

## Annexure 4

## INTIMATION &amp; SUBMISSION OF TECHNICAL GLITCH

## HEADERS

## DETAILS

1. Intimation of Incident (T-day, within 1 Hour of the Incident)	1. Letter / Report Subject -	Reporting of technical glitch
	Name of the Member --	Zerodha Broking Limited
	Member Code -	NSE: 13906; BSE: 6498, MCX: 56550
	2. Designated Officer (Reporting Officer details)	Name: Pankathi H Jain
	3. Date & Time of Incident	05-12-2025; 14:26 PM
	4. Exchanges on which Technical Glitch was encountered (NSE, BSE, MCX, NCDEX, MSEI)	NSE, BSE, MCX
	5. Intimation to clients about the Technical Glitch. (Please attach screenshots of communications to clients)	Twitter, IVR, In-App Notifications
	6. Additional Details about the Technical Glitch, if Any.	Due to a global outage of Cloudflare services, trading operations on our primary trading platform were affected. However, our alternate platform, Kite Backup via Whatsapp was operational and clients were able to manage their positions. The issue was resolved at 14:42 PM.
	1. Date & Time of Incident & Incident duration (in Minutes)	05-12-2025; 14:26 PM; 16 minutes
	2. Incident Description	<p>On 5th December, between 14:26 and 14:42 PM, Cloudflare, the leading global network security provider, suffered a significant global outage. During this 16-minute window, public access to the trading platforms of most major Indian brokers, including Zerodha, was unavailable, in addition to large swathes services across the internet globally across all sectors.</p> <p>We faced a downtime only on the front-end connectivity layer ("Cloudflare edge-layer") to our primary trading platform, Kite. When this Cloudflare edge layer failed, the "path" to our trading engines was blocked, even though our internal systems (OMS, RMS, and databases) remain fully operational and healthy. The issue was resolved by Cloudflare at 14:42 PM.</p> <p>Despite the outage rendering the primary mobile and web apps inaccessible for many, we would like to report that our Kite Backup (WhatsApp-based Disaster Recovery) system remained fully operational. While this global outage prevented our clients from taking fresh positions, the presence of our contingency mechanism, Kite Backup, enabled our clients to manage their existing positions, thereby minimising losses.</p>
	3. Immediate action taken (provide brief details)	<p>All stakeholders &amp; clients were immediately notified of the global outage via IVR, in-app notifications and X (twitter). Our usual website bulletin could not be used as the site was inaccessible, so we relied on these alternate channels. Further, clients were reminded and redirected (using the aforementioned channels), to use our alternate whatsapp-based front-end - Kite Backup, to manage their existing positions till the time the issue was ongoing.</p> <p>Our team also continuously followed up with Cloudflare throughout the duration of the incident providing updates to the stakeholders.</p> <p>Cloudflare resolved the issues at their end, and connectivity to Kite was restored within 16 minutes.</p> <p>Following the issue resolution, our technical team including our CTO, got an immediate technical call with Cloudflare's team to investigate the issue, requested RCA &amp; discussed preventive actions. A detailed report and RCA shall be furnished in due course.</p>
		Since this was a global outage at Cloudflare's end, we are unable to quantify the number of clients who were

<b>2. Preliminary Incident Report (T+1 day)</b>	<b>4. Business Impact</b> <b>i) Number of Clients Impacted</b> <b>ii) Any other impact</b>	<p>Since this was a global outage at Cloudflare's end, we are unable to quantify the number of clients who were impacted. However, we believe this number to be significantly low due to the presence of our alternate whatsapp-based front-end to the trading platform, Kite Backup, which our clients used to manage their positions throughout the duration of the issue. Further, we received about 1200 calls and 500 tickets across all segments.</p> <p>During the incident period, our internal systems (OMS, RMS, and databases) remained fully operational and healthy.</p>
	<b>5. Were alternate trading channels available for clients (list all the alternate channels)</b> <b>i) Was there a spike in traffic on the alternate channels available to clients? If yes, provide details.</b>	<p>Yes. Kite Backup, our WhatsApp-based alternate front-end, remained fully available, allowing clients to manage their existing positions without disruption.</p> <p>i. Preliminary reports indicate that approximately 2,640 unique clients used Kite Backup, placing around 4,018 orders during the incident.</p>
	<b>6. Was the issue caused or encountered by a third-party vendor or service provider?</b> <b>i) Name of the third-party vendor or service provider and a brief description of the issue.</b> <b>ii) Do you have a back-up vendor for the said services</b>	<p>Yes. The issue occurred due to a global outage of Cloudflare services.</p> <p>i) Cloudflare is a global security network provider, content deliver network and powers a vast portion of the modern fintechs and stock broking firms acting as a protective shield between our internet facing trading applications and clients' systems, thereby offering significant protection from numerous DDoS attacks and other kinds of cyber attacks.</p> <p>ii) Cloudflare practically caters to a significant portion of the world's internet-based applications. There aren't any significant players in the market that can match the scale &amp; efficiency of Cloudflare yet. Cloudflare has many number of automated DRs and redundancies built in, where issues in any area of the network seamlessly migrate to other areas instantly. However, this issue was at the configuration level, affecting all the DRs across all networks across countries.</p> <p>However, we have deployed - Kite Backup - an alternate whatsapp front-end to our primary trading application. This essentially mitigates the need to have a backup-up vendor to Cloudflare.</p> <p>That said, we are implementing a failover mechanism that can automatically detect any downtime in the Cloudflare edge layer and alert the ops team, enabling them to switch the trading application's front-end tier to non-Cloudflare endpoints.</p>
	<b>7. Was the issue encountered on the Exchange-provided environment? If Yes, kindly provide details of intimation and communication sent to the Exchnage.</b>	NA
	<b>8. Did you move operations to the Disaster Recover (DR) site? If, Yes, what was the Recovery Time?</b>	NA
	<b>9. Network Connectivity Issues / Hardware Issues / Software Issues / Human Error / Other (Please Specify (if more than one, please separate with commas))</b>	Network Connectivity Issues