



**TRADE RESTORATION PLAN
OF BUDAPEST STOCK EXCHANGE PLC.**

1. Introduction

Since its foundation, Budapest Stock Exchange (BSE) has paid particular attention to the management of its operational risks and to taking measures to reduce them, which include human, IT, environmental risks and risks arising from the complexity of BSE's systems and processes.

BSE applies both preventive and remedial precautions in order to reduce the negative effects to its services to an acceptable level in the event of a disruption (incident) resulting from any negative event. In line with this, BSE has developed a multi-level protection to ensure the continuous and uninterrupted trading on its markets.

BSE summarizes the most important guidelines regarding incidents that may affect the BSE's services in this document for market participants, making the operation of the BSE markets as transparent as possible.

This document contains the general principles related to the management of incidents involving BSE. BSE sets out its applied guidelines in this document regarding incident management, and although the rules of BSE had been drawn up taking these guidelines into account, it should be noted that BSE may deviate from these guidelines in justified cases, in order to effectively manage incidents within the framework of the market (regulated market, BÉTa market, Xtend market, Xbond market) regulations and of other exchange and market operator regulations.

In order to manage an incident efficiently and quickly, BSE may take different measures from those contained in this restoration plan, of which BSE shall notify the market participants as soon as possible.

The contents of this document and the action plans included are reviewed and tested by BSE at least every two years.

2. Incident management

BSE considers any event as incident which compromises the security of the network or information system, or the security of the data processed, stored or transmitted in it, or affects negatively the availability, confidentiality, continuity and authenticity of the services provided by the BSE. The outage or suspension of trading is considered a serious incident affecting the continuity of BSE's services.

In the pre-incident preparation phase, BSE takes appropriate measures to prevent and to manage incidents, in particular:

- providing up-to-date documentation, particularly including incident management rules, business continuity and data recovery plans, and relevant communication rules;
- appointing persons responsible for incident management;
- regular risk analysis and implementation of appropriate precautions;
- ensuring the high level of expertise and material conditions required for incident prevention and for incident management.

The basic requirement of the incident management process is the continuous monitoring of the BSE systems in order to detect and identify the circumstances indicating possible incidents. Following the detection, BSE applies strict communication protocols to ensure its effectiveness. BSE's primary objective is to eliminate the effects of the incident as soon as possible. During the managing of an incident causing the outage of trade, the IT Division or the Trading, Business Development and Issuing Division – depending on the IT or other origin of the incident – takes the following actions:

- identifies the incident, its effects and characteristics;
- categorize and prioritize the incident;
- start implementing workaround resolutions as soon as possible;

- decide on the possible implementation of business continuity and / or data recovery plans, within the framework of this, forms a pre-defined crisis team in accordance with the BSE's internal rules, uses alternative business processes and/or secondary infrastructure;
- inform the market participants involved in the incident and the competent authorities;
- eliminate the incident and restore the services;
- identifies the root causes of the incident and applies a final resolution and closes the incident.

Following the closure of the incident, the BSE will analyse the incident and its causes by processing the data and any feedback, after which BSE will draw lessons and, if necessary, take appropriate measures to avoid future incidents.

BSE may also use external service providers for its services in the framework of outsourcing. The most significant of these is the outsourcing agreement with Wiener Börse AG, according to which the BSE uses the Xetra T7 trading system to operate the spot market, similarly to many other European stock exchanges. The BSE continuously evaluates and closely monitors the activities of those performing outsourcing activities in accordance with the relevant legal regulations (RTS7¹, CMA²). If the given incident affects an outsourced activity and it occurs in the systems of the person performing the outsourced activity – although it also affects the services of the BSE – the incident management is performed partially or fully by the service provider performing the outsourced activity. In such a case, BSE constantly communicates with Wiener Börse AG through specific, reserved channels and closely monitors the incident management of the person performing outsourced activities and uses its reasonable endeavours to ensure that BSE's principles on incident management apply. Based on the information provided by the person performing outsourced activities on incident management, BSE informs market participants and authorities in accordance with its relevant regulations and legislation.

3. Incidents Affecting Service Level

Despite the high level of incident prevention measures applied by BSE, the risk of an incident resulting in an outage, or a reduction of the BSE's services cannot be excluded.

If an incident causing a decrease in the service level or outage of services, the primary aim of BSE is to restore the normal service levels in all cases, taking into account the interests of market participants as fully as possible. In order to ensure efficient incident management and communication, BSE classifies the incident into several criticality categories and applies the measures adapted, adjusted to the criticality level of the incident.

Communication of Incidents Affecting Service Level

During the management of incidents affecting the service level, BSE pays particular attention to the proper communication of incidents, continuously informing the affected market participants and the competent authorities about the occurrence and managing of such incidents.

BSE shall notify the market participants and any concerned parties immediately, but within 30 minutes at the latest in the event of an outage of trading, and in other cases, not later than within ninety minutes, after the detection of the incident causing outage or reduction of services. Accordingly, the BSE publishes information on the termination of trading and on the market status on its website, when possible, updating it every 30 minutes as the incident management progresses even in the absence of new information. The information provided to market participants must be made available to all persons participating in trading at the same time, and it must be indicated in them that such persons can receive

¹ Commission Delegated Regulation (EU) 2017/584 of 14 July 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying organisational requirements of trading venues

² Act CXX. of 2001 on the Capital Markets

or provide information regarding the outage and resumption of trading through the contacts of the trading division previously provided to them, and reference must be made to the BSE's Trade Restoration Plan and its access point must be provided (preferably with a link). The information must include - if possible - the nature of the incident and the expected time of resumption, and it must also indicate which orders are affected by the incident and in what way, provided that the scope of these orders and the way of involvement can be clearly identified. It is the responsibility of the exchange members to validate the adequacy of orders before the start of trading, and the BSE calls the affected exchange members for this in justified cases. BSE will also publish the most important information on incidents affecting service level on its website. If communication on the website is unavailable, BSE shall take all reasonable measures expected of it to provide the above information to the affected market participants through other communication channels.

Following the closure of an incident affecting the service level, BSE shall inform market participants with the right to trade about the circumstances leading to the market halt and, if justified by the circumstances - in particular, if the consultation with market participants is suitable to support the effective development of BSE incident management practices -, BSE may inform market participants and the Central Bank of Hungary – supervising the capital markets – of any measures taken to avoid outages in the future. BSE may use the possible reactions of market participants to draw lessons in order to prevent future incidents.

Termination and Resumption of Trading

BSE decides on the suspension with an Exchange Resolution in all cases, which is published on its website, and in case of trading halt, BSE publishes a notice of the halt on its website. In the event of suspension or trading halt, both persistent and non-persistent orders expire in the order book and no orders may be placed during the duration of the halt or suspension.

BSE is entitled to suspend all stock exchange trading on the regulated market if, in its sole discretion, it considers that maintaining the stock exchange trading in the given circumstances endangers the legitimate interests of investors, the equilibrium of the market, or the operation of the exchange.

In the regulated market, all stock exchange trading in a given Section shall be suspended if it is requested by at least 5 Exchange Members representing at least 50% of the turnover in that Section referring to technical problems, except for the case when BSE considers that the elimination of the above mentioned Exchange Members from the trading will not endanger the equilibrium of the market or the legitimate interests of the investors. The Exchange Member shall only be entitled to request the Suspension of the entire trading in a specific Section if it cannot participate in the trading in that specific Section at all, or if it can only participate in the trading in that specific Section with considerable difficulties due to technical problems of any kind that occurred due to a reason not attributable to the Exchange Member.

Regarding the MTF markets (BSE, Xtend, Xbond markets), BSE may order a trading halt in the event of a technical disruption, or BSE may suspend trading for any reason. Such a reason might be, in particular, a circumstance which endangers the legitimate interests of investors, the equilibrium of the market, or the operation of the market.

BSE shall take measures to resume trading if, in its opinion, the reasons for the halt or suspension no longer exist and the resumption of trading no longer endangers the legitimate interests of investors, the equilibrium of the market or the operation of the market.

BSE immediately notifies the persons with the right to trade of the resumption of trading, applying the notification rules applicable to trade outage, preferably at least 30 minutes before the first transaction period. The exact time of the trade resumption shall be set out in the notification thereof. When trading is resumed, the exchange members validate the adequacy of their orders in the trading system. Upon the request of the exchange member, the area responsible for trading of the BSE assists in validating the orders. Trading will continue with an order-collection sub-period section, if possible, with the duration

of at least 10 minutes during which orders may be placed, but no transaction concludes.

BSE may decide on the possible extension of the trading hours by resolution, in cases where a) the time of resumption of trading falls after 16:00; b) the technical conditions for the resumption of trading within the day are given; and c) the extension of the trading time is necessary to protect the legitimate interests of investors and preserve the balance of the market or necessary for its orderly operation. BSE shall inform the market participants of the trading time extension in due time, preferably 30 minutes before the end of the trading time specified in the respective exchange resolution on trading parameters. As a general rule, BSE does not extend the trading time beyond 18:00 on a given trading day. When making the decision, BSE takes into account the interests of investors and the criteria for ensuring the orderly operation of the market, in each case individually, considering all circumstances.

The closing price on BSE is considered to be the price of the last transaction according to the General Terms of Service of the respective market, in other words, if no closing auction phase is held on the given trading day due to the outage, the closing price will not be affected and is determined according to the general rules.

Validity and Cancellation of Orders

As a general rule, BSE considers the concluded transactions to be valid. If it is established that the transactions were concluded during such a major malfunction of the Exchange Trading System that results in the non-compliance of the order matching and of the trading with the Exchange Rules, BSE may decide to cancel the transactions. The detailed rules of cancellation are set out in the General Terms of Service of the given market.