

## **INTRODUCTION**

***[This introduction is not an integral part of the Grid code]***

*The objective of this introduction is to summarise:*

- (a) the nature and objectives of the Grid code and its area of application;*
- (b) its European and Italian national legal context;*
- (c) the description of the grid and the activities carried out by the Operator.*

**a) *Nature and objectives of the Grid code and its area of application***

*This document, named the Code for transmission, dispatching, development and security of the grid, (or the Code) governs the procedures regarding the activities of connection, management, planning, development and maintenance of the national transmission grid, as well as dispatching and measurement of electrical energy.*

*More specifically, the Grid code sets forth transparent, non-discriminatory regulations for:*

- (i) access to the grid and its technical regulation;*
- (ii) development, management, and maintenance of the grid;*
- (iii) the performance of dispatching services;*
- (iv) supply of services of measurement and settlement of financial charges connected to the aforementioned services; and*

(v) *security of the national electricity system.*

*Said document has been prepared in compliance with Art. 1, paragraph 4 of Prime Ministerial Decree 11 May 2004, which regulates the criteria, methods and conditions for unifying the ownership and management of the national electricity transmission grid.*

*The Code, drafted in compliance with the directives from the Italian Authority for Electricity and Gas as set forth in resolution no. 250/04, was approved, pursuant to and in accordance with the Prime Ministerial Decree, by the Authority with the resolution no. 79/05 and by the MPA. The Grid Code entered into force the 1<sup>st</sup> November 2005 pursuant to the resolution no. 226/05.*

*The further amendments to the Code have been approved by the Authority with the resolution no. 49/06 and by the MPA.*

**b) *European and Italian national legal context***

*The process of liberalisation and regulation of the electrical energy market was begun with Directive 96/92/EC, which was subsequently repealed by Directive 2003/54/EC, in force from 1 July 2004.*

*The European law was applied nationally in Italy with Legislative Decree no. 79 dated 19 March 1999, ("L. Decree no. 79/99"), subsequently amended by Law no. 290 dated 27 October 2003, which sets forth urgent instructions for the security of the national electricity system and for electric recovery.*

*More specifically, said law delegated to Prime Ministerial Decree (DPCM 11 May 2004) the definition of criteria, methods and conditions for unifying the ownership and management of the national electricity transmission grid and for the management of integrated undertakings, while respecting the public*

*interest in connection with the security and reliability of the national electricity system and the commercial autonomy of the current owners.*

*This Code was drafted in compliance with the electricity industry laws and regulations in force at the moment of its application, as well as in compliance with the “Concession to Gestore della Rete di Trasmissione Nazionale S.p.A. (Operator of the National Transmission Grid plc) of transmission and dispatching of electrical energy in the national territory” granted with the Decree from the Minister of Productive Activities on 20 April 2005, published in the Official Gazette no. 98 on 29 April 2005.*

**c) Description of the grid and the activities carried out by the Operator**

*The national transmission grid is composed of a group of lines along which electrical energy flows, which connects the production centres to the consumption centres, and a group of stations necessary for the transformation of energy from a higher voltage to a lower voltage, as well as remote control and telemetry systems.*

*The Italian grid is characterised by three levels of voltage: 380 kV, 220 kV, and 150-132-120 kV.*

*The 380 kV system, interconnected with the European electricity system, constitutes the primary transport network which conveys the electrical energy produced by most of the power generation plants to the most important junction points for transformation to lower voltage levels.*

*The 220 kV system is fed by a non-insignificant percentage of power plants, and, in part, carries out the distribution of high voltage.*

*The 150-132-120 kV system has the role of high voltage distribution, feeding the HV/MV primary stations or directly providing to high voltage utilities.*

*The sphere of the national transmission grid, defined with Ministerial Decree on 25 June 1999, was subsequently expanded with the Decree from the Ministry of Productive Activities 23 December 2002.*

*The latter decree establishes that, aside from elements in the grid which are subject to development, and hence are inserted in the Development Plan (see [Chapter 2](#)) in virtue of the Ministerial Decree of 1999, the Development Plan also includes elements of the grid which are not part of the NTG, but accessory to its operation (for example, elements of distribution grids, high voltage plants owned by producers, users, etc.), which the Operator intends to purchase.*

*As governed by the Concession, the Operator, in carrying out his own activities, performs for users the services briefly described below.*

**Transmission service.** *The service of transport and transformation of electrical energy along the national transmission grid, from the production plants and lines interconnected to foreign countries to the local distribution grids. This service includes the activities of connection, development, use and maintenance of the grid.*

**Dispatching service.** *The service aimed at maintaining the balance between the input and withdrawal of electrical energy, with necessary reserve margins. The service consists in activities aimed at issuing instructions for the coordinated use and operation of production plants, the transmission grid and ancillary services.*

**Metering service.** *The activity aimed at obtaining the measurements of electrical energy in the points of energy input, withdrawal and the interconnection points, and the recording of energy flows of the various users.*

**Metering aggregation service.** *The activity aimed at collecting the measurements reported by the distribution companies as well as the*

*measurements of electrical energy regarding the points of energy input located within the Operator's Grid.*

*In addition to the abovementioned services, the Operator shall collect statistical data regarding the production and consumption of the national electricity industry, process such data and make it available by publishing specific documentation.*

*The Operator's site includes the reference documentation for the matters governed by this Code, both for information purposes, and technical, including a detailed and updated description of the NTG.*