



# EECE499 – Computers & Nuclear Energy

**Software flaw caused trading outage, says Nasdaq OMX**

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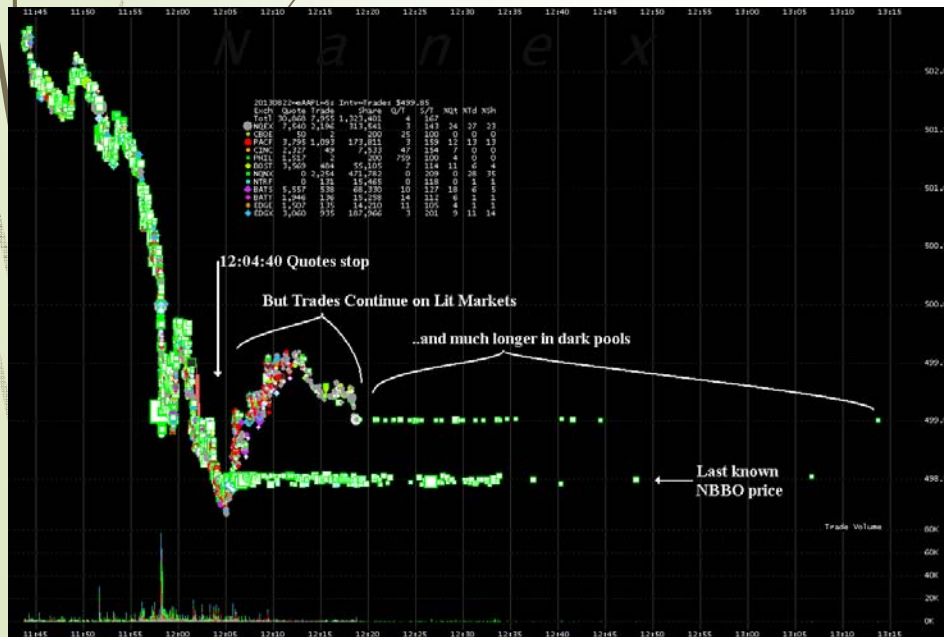
# Summary

Nasdaq OMX has blamed a software fault for its recent trading interruption, as its systems failed to deal with a 26-fold increase in the number of messages received from the New York Stock Exchange's (NYSE) Arca system.



# What and Where happened

New York, NY: The NASDAQ OMX Group, Inc. halted trading on all Nasdaq-listed securities at 12:14 p.m, Aug 22 '13. The alert was posted and all trading operations were suspended for three hours.



# When happened

- The main halt took place on August 22, 2013.
- About a week later, a software fault was blamed for the recent trading interruption.



# How happened

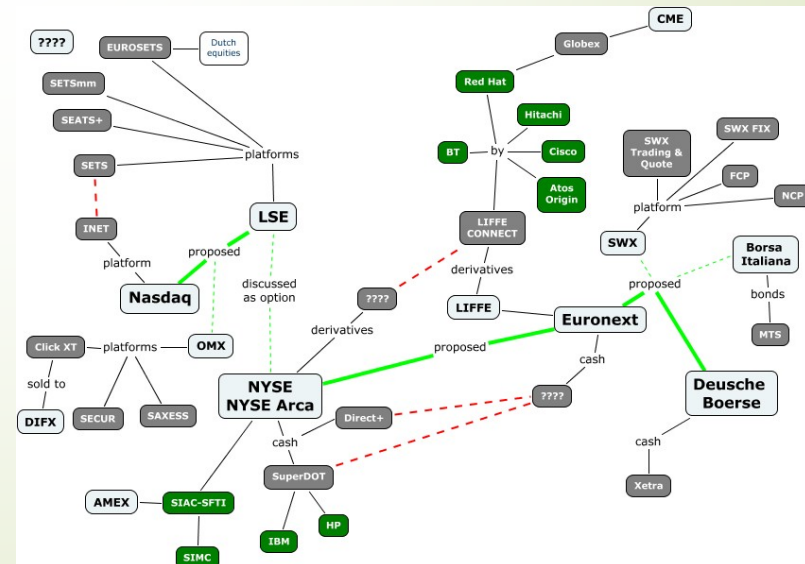


- ▶ An “unprecedented volume of message traffic” was partly responsible for the failure of the Securities Information Processor (SIP) data processing system, which led to trading on the 3-hour exchange halt. Nasdaq OMX’s systems failed to deal with a 26-fold increase in the number of messages received from the New York Stock Exchange’s (NYSE) Arca system.



# Why happened

- The deluge of messages (26000) exceeded SIP's planned maximum capacity (10000), and, according to Nasdaq OMX, revealed a "latent flaw" in the system's software code which prevented backup capabilities built into SIP from coming online. Due to the inability to correctly process quotes, Nasdaq bosses took the decision to halt trading in order to prevent 'information asymmetry' and ensure equal market conditions.



## How it could have been prevented

- ▶ The Wall Street Journal's Market Watch described the trading halt as "extraordinary," affecting more than 2,000 companies including Google, Amazon, Microsoft and Cisco.
- ▶ A Nasdaq alert reported that the UTP SIP is being modified to accommodate new data sets. The new Sale Condition Modifiers and Financial Status Indicators are said to be set for an October rollout.

