

EU COMMODITY MARKETS
AND TRADING
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European Federation of Energy Traders

Liberalisation of the European Internal Energy Market - Power

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- **What makes for successful liberalisation?**
- **The evolution so far of the EU Internal Electricity Market**
- **Competition and cross-border trading**
- **Commercial and “physical” wholesale power supply**
- **Balancing power supply and demand within day**
- **DG TREN review of progress of liberalization**
- **DG COMP power sector inquiry**
- **Conclusions**

Privatisation and liberalisation

- Relationship between the government-owner and government as “sponsor” of regulator
- Commitment to developing competition versus financial benefits to government-owner?
- Timing, order?

Unbundling

- Ownership, management?
- Balancing and other services for competitors ?

Liberalisation on the supply-side?

- Divestiture of generating capacity by dominant incumbent may be necessary for competition to start
- Auctioning of virtual power plants or long term contracts is possible second best

Cross border trade is an important source of liquidity

- Integration of neighbouring markets helps competition
- Non discriminatory access to cross-border capacity is a challenge

Avoid hidden cross-subsidies

- Bad experience with stranded costs and legacy contracts
- Subsidies may be designed to not distort the market

Regulators must communicate with market participants

- It is impossible for a regulator to anticipate and understand all effects of its intervention or non-intervention; market participants are creative
- Benefit of experience of regulators in earlier liberalised territories

EU Internal Electricity Market: Evolution 1



**NordPool,
English Pool
Early '90s**

Norway and Sweden



- **Early complete unbundling**
- **Regulatory model strong**
- **Hydro generation competition**
- **Day ahead market splitting**
- **Rapid development of financial contracts**



England and Wales



- **Privatisation and unbundling**
- **Pooled market, centralised dispatch**
- **Eventual regulatory price capping**
- **Move to bilateral market 2000**



EU Internal Electricity Market: Evolution 1



**1st
Liberalization
Directive**

Adopted 1997

**NordPool,
English Pool
Early '90s**

**German, Spanish
and Dutch
Competition 1998**

- **Unbundling of HV transmission**
- **Vertically integrated production - retail**
- **Structured pool price**
- **Relative national market isolation**
- **Planned MIBEL 2004**



Germany and Netherlands



- **Simple liberalisation model**
- **German legalised cartel broken**
- **Oversupply brings competition**
- **National market protection concerns**
- **Generation and retail mergers**



EU Internal Electricity Market: Evolution 1



**1st
Liberalization
Directive**

- **3rd party access**
- **Accounts unbundling**
- **Partial market opening**

Adopted 1997

Implementable 1999

**NordPool,
English Pool
Early '90s**

**German, Spanish
and Dutch
Competition
1998**

**French and
other national
reforms**

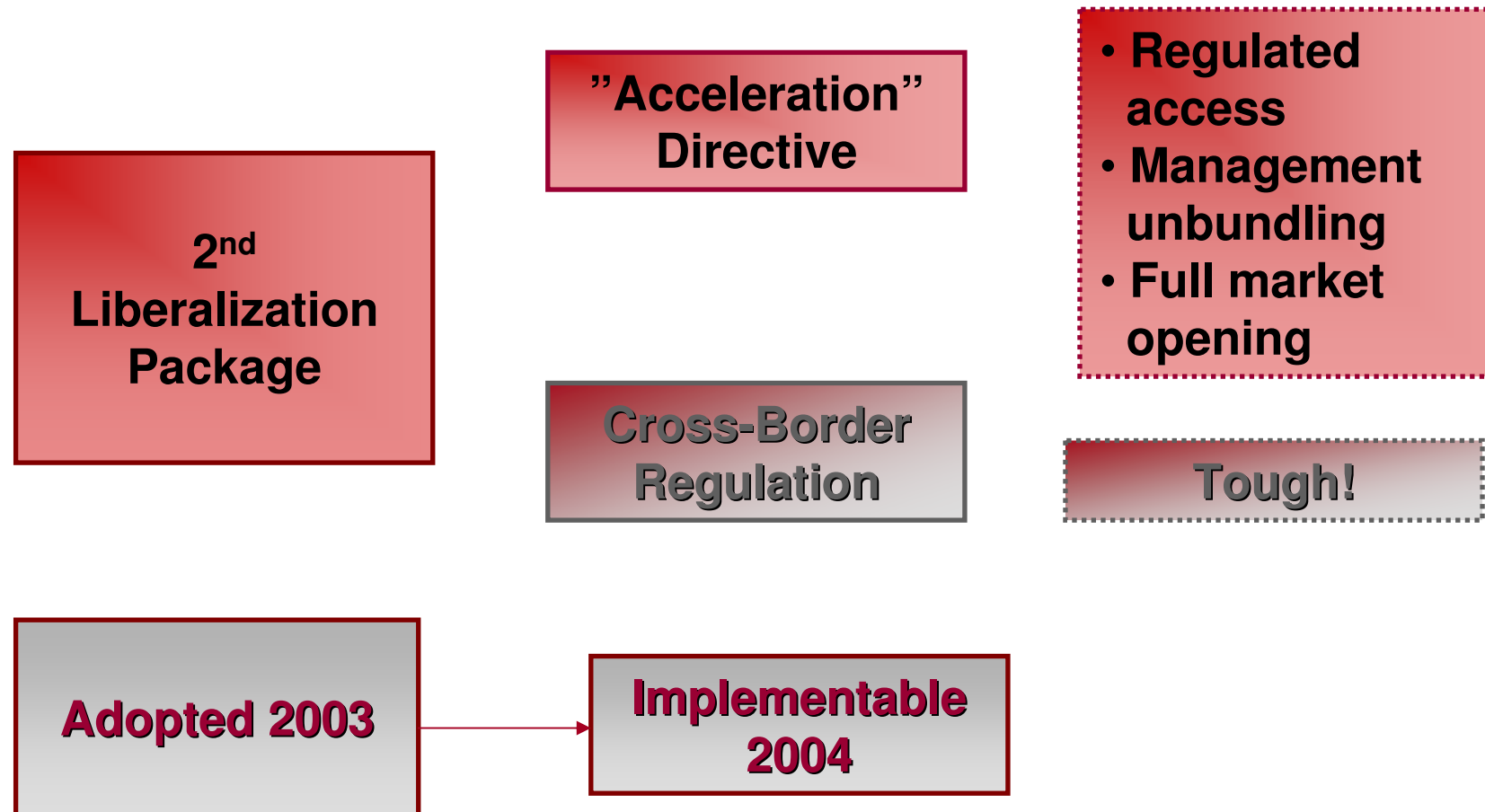
France, Finland, Austria, Denmark



- Liberalisation 'followers'
- No big restructuring
- Regulatory measures to stimulate competition
- Assimilation to neighbour wholesale markets
- Future market coupling challenge



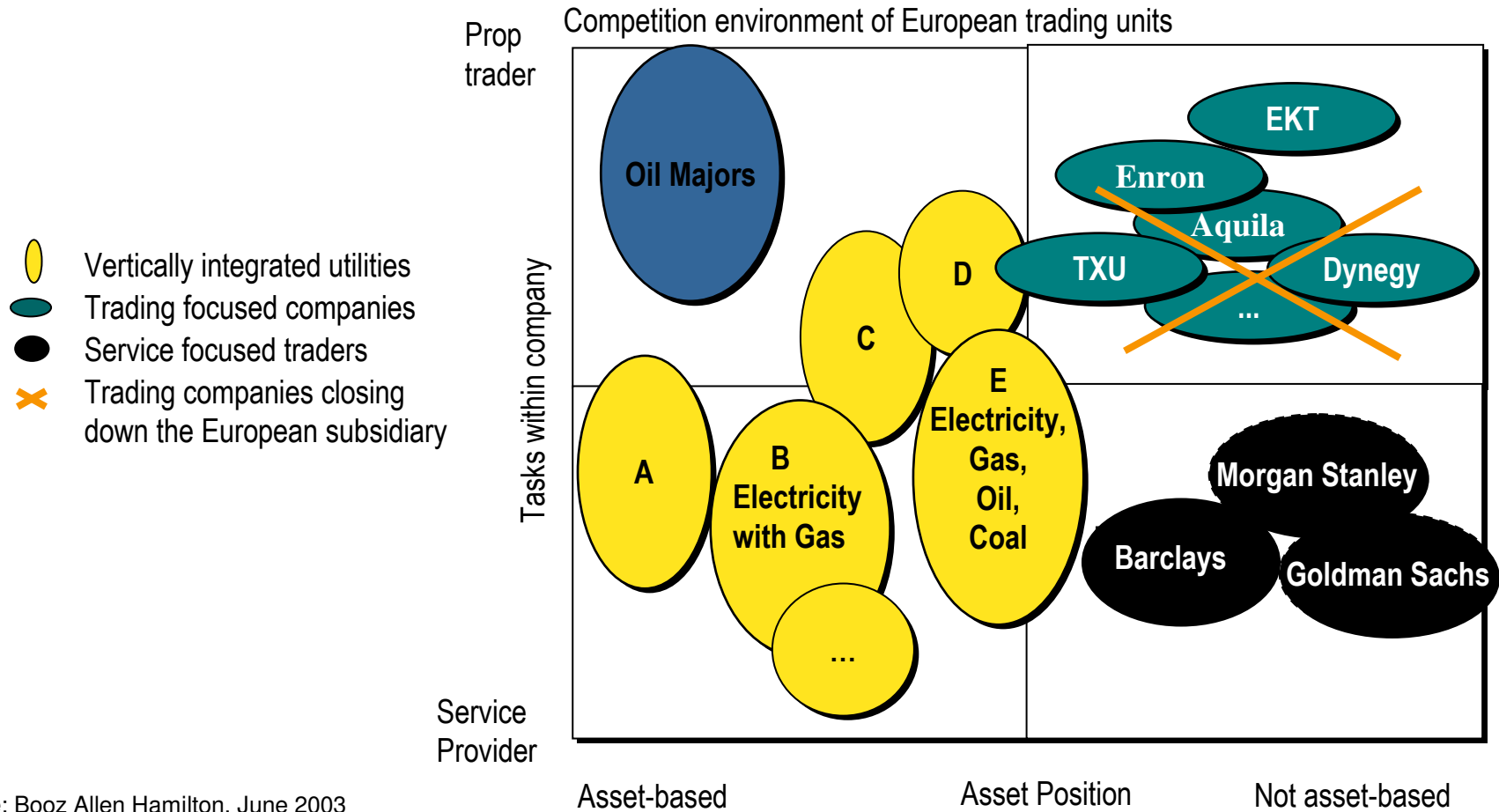
EU Internal Electricity Market: Evolution 2



Withdrawal of international competitors in power 2001 - 2003



Now the competition environment is mainly composed of asset based trading units and some financial service providers

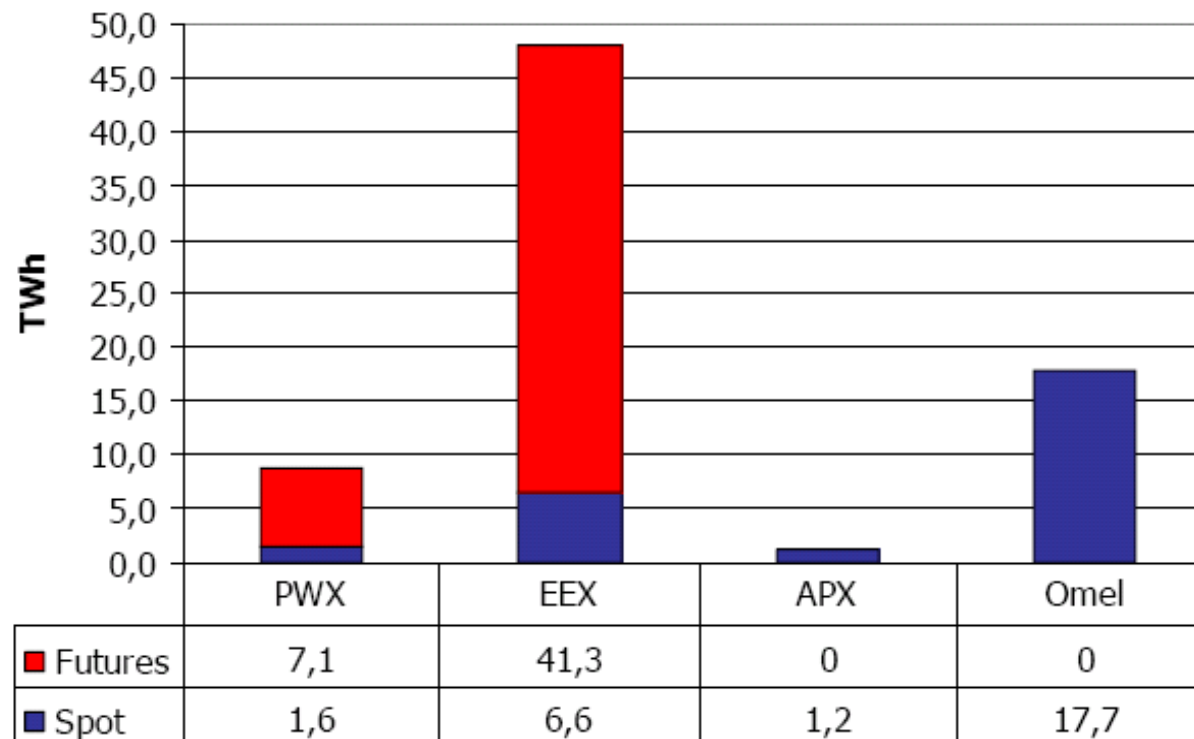


Source: Booz Allen Hamilton, June 2003

Monthly traded volumes in Western Europe 2005



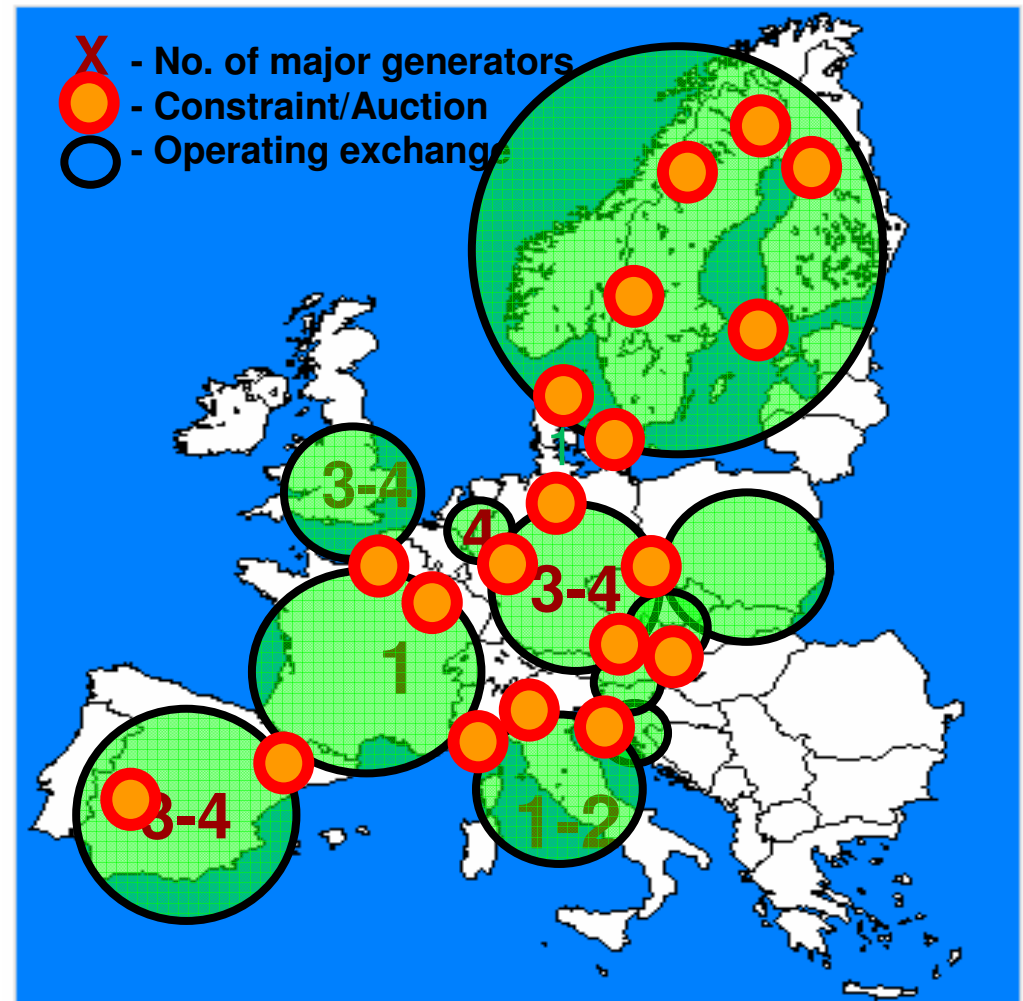
**Average monthly traded volumes during the 2005 2nd quarter
on the main European power exchanges (spot & futures)**



- **Cross-border trading existed before liberalisation but in a discriminatory, non-transparent manner**
- **NTC measure of cross-border transmission capacity outdated and overly restrictive**
- **No real firmness in allocation of transmission capacity**
- **Non-market-based allocation mechanisms persist**
- **Tension between advocates of market coupling and proponents of physical OTC market flexibility**
- **No financial transmission rights yet**

Cross-border constraints in Western Europe

- Many cross-border constraints
- Small # players per area
- Limited cross-border access arrangements



Contrast between commercial and physical views of wholesale power supply (1)



Operator's view (the “physical” dimension)

- Balancing the system
- Controlling the flows
- Maintaining security (guaranteed?)

Trader's view (the “commercial” dimension)

- System is a market place with trading flexibility
- Potential restrictions should be transparent

Relationship between flows and commercial contracts

Contrast between commercial and physical views of wholesale power supply (2)



- **“Border flows” do not coincide with “border commercial exchanges” (known to traders as “nominations”)**
- **Renewable power subsidies distort capacity allocation**
- **Load and generation schedules needed for accurate prediction of commercial trading capacities**
- **Schedules are fixed after end of all trades (within hubs and between them)**
- **In order to trade between hubs, traders need to know the commercially available capacities ...**

A special reason for hedging in electricity: Why power system imbalances are important



- Electricity is a tradable but not tangible commodity and cannot be stored
- Unpredictable weather conditions and load (demand)
- Trading for the day ahead, and not closer to the delivery time, is most liquid market
- Unpredictable failure of a production unit or transmission line

**The solution to maximise efficiency and competition
is to establish a balancing market**

A special reason for hedging in electricity: A balancing market?



- **Unpredictable imbalances between production and consumption within each day**
- **Market alternative to regulated pricing by TSO**
- **Buy and sell prices for market participants' power imbalances**
- **Intra-day and then real-time trading, up to one hour in advance of delivery/ off-take**
- **Producers, traders and consumers as participants, who can quickly respond to unanticipated power imbalances**
- **Reduction in TSO's costs of redressing imbalances**

A special reason for hedging in electricity: Successful operation of a balancing market



- **Balancing market prices reflective of the real-time supply-demand situation could underpin a liquid and transparent bilateral contract market**
- **Good liquidity of standardised products on day-ahead and intra-day markets would be a sign that the balancing market is functioning effectively**
- **The formation of balancing prices needs to be described in clear and transparent rules (TSO/ MO /Regulator) and be facilitated across national borders**

DG TREN: Internal market and progress in liberalization

- Key industry associations asked for views
- Member State implementation reports underway
- Strategic review expected by January 2007

DG COMP: Competition in the electricity and gas markets

- Launched in 2005
- Final report expected by January 2007
- Case investigations being pursued, based on investigated facts

- **Transposition and implementation of the EU second internal energy market legislative package**
- **Establishment of regulators with sufficient resources, true degree of independence and enforcement powers**
- **Degree of true customer choice**
- **Distortions caused by regulated tariffs and price caps**
- **Effectiveness of management and corporate unbundling**
- **Likely need for a third legislative package**

DG COMP main subjects (1)

Market conditions



- **Wholesale market mechanisms: Sales and pricing, procurement, planning of generation**
- **Liquidity in the market: Size of markets, vertical integration, long-term contracts**
- **Network issues affecting trade: Network capacity assessment, effective use, long-term reservations**
- **Retail experience of large customers: Procurement, pricing, network information**

DG COMP main subjects (2)

Competition conditions



- **Concentration and market power: Market shares, power exchanges, trading platforms, market power and price information**
- **Network use and impact of its constraints: Capacity availability and use, allocation methods, network constraints, anti-competitive practices**
- **Network operators: Vertical integration, switching, anti-competitive practices**
- **Transparency and supervision: Information needed to trade, supervision of wholesale markets**

- **Wealth of data**
- **Deciding on precise geographic and product scope of relevant markets under investigation**
- **Overlap of review with national authorities (Italy, Belgium, and Germany)**
- **Overlap of review with merger control proceedings underway or due**
- **Disentangling price increase effects in the wholesale power markets (including “cost of carbon”)**

- **Divergence since 2002 of wholesale power prices in certain geographic markets from demonstrable cost base (capital and operating)**
- **Upward variations since 2004 in the spread between wholesale power prices and average price of power to medium sized industrial users**

- **Negative effects on consolidation within one geographic market between a dominant power player and a dominant gas player**
- **Wholesale gas pricing, the contractual linkage with oil products and the lack of access to gas for new entrants**
- **Improving access to capacity in the main gas transit and storage infrastructure**

- **Liberalisation of the power market is still at a delicate stage in many European countries**
- **Significant physical challenges remain before traders can expect big increases in liquidity beyond the borders of the most developed national wholesale markets**
- **Natural imbalances between supply and demand near to real time create a special need for hedging instruments**
- **Competition and customer choice are under threat from structural distortions and Member State energy or industrial policies**