Institute of Energy for South East Europe (IENE)

3rd SE Europe Energy Dialogue

ENERGY COOPERATION AMONG THE SEE ENERGY COMMUNITY TREATY STATES

Dr. Evangelos Lekatsas

Chairman of Hellenic Transmission System Operator S.A.

Thessaloniki, June 18-19th, 2009

HTSO
ΔΕΣΜΗΕ

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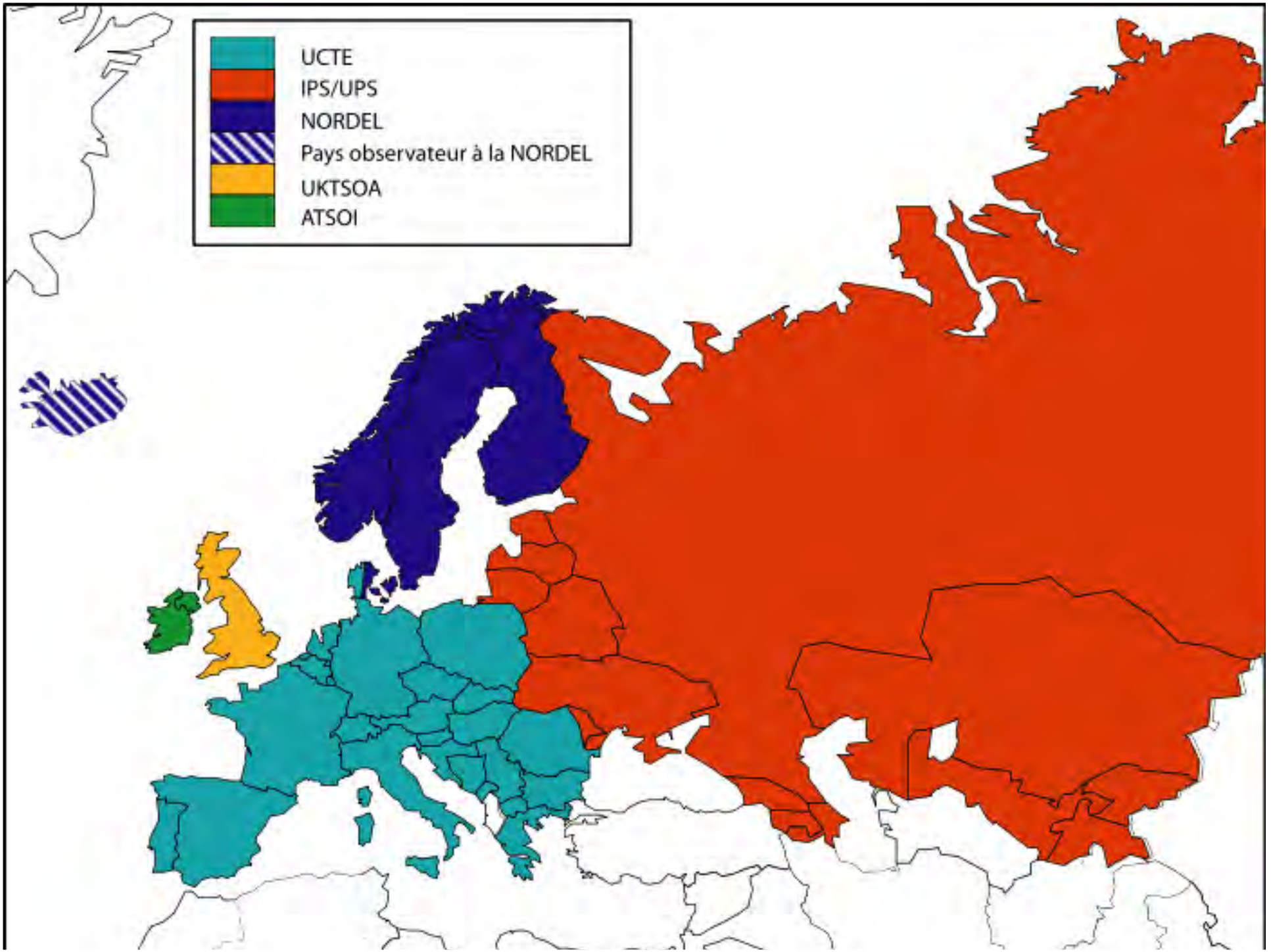
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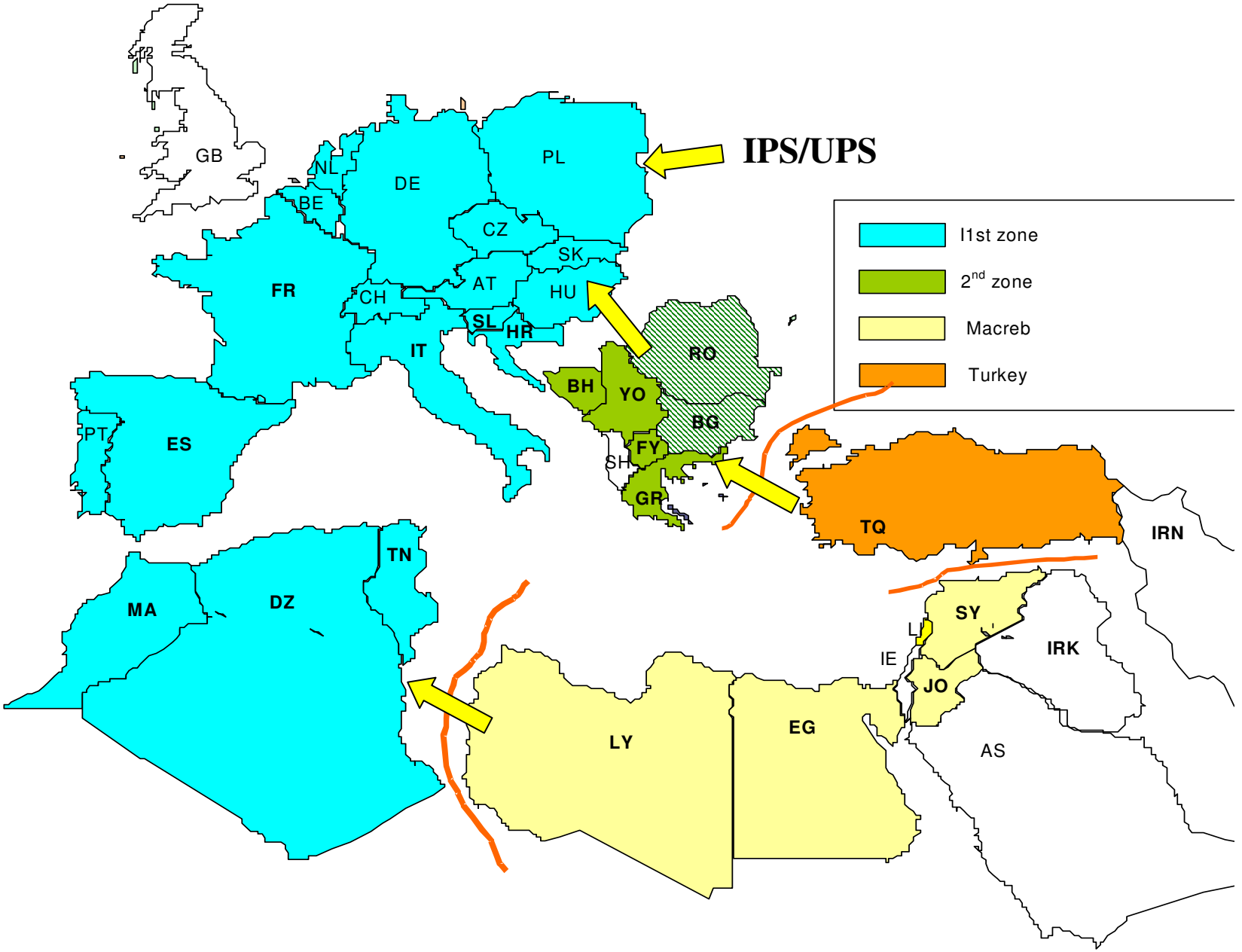
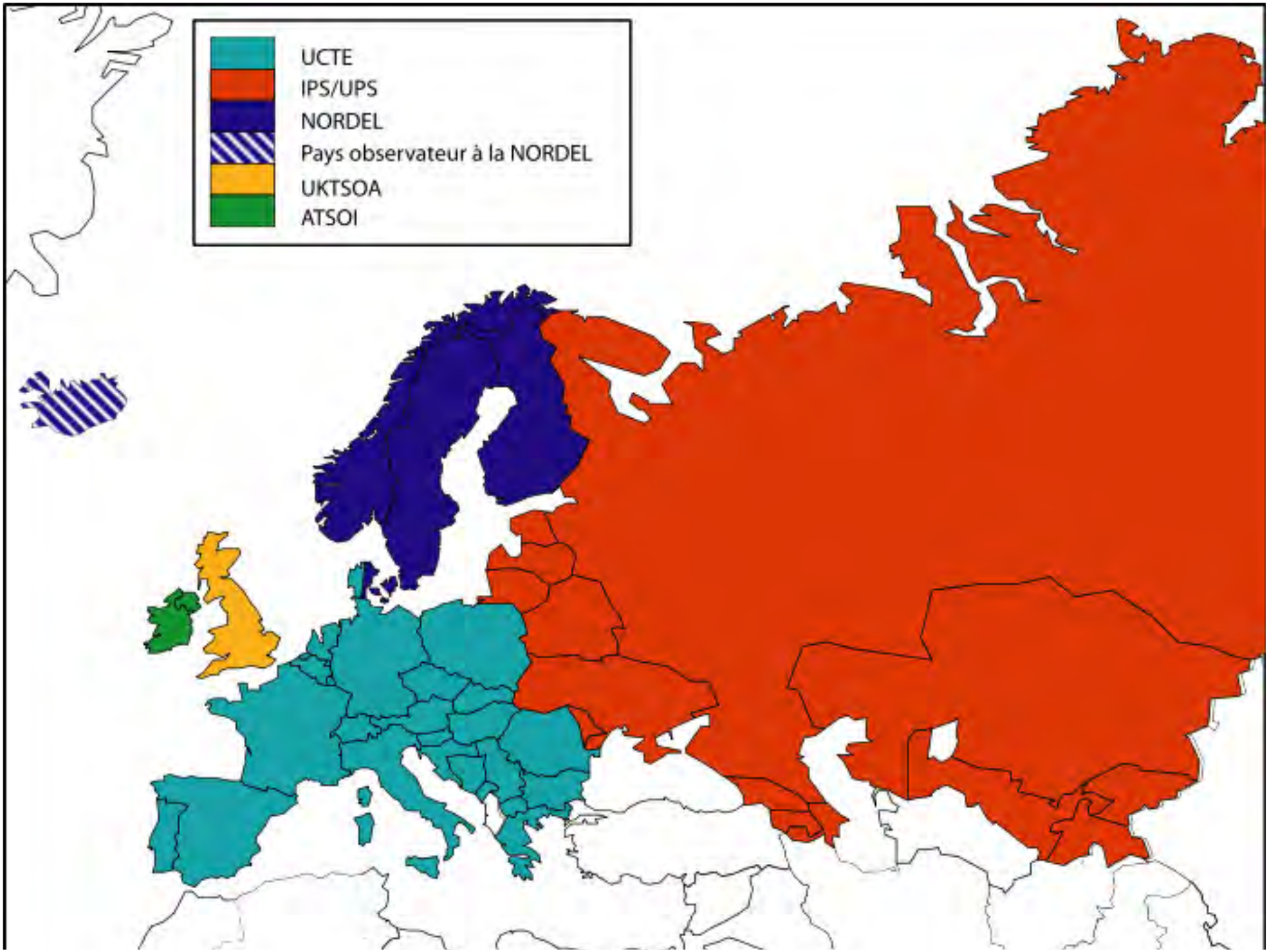
UCTE and its Expansions

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DC Links

DC Links technology is a:

- **relatively easy to implement,**
- **proven, and reliable,**
- **non-synchronous connection technology,**

  that minimizes the influence of connected power systems on each other.

Islanding Operation (I)

- **Bilateral agreements between neighbouring countries to improve or build new interconnecting infrastructure and operate it by islanding a small part of the network of the one country and attaching it to the system of the other country may be a temporary, though not completely efficient, method of cooperation.**

Islanding Operation (II)

There are at least three cases where such a method has already been or will be applied:

- **The thermal power station of Burshtyn together with the substation of Mukacevo have been separated (islanded) from the rest of the Ukrainian system and have been attached to the Romanian system and to the Hungarian system, thus injecting power to UCTE.**
- **In Bulgaria, the thermal power station Maritsa Istok 3 has, in the past, been attached to the Turkish power system.**
- **A similar islanded operation of a part of the Turkish system (in Babaeski) with the Greek system can be applied, temporarily, using the new 400kV interconnection line between the two countries, until the whole Turkish system is finally accepted to operate in full synchronous mode with UCTE.**

Infrastructure Investments in SEE (I)

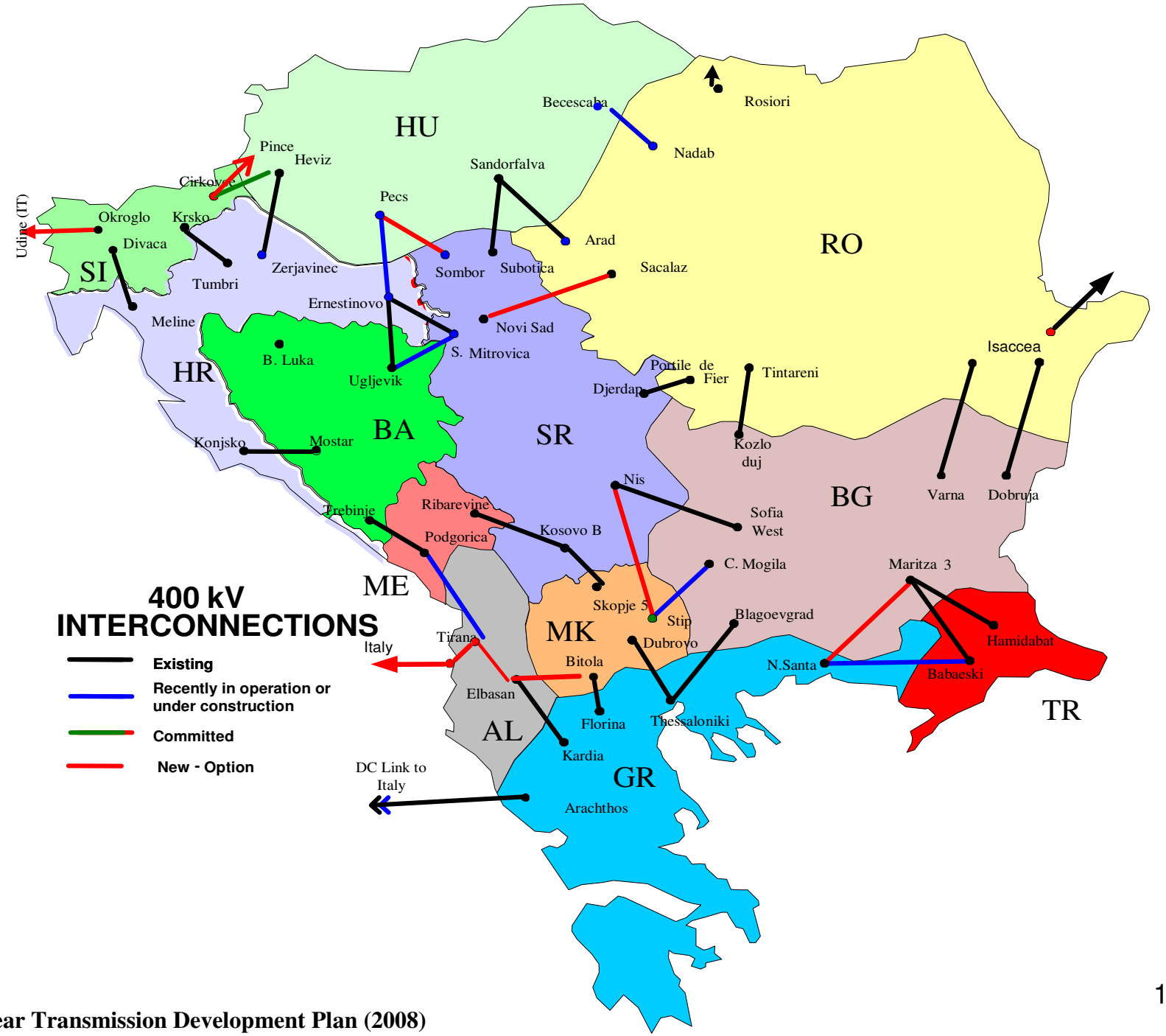
- **We all agree that cross-border trade is of extreme importance for all our countries.**
- **To exploit the high energy trade potential of the region we should undertake concrete measures to overcome existing differences in traditions, cultures, economic level, and bureaucratic status and to adopt the appropriate legislation in order to encourage foreign investments and free trading.**
- **We also need to strengthen the existing Interconnections and build new Infrastructure in order to enhance the Net Transmission Capacities available for Cross Border Trading.**

Infrastructure Investments in SEE (II)

- **Infrastructure across the borders is an important prerequisite for an integration of the electricity markets of SEE countries. If there is a need for developing infrastructures, investments should be carried out in a co-ordinated way and follow market integration.**
- **Improving the infrastructure can increase the security of supply and contribute to a better environment and increased competitiveness.**
- **For these reasons supporting of investments in infrastructure is sine qua non.**

Infrastructure Investments in SEE (III)

- **There are many differences among the national power systems of the region, in terms of size, power mix and even load profiles.**
- **Moreover, as a result of different economic conditions, there are varying projects for the development of the power systems in each country.**
- **In what follows we present only those projects that are of multinational interest.**



Source:
UCTE 10 Year Transmission Development Plan (2008)

Energy Community (I)

- **In an open electricity market load flows are not only caused by the current regional demand and production, but also influenced further on by the different prices of various regions of Europe.**
- **Thus, the regional energy co-operation is of outmost importance and has two targets:**

- **-to ensure a secure energy supply to all customers**
- **-to minimize the investment costs.**

- **The Energy Community has as its task to organize the relations between the Parties, to harmonize network access rules, to facilitate Cross Border Trading, to mitigate congestion problems that impede free trade, and at the same time to secure the operation of the interconnected systems and create a legal and economic framework in relation to Energy.**

Energy Community (II)

- **The main goals are:**
- **to create a stable and regulatory market framework capable of attracting investment;**
- **to create a single regulatory space for trade;**
- **to enhance security of supply;**
- **to improve the environmental situation and to develop electricity and gas market competition on a broader geographical scale in accordance with the acquis communautaire as established in articles 81, 82, 86(1) and 86(2) and 87 of the EC Treaty and described in detail in EU Directives 2003/54 and 2003/55 for electricity and gas respectively, as well as in Regulation 1228/2003.**

- **The ultimate aim is to have a single regulatory space for electricity and natural gas trade in the region that will help as a prototype for the whole EU in its way towards the ultimate goal of creating a single Internal Electricity Market in Europe.**

Obstacles (I)

- **Some progress has been made so far within the Energy Community. Removal of barriers to trade is a key issue to facilitating the market.**
- **It is worth to mention here that according to the European Internal Market for energy rules, import and export monopolies are not permitted, and the countries can not levy import and export duties for physical and financial cross-border transactions. However the progress so far is not satisfactory. The development of a regional electricity market is a project far more complicated than the liberalization of a national electricity market.**

Obstacles (II)

The project is even more difficult and challenging in the region of the SEE countries, for, in this case, one must take into account the following important issues:

- **The SEE region consists of countries with various national, religious and cultural origins.**
- **Most countries of the region are going through a transition period that involves structural, political, and economic changes.**
- **The state owned, vertically integrated utilities covering all stages of power generation, transmission, distribution and supply has led to the development of national electrical systems with a number of shortcomings, especially with respect to the proper utilization of the investments.**
- **There are wide variations between the countries in terms of**
  - **-their existing and future internal electricity market structures,**
  - **-the pace at which reform may take place,**
  - **-the changing demand patterns and the fuel supply situation.**

- **As a starting point, it can not be assumed that all countries will have the same need or desire to trade in a similar manner at the time when a regional market is initiated. It may therefore be desirable to establish a market structure that has the flexibility to cope with the differing possibilities to trade.**

A Staged Approach (I)

- **The establishment of a regional market in SEE is expected to have immediate positive effects in system reliability, economies of scale in planning, constructing and operating generation and transmission systems. In addition to these immediate benefits the generation of a regional market will exercise competitive pressures on existing systems, increase their efficiency and encourage inflow of private capital.**
- **The regional market should ideally allow each country to have maximum flexibility in determining what capacity and energy it may wish to buy or sell and the type of transaction that it may wish to use. An efficient market design should allow market participants a maximum choice in trading opportunities.**

A Staged Approach (II)

- **A prerequisite for the successful integration of the electricity systems of the SEE Region is the development of national system operators, independent of commercial interests.**
- **The need to create fully unbundled TSOs is a key requirement to promote a functioning market development in South East Europe.**
- **Collaboration and co-ordination between the system operators is a prerequisite for the development of interconnected systems, with a number of transmission and distribution systems linked together by means of one or more inter-connectors.**

Conclusions (I)

- **Building new interconnectors is the relatively easy part. The creation of strongly harmonized market arrangements is the most difficult and challenging issue. It requires the strong commitment of all governments to develop the appropriate and harmonized legislation and to create a Coordinated Auction Office, as has been already proposed in the Athens Forum 3 years ago, in order to apply common procedures for cross border congestion management.**

Conclusions (II)

- **The region of SEE countries is characterized by a number of different, frequently separated, electricity "markets" in various stages of early development. In some cases the pricing mechanisms adopted are inadequate to encourage long-term investment in new electricity generation capacity. In most cases this is due to the fact that retail prices, as set by governments, are far below the cost of new entry. It will be a great challenge for the politicians to provide the conditions for consumers to choose their suppliers, and, at the same time to convince them of the need to raise prices up to the level of real costs. The situation is even more difficult in those countries with economies in transition in which the rates of collecting electricity bills are still very low. It is obvious that such obstacles can only be overcome when the economies of the countries converge. And this needs time.**

Thank You for your Attention !