Regulating the electricity markets in Europe: critical issues and future perspectives

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Outline

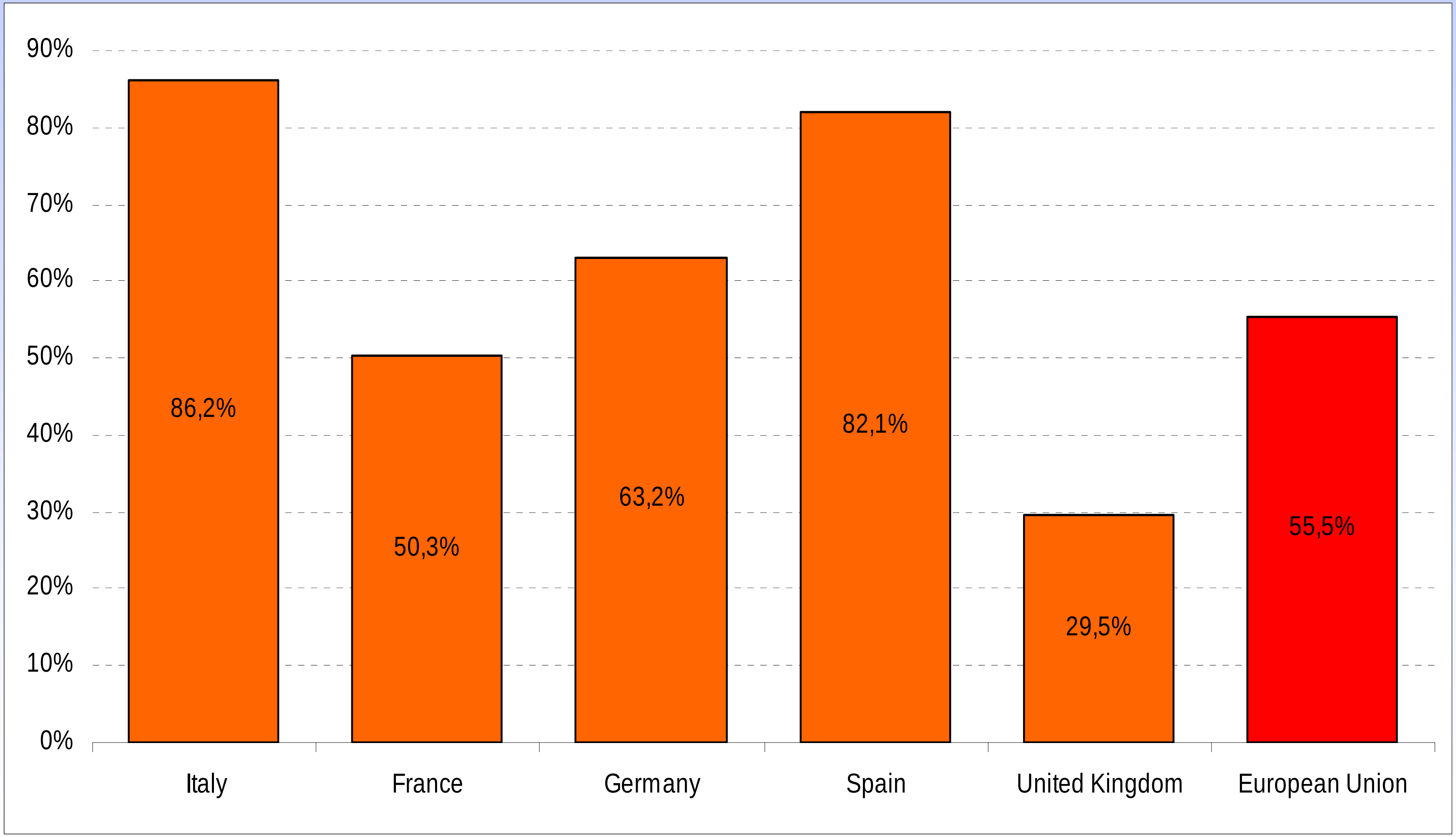
1. The electricity markets in the EU: key issues and figures
2. The long march towards a single market for electricity: liberalisation and regulation in the EU
3. The role of ACER
4. Hints for the future: national and EU regulators

1.1 Do we have a single market for electricity?

- Significant differences between EU countries:
  - dependence on imports (not only for electricity)
  - generation mix
  - concentration in generation capacity
  - prices

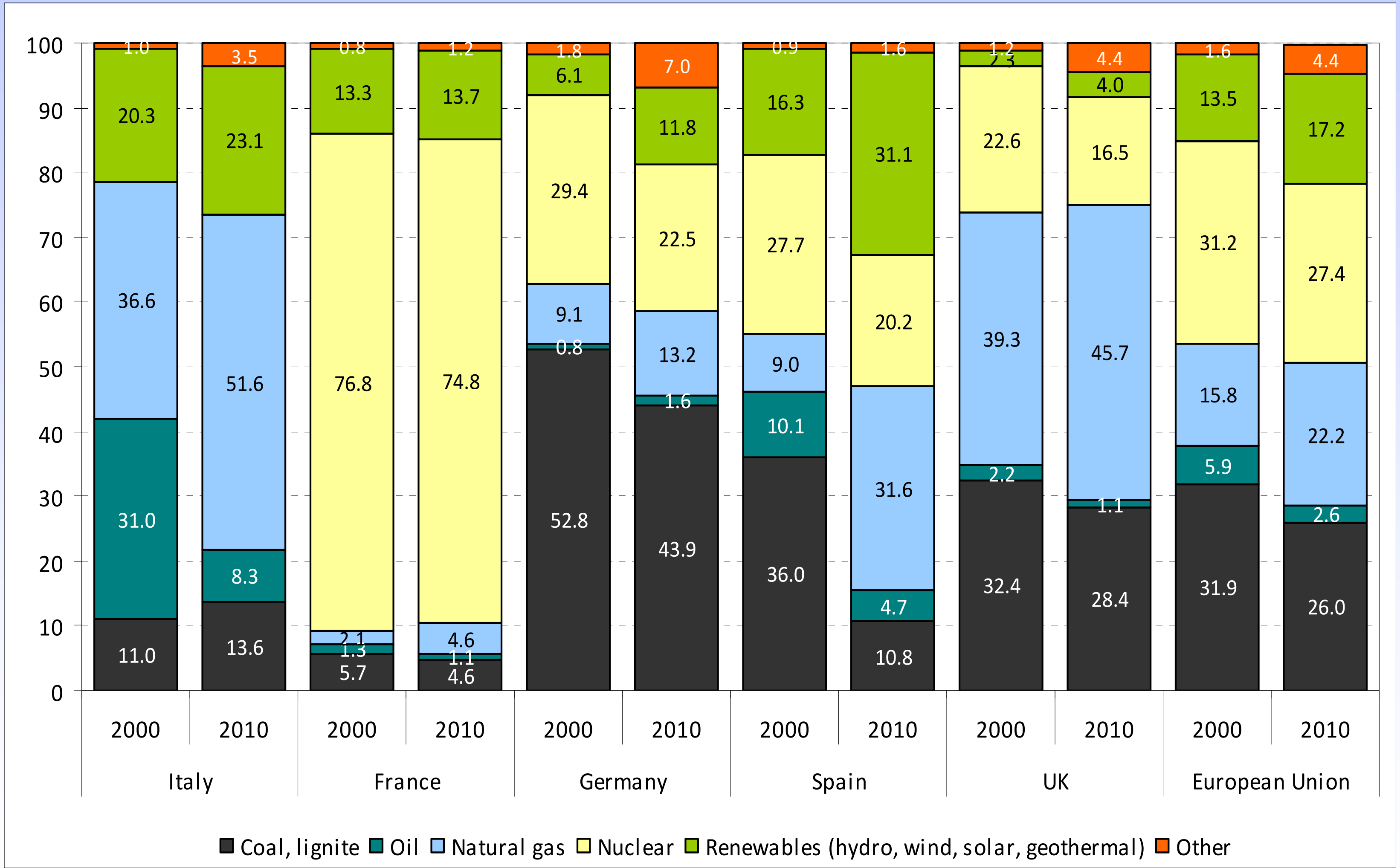
1.2 Import dependence: high but diversified

(net imports on primary consumption of energy, 2010)



Source: Enerdata

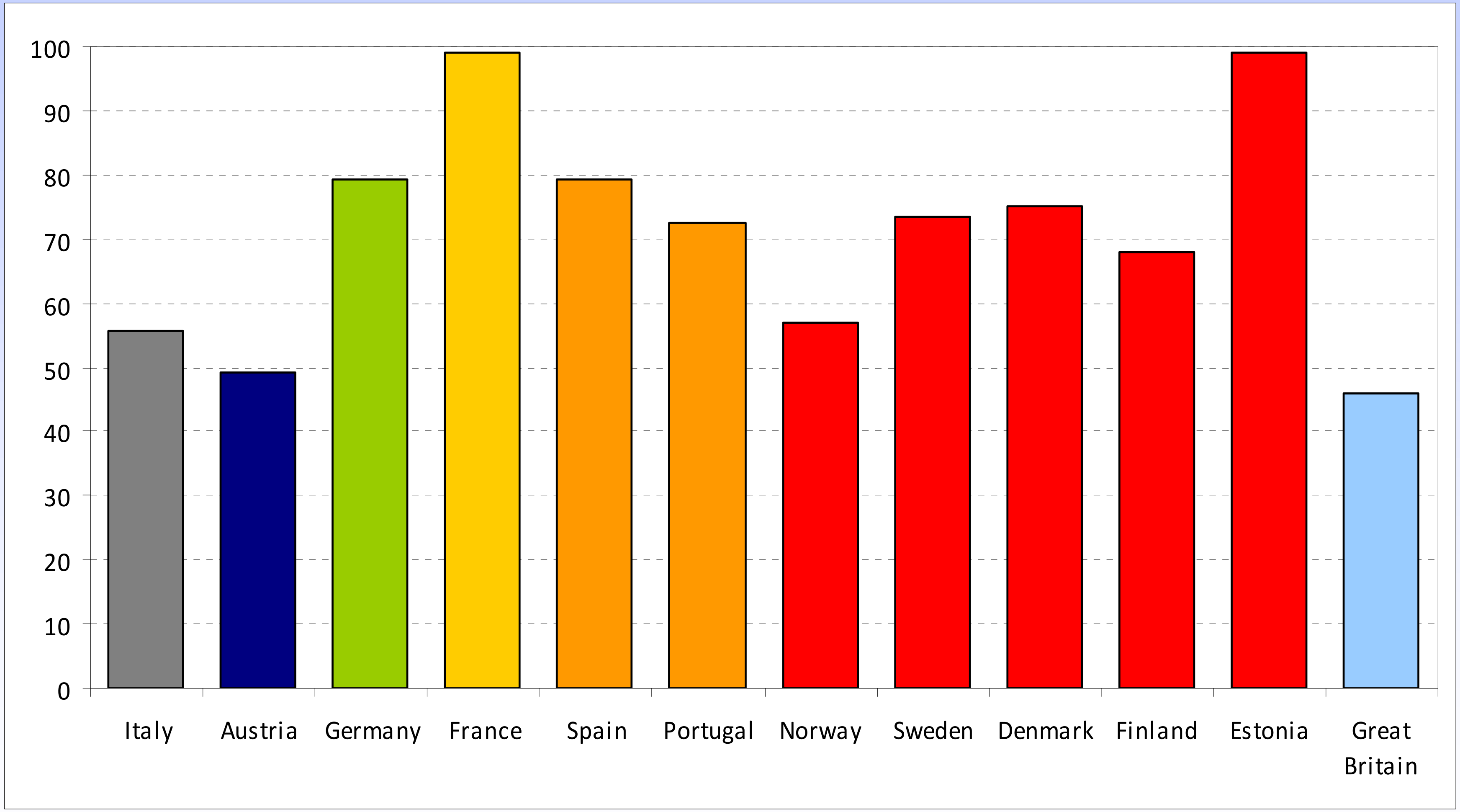
1.3 The generation mix: gas and renewables are growing for all (and will grow even more)



Source: Enerdata

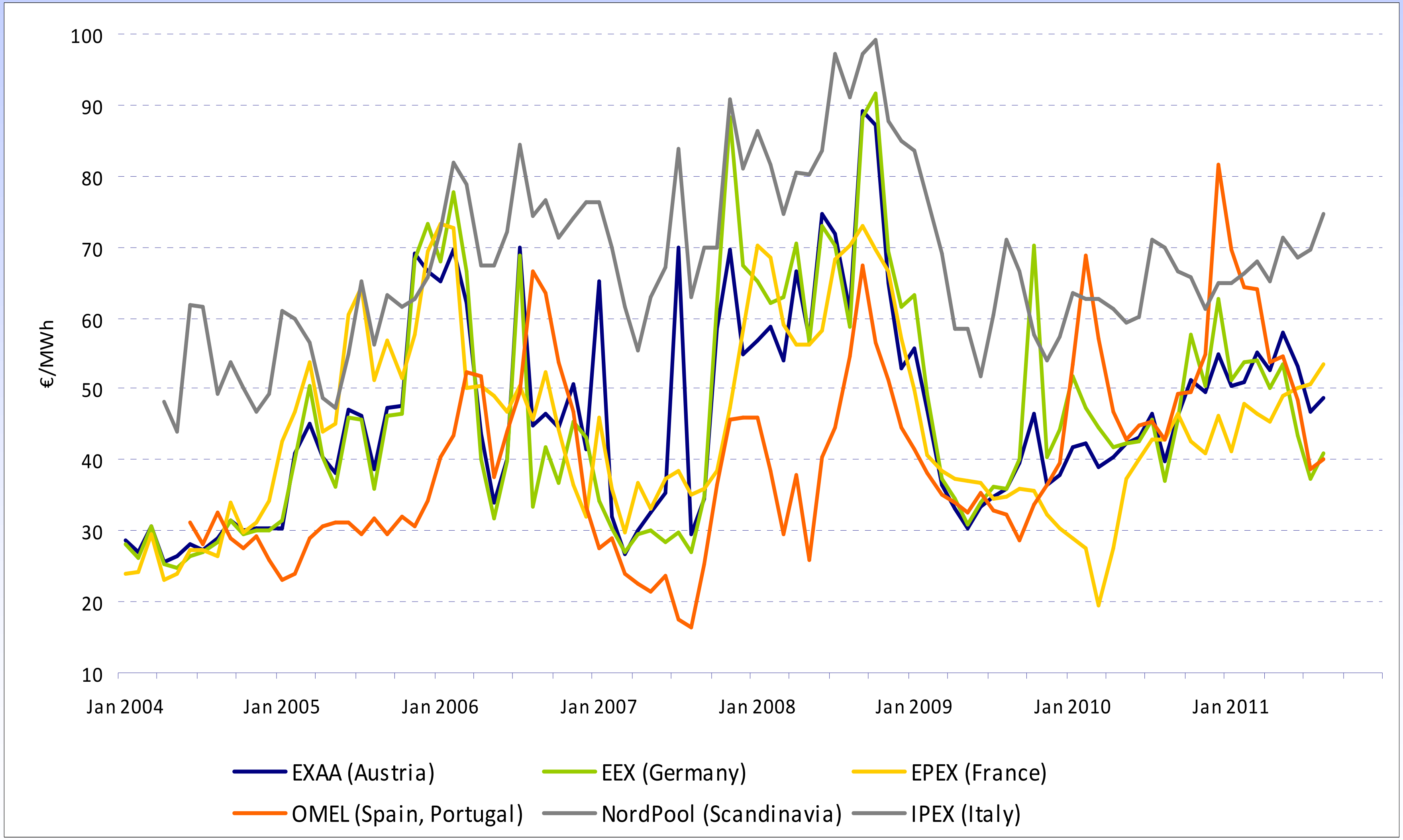
1.4 Competition? What competition?

(Share of largest 3 generation companies by net generation capacity, 2009)



Source: CEER, National Report 2010 Indicators.

1.5 One market, one price?
(Electricity prices on main EU power exchanges)



Source: National Power Exchanges

1.6 Key issues in the electricity markets

- Changes in the electricity fuel mix:
  - growing role of gas and concerns on security of supply;
  - renewables and energy efficiency, also as a consequence of new climate policies;
  - Fukushima: phasing out nuclear generation?

- The long march towards a single market:
  - market integration (both physical and commercial), adequate institutional framework.

2.1 Regulation - The long march towards a European single market

- Liberalisation process started in the 1990s to split up State monopolies and provide, through competitive markets, efficient and secure energy services at competitive prices.
  - **Unbundling**
  - **Competition**
  - **Independent Regulators**

2.1 Regulation - The long march towards a European single market

- Liberalisation process started in the 1990s to split up State monopolies and provide, through competitive markets, efficient and secure energy services at competitive prices.
  - **Unbundling** of vertically integrated companies, **regulation** of essential infrastructures and free **competition** in other segments of the market (production, import, sales).
  - Creation of **independent national regulators** (independent of industry and of Governments).
- 15 energy regulators worldwide at the end of 1990's; 315 energy regulators today (www.iern.net).

2.2 Unbundling and regulation

Generation	Process of producing electricity from primary sources of energy	**Activity open to competition**
Transmission	High voltage electricity transportation	**Regulated natural monopoly**
Distribution	Medium/low voltage electricity distribution to end customers	**Regulated natural monopoly**
Wholesale/ Supply	Supply to customers	**Activity open to competition**

2.3 Responsibilities of independent regulators

- Definitions of rules for access to transmission and distribution grids and balancing
- Definition of tariffs for essential infrastructures of transmission and distribution
- Quality of service
- Protection of final customers, market monitoring and reporting
- Enforcement

2.4 The milestones of the long march…

- **The First energy package (1996-98):** minimum common rules for the opening up of European energy markets (electricity and gas): e.g. Third party access (TPA), unbundling of accounts.
- **The Second energy package (2003):** towards a more effective harmonization process in order to improve the functioning of European energy markets, national regulatory authority (NRA) independent from industry and with a minimum set of duties (e.g. tariffs), legal separation of regulated activities.
- **The Third energy package (2009):** strengthening of national regulators; establishment of new institutions at EU level (ACER, ENTSO, European association of transmission system operator), more effective provision for unbundling.
- **European Council, February 2011:** completion of the single market for electricity and gas by 2014.

2.5 …reflect the evolution of the regulatory framework

Council of European Energy Regulators

2000

ERGEG

European Regulators Group for Electricity & Gas

2003

ACER

Agency for the Cooperation of Energy Regulators

2009

2.5 …reflect the evolution of the regulatory framework

Council of European Energy Regulators

Set up in Brussels in 2000. Through CEER, a voluntary non-for-profit association, the national regulators cooperate and exchange best practice to facilitate the creation of a single, competitive, efficient and sustainable EU internal energy market.

ERGEG – European Regulators Group for Electricity & Gas

After the 2003 directives, the EC set up an European Regulators Group for Electricity and Gas (ERGEG) with a mission of encouraging co-ordination between NRAs and of «advising and assisting it in its action to consolidate the internal market » (EC Decision n. 2003/796). Expired in 2011.

ACER – Agency for the Cooperation of Energy Regulators

Established in 2009 (EU Reg. 713/09). The Agency for the Cooperation of Energy Regulators (ACER) is a European Union body whose mission is to assist National Regulatory Authorities in exercising, at Community level, the regulatory tasks that they perform in the Member States and, where necessary, to coordinate their action. In force since March 2011.

3.1 ACER is an Agency, not an independent Authority

Main tasks assigned to ACER by Directives 2009/72/EC, 2009/73/EC, Regulations (EC) No. 713/2009, No 714/2009 and No 715/2009:

- terms and conditions for access to and operational security of cross-border infrastructure;
- cooperation of TSO and NRAs;
- monitoring, reporting and transparency.

ACER legal tools:

- issue opinions and recommendations addressed to TSOs, NRAs, European Parliament, the Council, or the Commission;
- submit to the Commission non-binding framework guidelines, FG (common principles at EU level for the regulation of cross border network issue and market integration, according to the priority area listed in Article 6 and 8 of Regulation (EC) No 714/2009);
- **take individual decisions in the specific cases referred to in Reg. 713/09 (e.g., for cross-border infrastructure, in case competent NRAs have not been able to reach an agreement or they have jointly requested a decision by ACER).**

3.2 ACER governance and accountability (2/3)

- **Board of Regulators (BoR):** consists of senior representatives of the NRAs and one non-voting representative of the EC. It decides on the regulatory policy of ACER. it provides opinions to the Director which the Director shall follow. In addition, the Board of Regulators, within its field of competence, provide guidance to the Director in the execution of his tasks.
- **Director:** is responsible for representing the Agency and is in charge of its management. The Director adopts and publishes the opinions, recommendations and decisions that have received a favourable opinion of the Board of Regulators.
- **Administrative Board:** consists of 9 members appointed by the EC (2 members), the European Parliament (2 members) and the Council (5 members). It ensures that ACER carries out its mission and performs the tasks assigned to it in accordance with the Agency Regulation. It is charged with the appointment of the bodies of ACER and with exercising budgetary powers.
- **Board of appeal:** comprises six members formally appointed by the BoR. It is responsible for judging appeals against ACER's decisions.

3.3 ACER activities 2011/2012

- OPINION: on ENTSO-E Statutes, list of Members and rules of procedures (May 2011)

- FRAMEWORK GUIDELINES:
  - electricity grid connections (July 2011)
  - capacity allocation and congestion management (July 2011)
  - system operation (expected Dec 2011)
  - balancing (expected July 2012)

- DECISIONS:

3.4 ACER Framework guidelines on capacity allocation and congestion management (1/2)

- Aim to identify a market mechanism for an efficient allocation of a limited (potentially scarce) resource such as the cross border electricity infrastructures:
  - capacity allocation and congestion management rules are necessary, which need to be consistent with the effective functioning of wholesale markets (power exchanges) in a single EU market;
  - so, we need to move from methods based on bilateral agreement to the integration, coordination and harmonisation of the congestion management regimes at EU level;
  - the different time scales at which electricity is sold (forward - day ahead – intra day- real time) need to be taken into account.

3.5 ACER Framework Guidelines on capacity allocation and congestion management (2/2)

- Methodology adopted by the ACER Framework Guidelines for the day ahead market is the 'implicit auction':

  - if capacity is insufficient to move electricity from one country/zone to another, prices differ and we have a 'congestion rent' equal to the difference between the two prices;

  - most efficient solution: transmission rights between countries are attributed simultaneously according to the day ahead market outcome (the prices and volumes resulting on the Exchange)

    i.e. the operators winning the auction for energy take the corresponding transmission capacity.

3.6 Current issues for ACER

- Harmonized long term transmission rights
- Intra-day cross border capacity allocations
- Infrastructures of EU relevance (Commission communication and future legislative initiatives)
- Pan-European market coupling (Regional initiatives)

4.1 Is the current EU regulatory framework adequate?

- Important progress has been made: ACER has a strong role on cross-border issues and advisory powers on other issues, independent NRAs, and we also have more provisions for (some) unbundling.

- A 2014 target for a complete integration of EU energy markets has been set. We also have ambitious energy and climate targets at 2020. We need:
  - EU level infrastructures;
  - more security of supply for primary energy sources;
  - better integration of renewable energies into the system in terms of security and competitiveness;
  - a greater role for energy efficiency and smart grids.

4.2 Do we need a European regulator?

- Given the challenges just described, there seems to be scope for a greater role for EU level regulation.
  - Some issues, e.g. tariffs for EU infrastructures, probably require greater independence than others.

- New emerging issues at EU level have already benefited from a new EU approach: e.g. the forthcoming EU Regulation on wholesale energy markets integrity and transparency (REMIT) provides ACER with a new role in monitoring of the wholesale electricity and gas markets.

- What is the role of ACER in the future? Can the European Central Bank provide a model for a possible evolution of ACER?

4.3 Do we need national regulators?

- Which role for national regulators in the future?
  - Not all issues require EU scale, not all issues require regulation (following market maturity).
  - Enforcement and supervision is better made at a national level.

- Strong coordination between national and EU regulation is needed

“In Zweifel für Europa“

When in doubt, favour Europe*

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Quotation from S. Cassese, “Introduction: In Zweifel für Europa”,** ***S. Micossi, G.L. Tosato, “The European Union in the XXI century: Perspectives from the Lisbon Treaty, 2009

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Links

Internal energy market

http://ec.europa.eu/energy/gas_electricity/legislation/legislation_en.htm

Energy Strategy For Europe

http://ec.europa.eu/energy/index_en.htm

European Energy Regulators

http://ec.europa.eu/energy/gas_electricity/legislation/legislation_en.htm