Italy:  
import capacity 7%

Greece



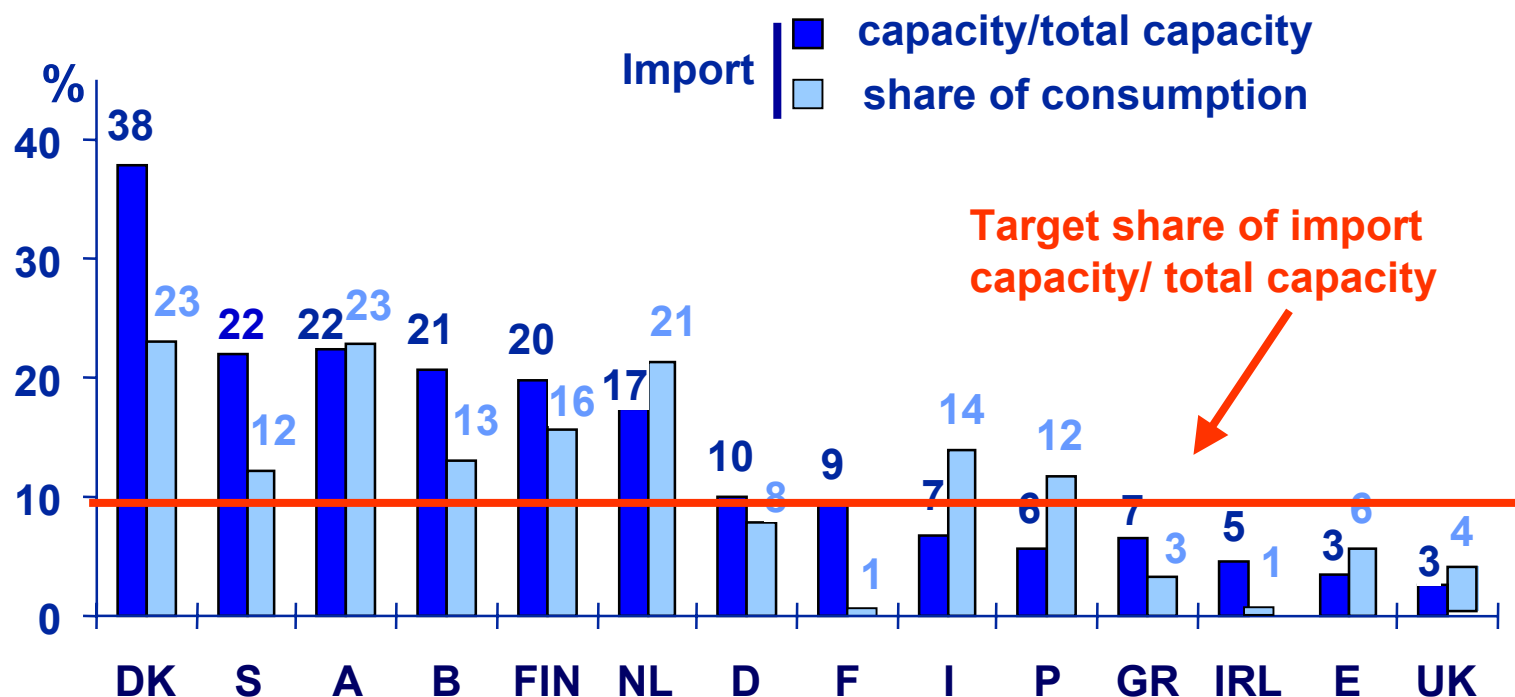




# Levels of interconnection

Electricity challenge 2/5

## Import capacity and congestion





# Security of supply issues

Electricity challenge  
3/5

## Import and reserve capacity



Average growth in electricity  
demand up to 2020

60%

40%

Reserve  
capacity

Import  
capacity

In % of  
installed  
capacity

UK

5.9

2.7

Italy

5.6

7.2

Iberian Peninsula

4.1

1.9

Core area

3.7

3.3

Greece, Yugoslavia, FYROM

2

1.2

Scandinavia

1.2

3.8

Ireland

0

4.1

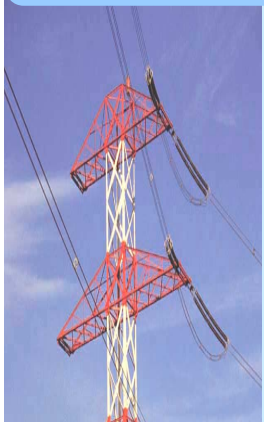




# Interconnector needs

Electricity challenge 4/5

## What interconnectors can bring



- Interconnecting isolated markets with core markets
- Improving security of supply
- Allowing transit of electricity
- Full market integration
- Exploitation of price differences

## Level of interconnection proposed by regulators in peripheral countries



Reaching a minimum level interconnection of around **20% of peak demand in any area** with the rest of the European Union could help eliminate segmented markets and create a real competitive internal market

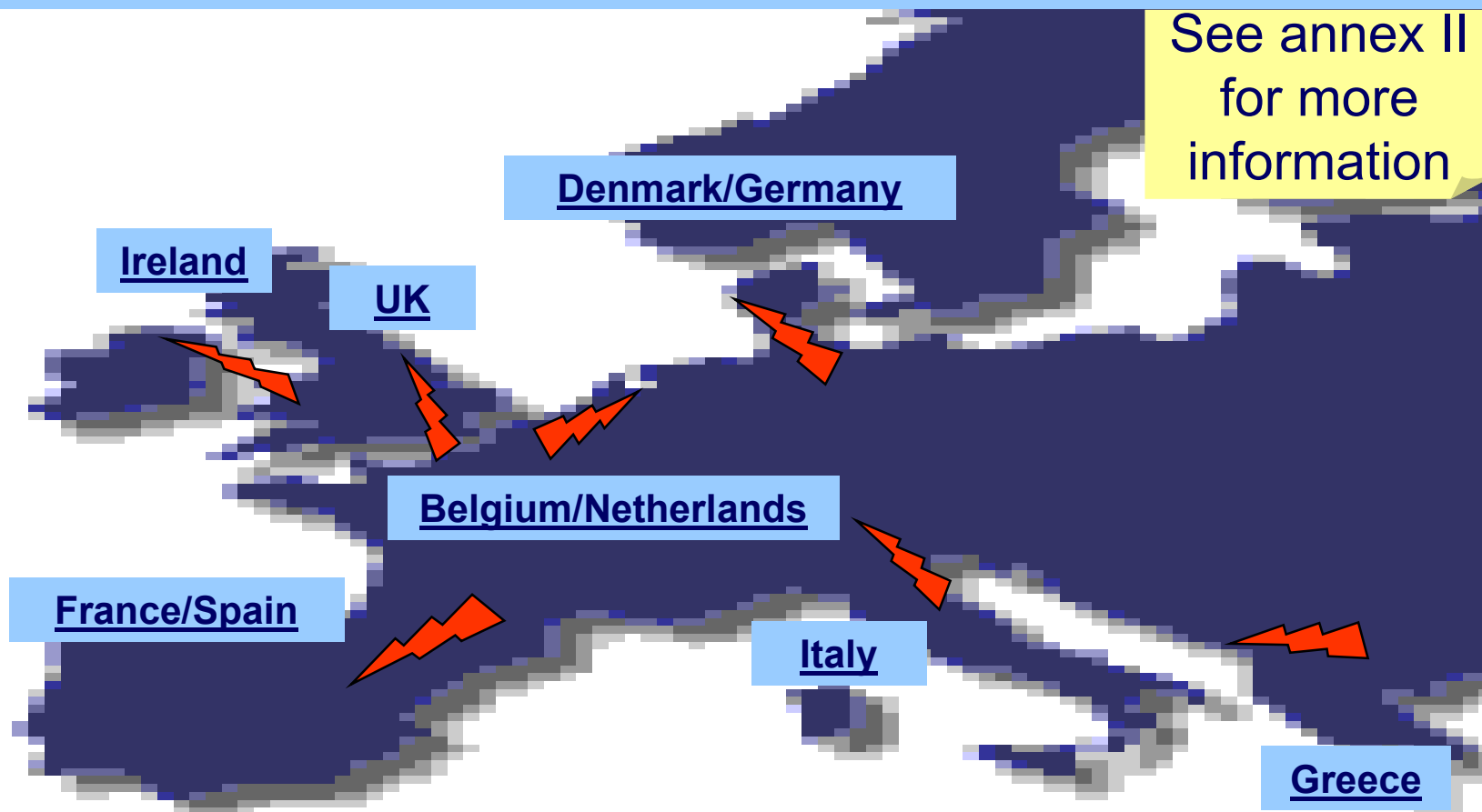




# Critical bottlenecks

Electricity challenge 5/5

**Seven main bottlenecks have been identified**



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# Roles

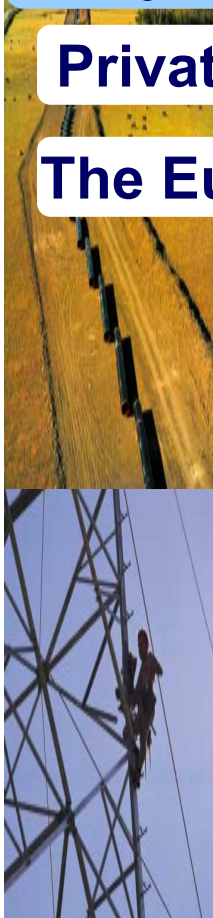
Findings 2/3

## Key actors for the creation of infrastructure

**Private undertakings** to build infrastructure

### The European Union, Member States and Regulators

- to provide **the appropriate and stable regulatory framework** to ensure:
  - | the efficient use of existing infrastructures
  - | incentives for the building of new infrastructure
- to take action to **resolve bottlenecks** or ensure the construction of **missing links** that industry will not address alone due to various obstacles:
  - | Commercial non-viability: (ultra)- peripheral regions
  - | Gaining authorization for new infrastructure is difficult
  - | Vertically integrated companies have no incentive to reduce congestion
  - | Uncertain regulatory regime apply to new, high risk investment





# Objectives

Findings 3/3



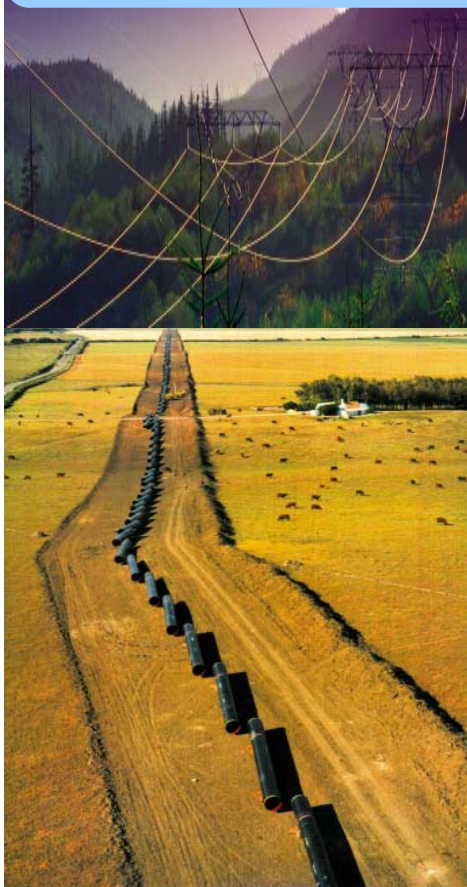
- All Member States should achieve an initial level of electricity interconnection of **at least 10%** of their generation capacity within a reasonable timeframe.
- **Higher targets** will be set for Member States **already exceeding** the 10% level with significant levels of congestion or which represent **key transit areas**.
- **Key projects** will be addressed as priority short-term actions where they are in the interest of all Member States.
- **Transmission system operators** should implement “**soft measures**” to ensure effective, transparent and non-discriminatory allocation of existing capacity and access to infrastructure.





# C. Proposed actions

## Five main areas of actions



- Improving the use of existing infrastructure
- Ensuring a stable and favourable regulatory environment for new infrastructure
- Re-focusing Community financial support on priority projects
- Political awareness and commitment at the Community and national level
- Gas supplies to Europe





# Improving the use of existing infrastructure

Actions 1/6

## Gas and electricity

### More effective unbundling & regulated third party access

Rapid adoption of the proposed revision of the gas and electricity Directives and the Regulation on cross-border trade of electricity.

**Action 1**

## Electricity

### Transparent network use

- By 30/4/2002 Council of European Energy Regulators (CEER) to propose revision of transparency and congestion management guidelines. European Transmission System Operators (ETSO) to recommend common minimum requirements by same date. Reviewed guidelines basis of legally binding minimum requirements to be adopted under Draft regulation on cross-border trade.

**Action 2**

### Congestion management

- All to make sure congestion management guidelines applied.
- By 1/7/2002, ETSO to propose common technical/administrative interconnector standards.

**Action 3**

### Cross-border transmission tariffs

- CEER and ETSO to develop details of a tarification system to enter into force in 2003. Commission where necessary will make proposals.

**Action 4**

**Action 5**





# Ensuring an environment favourable to investments

Actions 3/6



## Gas and electricity



Ensure a transparent regulatory environment

- By 31/04/2002, Council of European Energy Regulators to put forward **guidelines on Regulatory control and financial reward** for infrastructure.

**Action 8**







# Political and financial support of priority projects

Actions 4/6

See annex I  
for more  
information

## Gas and electricity

### Revision of the TEN- Energy Guidelines

- **Objective** To focus support on key projects  
To concentrate financial assistance in this area  
Better methods to ensure objectives are met.
- **Criteria for awarding support**  
Creation of the internal market  
Security of supply  
Integration of renewables  
Enlargement & integration ultra-peripheral regions
- **New list of Priority Projects of European Interest**
- **Increase of the maximum share of possible Community co-financing for priority projects:** from 10 to 20% of total investment costs

**Action 9**



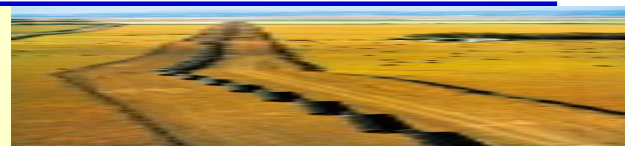


# Political commitment

Actions 5/6



## Gas and electricity



### Report on security of supply

- On a yearly basis the Commission will issue a report on security of supply and infrastructure issues in the electricity and gas sectors. Member States will make contributions to the report. The report will be submitted to Council and Parliament. It will be a key political instrument to monitor progress on infrastructure development and for proposing measures to eliminate and avoid congestion **Action 10**

### Repeal of the investment planning Regulation

- Commission to propose a repeal of Council Regulation 736/96 on information on planned investments in oil, gas and electricity made redundant by action 10. **Action 11**





# Main conclusions

## 1. Assessment

Electricity and gas infrastructure suffer in varying degrees from **congestion** or **missing links** which hamper the smooth functioning of the internal market and security of supply.

## 2. Obstacles

- Infrastructures could be used more **efficiently**.
- An **increased interconnection level** is needed for electricity in a number of Member States

## 3. Actions

- The Commission proposes to take **urgent action** in 5 main areas.
- In line with good governance principles, actions have been allocated **at the most appropriate levels**, including industrial. Where necessary Community actions will support and provide a legal basis to give effect to the achieved results.
- This process will require **efforts at both EU and national level**.

