## Integrating Internal and Interconnecting External Systems

The integration of internal systems means continuous cooperation with those parts of Continental European synchronous area that are not yet fully compliant with the standards defined in the Operation Handbook (OH), in order to help them meet these standards within the shortest possible time. At present, this is for instance the case with the Albanian transmission system.

The integration of external systems is related to the extension of the Continental European transmission system, which can be done by High Voltage Direct Current lines (asynchronous interconnection) or Alternative Current lines (synchronous interconnection).

In both cases, a thorough investigation and evaluation of possible technical requisites is necessary.

## **Project Group Turkey**

The project group responsible for the synchronous interconnection of the Turkish system with the system of the Regional Group Continental Europe (RG CE) is described here as an example of system integration. The interconnection was established on 18 September 2010 for a trial period of one year. In case the trial operation is successful, the Turkish and the Continental European systems will remain interconnected on a permanent basis.

The role of the Project Group Turkey is to realize the project in the most efficient way, in order to meet deadlines and development milestones, as well as ensure quality of results and reports. The project group works on an open timeline under the mandate of RG CE, and as an internal structure of the latter.

The Project Group Turkey elaborated a comprehensive document entitled "Contractual Agreement", which includes all technical, organisational and legal issues needed as preconditions for the interconnection of the Turkish Power System to the Continental European synchronous area. The Contractual Agreement reflects the results and the recommendations of the complementary static and stability studies and has been signed on 18 December 2009 by the following TSOs: HTSO (Greece), ESO EAD (Bulgaria), Amprion (Germany), Transpower (Germany; now TenneT TSO GmbH), and TEIAS (Turkey).

The Project Group Turkey is responsible for the management of the overall process of the Contract execution regarding deadlines and administrative aspects, and it monitors the implementation of the measures stated in the Contractual Agreement, the mandatory final tests of the Turkish Power System, and the trial parallel operation.