



SEBI - Outsourcing of activities by Stock Exchanges and Clearing Corporations

Google Cloud Mapping

This document is designed to help the Stock Exchange and clearing corporations supervised by the Securities and Exchange Board of India (“**regulated entity**”) to consider [the Circular on Outsourcing of activities by Stock Exchanges and Clearing Corporations](#) (“**framework**”) in the context of Google Cloud Platform (“**GCP**”) and the Google Cloud Financial Services Contract.

We focus on the following requirements of the framework: section 4 (Service Providers/Outsourced agencies and Due Diligence), section 5 (Legal Accountability), section 6 (Sub-contracting), section 7 (Contract with Service Provider/Outsourcing agency), section 8 (Monitoring of Service Provider’s/Outsourcing agency’s Performance), section 9 (Business Continuity at the Service Provider), section 10 (Security and Confidentiality of Information), section 11 (Termination Procedures), Section 12 (Access to information and other records) and section 13 (Audit). For each paragraph, we provide commentary to help you understand how you can address the requirements using the Google Cloud services and the Google Cloud Financial Services Contract.

#	Framework reference	Google Cloud commentary	Google Cloud Financial Services Contract reference
1.	4. Selection of Service Providers / Outsourced agencies and Due Diligence	<p>Google recognizes that you need to conduct due diligence and perform a risk assessment before deciding to use our services. To assist you, we’ve provided the information below.</p> <ul style="list-style-type: none">Google Cloud has been providing cloud services for over 10 years, assisting customers across the globe in the financial services, healthcare & life science, retail and public sectors to name a few. More information on Google Cloud’s capabilities is available on our Choosing Google Cloud page.Google Cloud has been named as a leader in several reports by third party industry analysts. You can read these on our Analyst Reports page.Information about our referenceable customers is available on our Google Cloud Customer page. In addition, our Financial Services Cloud Blog and Financial Services solutions page explains how financial services institutions can and are using Google Cloud to help drive business transformation to support data-driven innovation, customer expectations, and security & compliance.Information about Google Cloud’s leadership team is available on our Media Resources page.You can review Google’s audited financial statements on Alphabet’s Investor Relations page.	N/A
2.	4.1. The service provider / Outsourcing agency shall be subjected to appropriate due diligence to assess its capability to employ a high standard of care in performing the service and comply with its obligations under the outsourcing agreement. The due diligence should take into consideration qualitative and quantitative, financial, operational and reputation factors of the service provider / Outsourcing agency.	See above	N/A
3.	4.2. The exchanges and clearing corporations shall ensure that entities having proven high delivery standards or expertise in the field, are selected after a proper due-diligence process which may include parameters like track record, delivery standard, unique selling proposition, service standards.	See above	N/A
4.	4.3. Due diligence undertaken during the selection process should be documented and re-performed periodically as part of the monitoring and control processes of outsourcing.	This is a customer consideration.	N/A
5.	5. Legal Accountability		
6.	5.1. Stock Exchange and clearing corporations shall ensure that there is a legally binding written contract with the service provider / Outsourcing agency.	The Google Cloud Financial Services Contract is the written contract between the parties.	N/A



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Google Cloud Mapping

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7.	5.2. Stock Exchange and clearing corporation shall ensure that the outsourcing arrangement does not in any way diminish its obligations and those of its board and senior management, to comply with relevant laws and regulations, guidelines and other directions.	<p>You operate the services independently without action by Google personnel. You decide which services to use, how to use them and for what purpose. Therefore you stay in control of the relevant activities.</p> <p>Regulated entities can use the following functionality to control the Services:</p> <ul style="list-style-type: none">• Cloud Console: A web-based graphical user interface that customers can use to manage their GCP resources.• gcloud Command Tool: A tool that provides the primary command-line interface to GCP. A command-line interface is a user interface to a computer's operating system.• Google APIs: Application programming interfaces which provide access to GCP.	Instructions
8.	5.3. The board and senior management of the stock exchange and clearing corporation shall retain ultimate responsibility for the effective management of risks arising from outsourcing.	Our Board of Directors Handbook for Cloud Risk Governance provides practical guidance for the Boards of Directors of organizations that are engaging in a new, or substantially increased, adoption of cloud technology perhaps as part of a wider digital transformation of their business. In particular, it explains how adopting cloud technologies, and adjusting business practices, processes and operating models to fully gain from the advantages of cloud, provides organizations with an opportunity to step change their management of operational risk.	N/A
9.	6. Sub-contracting		
10.	6.1. Stock exchanges and clearing corporations shall ensure that outsourced activities are further outsourced downstream only with the prior consent of the exchange and clearing corporation and with appropriate safeguards including proper legal documentation/ agreement.	<p>To enable regulated entities to retain oversight of any subcontracting and provide choices about the services regulated entities use, Google will:</p> <ul style="list-style-type: none">• provide information about our subcontractors;• provide advance notice of changes to our subcontractors; and <p>give regulated entities the ability to terminate if they have concerns about a new subcontractor.</p>	Google Subcontractors
11.	6.2. Stock exchange and clearing corporations shall also consider the ability of the sub-contractor to perform the services as a part of the due diligence process.	<p>Google requires our subcontractors to meet the same high standards that we do. In particular, Google requires our subcontractors to comply with our contract with you.</p> <p>Before engaging a subcontractor, Google will conduct an assessment considering the risks related to the subcontractor and the function to be subcontracted to confirm that the subcontractor is suitable.</p>	Google Subcontractors
12.	7. Contract with Service Provider / Outsourcing agency		
13.	7.1. Contractual terms and conditions governing relationships, functions, obligations and responsibilities of the contracting parties, potential conflict of interests should be carefully and properly defined in written agreements.	The responsibilities and obligations of the parties are set out in the Google Cloud Financial Services Contract	N/A



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Google Cloud Mapping

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14.	7.2. Every outsourcing agreement should address the risks and risk mitigation strategies identified at the risk evaluation and due diligence stages. Each agreement should allow for renegotiation and renewal to enable the exchange to retain an appropriate level of control over the outsourcing and the right to intervene with appropriate measures to meet its legal and regulatory obligations.	<p>Google recognizes that regulated entities require assistance from Google to enable them to ensure compliance with applicable laws and regulations. We are committed to working with regulated entities in good faith to provide this assistance.</p> <p>In particular, we appreciate that you will need to have confidence that the Google Cloud Financial Services Contract continues to support your compliance requirements. We are committed to working with you throughout our relationship to address the impact of changes in law or regulation.</p>	Enabling Customer Compliance
15.	7.3. The agreement should provide for a dispute resolution mechanism, inter-alia specifying the resolution process, events of default, and the indemnities, remedies and recourse of the respective parties in the agreements.	Refer to your Google Cloud Financial Services Contract.	Governing Law; Liability; Indemnification
16.	8. Monitoring of Service Provider's / Outsourcing agency's Performance		
17.	8.1. Stock exchanges and clearing corporations shall maintain the capability and appropriate level of monitoring and control over outsourcing agencies, in order to be able to maintain continuity of business, even in the event of disruption or unexpected termination of the service.	<p><u>Monitoring</u></p> <p>You can monitor Google's performance of the Services (including the SLAs) on an ongoing basis using the functionality of the Services.</p> <p>For example:</p> <ul style="list-style-type: none">• The Status Dashboard provides status information on the Services.• Google Cloud Operations is an integrated monitoring, logging, and diagnostics hosted solution that helps you gain insight into your applications that run on GCP, including availability and uptime of the services.• Access Transparency is a feature that enables you to review logs of actions taken by Google personnel regarding your data. Log entries include: the affected resource, the time of action, the reason for the action (e.g. the case number associated with the support request); and data about who is acting on data (e.g. the Google personnel's location). <p><u>Control</u></p> <p>You operate the services independently without action by Google personnel. You decide which services to use, how to use them and for what purpose. Therefore you stay in control of the relevant activities.</p>	<p>Ongoing Performance Monitoring.</p> <p>Instructions</p>



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Google Cloud Mapping

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		<p>Regulated entities can use the following functionality to control the Services:</p> <ul style="list-style-type: none">• Cloud Console: A web-based graphical user interface that customers can use to manage their GCP resources.• gcloud Command Tool: A tool that provides the primary command-line interface to GCP. A command-line interface is a user interface to a computer's operating system.• Google APIs: Application programming interfaces which provide access to GCP. <p><u>Continuity</u></p> <p>We recognize that, whatever the level of technical resilience that can be achieved on GCP, regulated entities must plan for the scenario in which Google can no longer provide the service.</p> <p>We support such exit plans through:</p> <ul style="list-style-type: none">• Commitment to Open Source: many of our products and services are available in Open Source versions, meaning that they can be run on other Cloud providers or on-premise.• Commitment to common standards: our platform supports common standards for hosting applications in virtual machines or containers, which can be replicated by alternative services on other Cloud providers or on-premise.• Anthos multi-Cloud management: our multi-Cloud management product, Anthos, allows customers to run and manage an increasing range of services in the same way as on GCP across other Cloud providers or on-premise. <p>Refer to our Engaging in a European dialogue on customer controls and open cloud solutions blog post and our Open Cloud page for more information on our commitment to open source and common standards.</p>	Data Export (Cloud Data Processing Addendum)
18.	8.2. Stock exchange and clearing corporation should evaluate its aggregate exposure to a particular service provider / outsourced agency in cases where the institution outsources various functions to the same service provider / outsourced agency.	<p>Google recognizes the importance of continuity for regulated entities and for this reason we are committed to data portability and open-source. Refer to our Engaging in a European dialogue on customer controls and open cloud solutions blog post and our Open Cloud page for more information on how Google's approach to open source can help you address vendor lock-in and concentration risk.</p> <p>To manage concentration risk, you can choose to use Anthos to build, deploy and optimize your applications in both cloud and on-premises environments. Anthos provides a platform to develop, secure and manage applications across hybrid and multi-cloud environments. For more information, refer to the IDC Whitepaper on How A Multicloud Strategy Can Help Regulated Organizations Mitigate Risks In Cloud.</p>	N/A



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Google Cloud Mapping

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19.	8.3. Stock exchange and clearing corporation shall undertake periodic reviews of its outsourcing arrangements to identify new material outsourcing risks as they arise and analyze the impact of the arrangement on its overall risk profile and whether there are adequate internal expertise and resources to mitigate the risks identified.	<p>Google recognizes that you need to plan and execute your migration carefully. Our Migration to Google Cloud guide helps you plan, design, and implement the process of migrating your workloads to Google Cloud to avoid and mitigate risk. In addition, our How to put your company on a path to successful cloud migration whitepaper provides guidance to help with the start of your digital transformation.</p> <p>In addition, our Risk Assessment & Critical Asset Discovery solution evaluates your organization's current IT risk, identifies where your critical assets reside, and provides recommendations for improving your security posture and resilience. Once on Google Cloud, you can leverage Risk Manager to continuously evaluate risk.</p> <p>Our Risk Governance of Digital Transformation in the Cloud whitepaper can help you understand what a cloud transformation means for risk, compliance, and audit functions, and how to best position those programs for success in the cloud world.</p>	N/A
20.	9. Business Continuity at the Service Provider		
21.	9.1. Stock exchanges and clearing corporations should take appropriate measures to determine that its service providers / Outsourcing agencies establish and maintain emergency procedures and a plan for business continuity / disaster recovery, with periodic testing of backup facilities.	<p>Google will implement a business continuity plan for the Services, review and test it at least annually and ensure it remains current with industry standards. Regulated entities can review our plan and testing results.</p> <p>In addition, information about how customers can use our Services in their own business contingency planning is available in our Disaster Recovery Planning Guide.</p>	Business Continuity and Disaster Recovery
22.	10. Security and Confidentiality of Information		
23.	10.1. Stock exchanges and clearing corporations should have adequate procedures in place that require the service provider / Outsourcing agency to protect exchange's proprietary, member-related and potentially market sensitive information and software from unauthorized usage.	<p>The security / confidentiality of a cloud service consists of two key elements:</p> <p><u>(1) Security of Google's infrastructure</u></p> <p>Google manages the security of our infrastructure. This is the security of the hardware, software, networking and facilities that support the Services.</p> <p>Given the one-to-many nature of our service, Google provides the same robust security for all our customers.</p> <p>Google provides detailed information to customers about our security practices so that customers can understand them and consider them as part of their own risk analysis.</p> <p>More information is available at:</p> <ul style="list-style-type: none">• Our infrastructure security page	<p>Confidentiality</p> <p>Data Security; Google's Security Measures (Cloud Data Processing Addendum)</p>



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Google Cloud Mapping

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		<ul style="list-style-type: none">• Our security whitepaper• Our cloud-native security whitepaper• Our infrastructure security design overview page• Our security resources page <p>In addition, you can review Google's SOC 2 report.</p> <p><u>(2) Security of your data and applications in the cloud</u></p> <p>You define the security of your data and applications in the cloud. This refers to the security measures that you choose to implement and operate when you use the Services.</p> <p><u>(a) Security by default</u></p> <p>Although we want to offer you as much choice as possible when it comes to your data, the security of your data is of paramount importance to Google and we take the following proactive steps to assist you:</p> <ul style="list-style-type: none">• <u>Encryption at rest</u>. Google encrypts customer data stored at rest by default, with no additional action required from you. More information is available on the Google Cloud Encryption at rest page.• <u>Encryption in transit</u>. Google encrypts and authenticates all data in transit at one or more network layers when data moves outside physical boundaries not controlled by Google or on behalf of Google. More information is available on the Google Cloud Encryption in transit page. <p><u>(b) Security products</u></p> <p>In addition to the other tools and practices available to you outside Google, you can choose to use tools provided by Google to enhance and monitor the security of your data. Information on Google's security products is available on our Cloud Security Products page.</p> <p><u>(c) Security resources</u></p> <p>Google also publishes guidance on:</p> <ul style="list-style-type: none">• Security best practices• Security use cases	



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		<ul style="list-style-type: none">Security blueprints	
24.	11. Termination Procedures		
25.	11.1. Stock exchanges and clearing corporations should include contractual provisions relating to the termination of the contract and appropriate exit strategies inter-alia specifying events that may trigger termination of the service contract, what will occur on termination and strategies for managing the transfer of the activity back to the stock exchange and clearing corporation or to another party.	<p><u>Termination rights</u></p> <p>Regulated entities can terminate our contract with advance notice for Google's material breach after a cure period.</p> <p>Regulated entities can elect to terminate our contract for convenience with advance notice if necessary to comply with law and if directed by a supervisory authority.</p> <p><u>Transfer and exit strategies</u></p> <p>Google recognizes that regulated entities need to be able to exit our Services without undue disruption to their business, without limiting their compliance with regulatory requirements and without any detriment to the continuity and quality of their service to their own clients. To help regulated entities achieve this, upon request, Google will continue to provide the Services for 12 months beyond the expiry or termination of the contract.</p> <p>Google will enable you to access and export your data throughout the duration of our contract and during the post-termination transition term. You can export your data from the Services in a number of industry standard formats. For example:</p> <ul style="list-style-type: none">Google Kubernetes Engine is a managed, production-ready environment that allows portability across different clouds as well as on premises environments.Migrate for Anthos allows you to move and convert workloads directly into containers in Google Kubernetes Engine.You can export/import an entire VM image in the form of a .tar archive. Find more information on images here and on storage options here. <p><u>Deletion</u></p> <ul style="list-style-type: none">On termination of the contractual relationship, Google will comply with the regulated entity's instruction to delete Customer Data from Google's systems. For more information about deletion refer to our Deletion on Google Cloud Platform whitepaper.	<p>Term and Termination</p> <p>Transition Term</p> <p>Data Export (Cloud Data Processing Addendum)</p> <p>Deletion on Termination (Cloud Data Processing Addendum)</p>
26.	12. Access to Information and other records		



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Google Cloud Mapping

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27.	12.1. The outsourcing arrangement should provide for the access by the regulatory authority of the records of service providers / Outsourcing agencies and other information relating to the activities that are relevant to regulatory oversight.	<p>Google recognizes that regulated entities and their supervisory authorities must be able to audit our services effectively. Google grants information, audit and access rights to regulated entities, supervisory authorities, and both their appointees.</p> <p>Google recognizes that you expect independent verification of our security, privacy and compliance controls. Google undergoes several independent third-party audits on a regular basis to provide this assurance. Google commits to comply with the following key international standards during the term of our contract with you:</p> <ul style="list-style-type: none">• ISO/IEC 27001:2013 (Information Security Management Systems)• ISO/IEC 27017:2015 (Cloud Security)• ISO/IEC 27018:2014 (Cloud Privacy)• PCI DSS• SOC 1• SOC 2• SOC 3 <p>You can review Google's current certifications and audit reports at any time. Compliance reports manager provides you with easy, on-demand access to these critical compliance resources.</p>	<p>Regulator Information, Audit and Access</p> <p>Customer Information, Audit and Access</p> <p>Certifications and Audit Reports</p>
28.	13. Audit		
29.	13.1. The outsourcing policy document shall act as a reference for audit of the outsourced activities. Audit of implementation of risk assessment and mitigation measures listed in the outsourcing policy document and outsourcing agreement/ service level agreements pertaining to IT systems shall be part of System Audit of Stock Exchanges and Clearing Corporations.	See above	N/A