Google Cloud Mapping

This document is designed to help firms supervised by the Financial Conduct Authority ("**regulated entity**") to consider <u>SYSC 8.1 General Outsourcing Requirements</u> (the "**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: SYSC 8.1.1 to SYSC 8.1.9. 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	G re
1.	8.1.1(1)	A common platform must: when relying on a third party for the performance of operational functions which are critical for the performance of <i>regulated activities</i> , <i>listed</i> <i>activities</i> or <i>ancillary services</i> (in this chapter "relevant services and activities") on a continuous and satisfactory basis, ensure that it takes reasonable steps to avoid undue additional operational risk; and	You decide which services to use, how to use them and for what purpose. Therefore you stay in control of the relevant activities and can configure the service to avoid undue operational risk. For more information on Google's security infrastructure refer to Row 31.	N,
2.	8.1.1(2)	not undertake the <i>outsourcing</i> of important operational functions in such a way as to impair materially:		
3.	8.1.1(2)(a)	the quality of its internal control; and	 Regulated entities can use the following functionality to control the Services: <u>Cloud Console</u>: A web-based graphical user interface that customers can use to manage their GCP resources. <u>gcloud Command Tool</u>: 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. <u>Google APIs</u>: Application programming interfaces which provide access to GCP. In addition, refer to Row 7 for more information on how you can monitor Google's performance of the Services. 	In
4.	8.1.1(2)(b)	the ability of the FCA to monitor the <i>firm's</i> compliance with all obligations under the <i>regulatory system</i> and, if different, of a <i>competent authority</i> to monitor the <i>firm's</i> compliance with all obligations under <i>MiFID</i> . [Note: article 16(5) first paragraph of <i>MiFID</i>]	Google will fully cooperate with supervisory authorities exercising their audit, information and access rights. For more information on the audit, information and access rights granted to supervisory authorities refer to Row 30.	Er
5.	8.1.1A	Other <i>firms</i> should take account of the outsourcing <i>rule</i> (SYSC 8.1.1 R) as if it were <i>guidance</i> (and as if should appeared in that <i>rule</i> instead of must) as explained in SYSC 1 Annex 1 3.3R(1).	This is a customer consideration.	N,
6.	8.1.2	The application of SYSC 8.1 to relevant services and activities (see SYSC 8.1.1 R (1)) is limited by SYSC 1 Annex 1 (Part 2) (Application of the common platform requirements).	This is a customer consideration.	N,
7.	8.1.3	<i>SYSC 4.1.1 R</i> requires a <i>firm</i> to have effective processes to identify, manage, monitor and report risks and internal control mechanisms. Except in relation to those functions described in <i>SYSC 8.1.5R</i> and (for a <i>common platform firm</i> in article 30(2) of the <i>MiFID Org Regulation</i>), where a <i>firm</i> relies on a third party for the performance of operational functions which are not critical or important for the performance of relevant services	Monitoring the service You can monitor Google's performance of the Services (including the SLAs) on an ongoing basis using the functionality of the Services. For example:	1 01

Google Cloud Financial Services Contract eference		
N/A		
nstructions		
Enabling Customer Compliance		
N/A		
N/A		
Ongoing Performance Monitoring		



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		and activities (see SYSC 8.1.1 R (1)) on a continuous and satisfactory basis, it should take into account, in a manner that is proportionate given the nature, scale and complexity of the <i>outsourcing</i> , the <i>rules</i> in this section in complying with that requirement.	 The <u>Status Dashboard</u> provides status information on the Services. <u>Google Cloud Operations</u> is an integrated monitoring, logging, and diagnostics hosted solution that helps you gain insight into your applications that run on GCP. <u>Access Transparency</u> 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). <u>Incident notification</u> For more information on Google's incident notification process refer to Row 27 	n S d r
8.	8.1.4	For the purposes of this chapter an operational function is regarded as critical or important if a defect or failure in its performance would materially impair the continuing compliance of a <i>firm</i> other than a (<i>common platform firm</i>) with the conditions and obligations of its <i>authorisation</i> or its other obligations under the <i>regulatory system</i> , or its financial performance, or the soundness or the continuity of its relevant services and activities.	This is a customer consideration.	N/ N/
9.	8.1.5	For a <i>UCITS investment firm</i> and without prejudice to the status of any other function, the following functions will not be considered as critical or important for the purposes of this chapter:	This is a customer consideration.	N/
10.	8.1.5(1)	the provision to the <i>firm</i> of advisory services, and other services which do not form part of the relevant services and activities of the <i>firm</i> , including the provision of legal advice to the <i>firm</i> , the training of personnel of the <i>firm</i> , billing services and the security of the <i>firm</i> 's premises and personnel;	This is a customer consideration.	N/
11.	8.1.5(2)	the purchase of standardised services, including market information services and the provision of price feeds;	This is a customer consideration.	N/
12.	8.1.5(3)	the recording and retention of relevant telephone conversations or electronic communications subject to SYSC 10A.	This is a customer consideration.	N/
13.	8.1.5A	Other firms should take account of the critical functions rules (SYSC 8.1.4 R and SYSC 8.1.5 R) as if they were guidance (and as if should appeared in those rules instead of must) as explained in SYSC 1 Annex 1 3.3R(1).	This is a customer consideration.	N/

Google Cloud Financial Services Contract reference

N/A			
N/A			
N/A			

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#	Framework	reference	Google Cloud commentary	Google Cloud Financial Services Contract reference
14.	8.1.6	If a <i>firm</i> (other than a <i>common platform firm</i>) <i>outsources</i> critical or important operational functions or any relevant services and activities, it remains fully responsible for discharging all of its obligations under the <i>regulatory system</i> and must comply, in particular, with the following conditions:	This is a customer consideration.	N/A
15.	8.1.6(1)	the <i>outsourcing</i> must not result in the delegation by <i>senior personnel</i> of their responsibility;	This is a customer consideration.	N/A
16.	8.1.6(2)	the relationship and obligations of the <i>firm</i> towards its <i>clients</i> under the <i>regulatory system</i> must not be altered;	This is a customer consideration.	N/A
17.	8.1.6(3)	the conditions with which the <i>firm</i> must comply in order to be <i>authorised</i> , and to remain so, must not be undermined;	This is a customer consideration.	N/A
18.	8.1.6(4)	none of the other conditions subject to which the <i>firm's authorisation</i> was granted must be removed or modified.	This is a customer consideration.	N/A
19.	8.1.6A	A UCITS investment firm should take account of the provisions that apply to a common platform firm in relation to its <i>MiFID business</i> in accordance with SYSC 8.12G.	This is a customer consideration.	N/A
20.	8.1.7	A UCITS investment firm must exercise due skill and care and diligence when entering into, managing or terminating any arrangement for the outsourcing to a service provider of critical or important operational functions or of any relevant services and activities.	This is a customer consideration.	N/A
21.	8.1.8	ensure that the following conditions are satisfied:	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 information for each of the areas you need to consider in the rows that follow.	N/A
22.	8.1.8(1)	authorisation required by law to perform the outsourced functions, services or activities reliably and professionally;	 <u>Ability</u> Google Cloud has been named as a leader in several reports by third party industry analysts. You can read these on our <u>Analyst Reports</u> page. Information about our referenceable customers (including in the financial services sector) is available on our <u>Google Cloud Customer</u> page. <u>Capacity</u> Google Cloud has been providing cloud services for over 10 years, assisting customers across the globe in the financial services, healthcare & life science, 	N/A



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#	Framework	<pre>c reference</pre>	Google Cloud commentary	G re
			 retail and public sectors to name a few. More information on Google Cloud's capabilities is available on our <u>Choosing Google Cloud</u> page. Information about Google Cloud's leadership team is available on our <u>Media Resources</u> page. You can review information about our mission, philosophies and culture on <u>Alphabet's Investor Relations</u> page. 	
			Google will comply with all laws and regulations applicable to it in the provision of the Services	
23.	8.1.8(2)	the service provider must carry out the <i>outsourced</i> services effectively, and to this end the <i>firm</i> must establish methods for assessing the standard of performance of the service provider;	The SLAs provide measurable performance standards and remedies for the services and are available on our Google Cloud Platform <u>Service Level Agreements</u> page.	S
24.	8.1.8(3)	the service provider must properly supervise the carrying out of the <i>outsourced</i> functions, and adequately manage the risks associated with the <i>outsourcing</i> ;	Supervision by Google senior executives Google executive management reviews and approves all information security policies and sets applicable commitment and direction to achieve the agreed upon Information Security goals.	N
			Google's senior executive is also responsible for approving Google's ISO27001 ISMS and other key compliance frameworks. Google's security management team, with support from our executive team, maintains a robust security infrastructure. Management evaluates, directs and supervises security at an organisational and product level and ensures security is embedded at all levels of our products.	
			Monitoring and risk management by Google personnel	
			Google employs security and privacy professionals, who are part of our software engineering and operations division. Our team includes some of the world's foremost experts in information, application and network security. This team is tasked with maintaining the company's defense systems, developing security review processes, building security infrastructure and implementing Google's security policies. Google's dedicated security team actively scans for security risks using commercial and custom tools, penetration tests, quality assurance (QA) measures and software security reviews.	
			Incident response	
			For more information on Google's incident notification process refer to Row 27.	

Google Cloud Financial Services Contract reference

Services

N/A



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#	Framewor	k reference	Google Cloud commentary	Goo refe	
25.	8.1.8(4)	appropriate action must be taken if it appears that the service provider may not be carrying out the functions effectively and in compliance with applicable laws and regulatory requirements;	This is a customer consideration.	N/A	
26.	8.1.8(5)	the <i>firm</i> must retain the necessary expertise to supervise the <i>outsourced</i> functions effectively and to manage the risks associated with the <i>outsourcing</i> , and must supervise those functions and manage those risks;	Regulated entity expertise This is a customer consideration. Regulated entity supervision For more information on how a regulated entity may supervise and control outsourced functions refer to Rows 3 and 7.	N/A	
27.	8.1.8(6)	the service provider must disclose to the <i>firm</i> any development that may have a material impact on its ability to carry out the <i>outsourced</i> functions effectively and in compliance with applicable laws and regulatory requirements;	Google will make information about developments that materially impact Google's ability to perform the Services in accordance with the SLAs available to you. More information is available on our <u>Incidents & the Google Cloud dashboard</u> page. In addition, Google will notify you of data incidents promptly and without undue delay. More information on Google's data incident response process is available in our <u>Data</u>	/ Sigi Dat	
			incident response whitepaper. For more information on how a regulated entity may monitor Google's performance of the Services, refer to Row 7.	N/A	
28.	8.1.8(7)	the <i>firm</i> must be able to terminate the arrangement for the <i>outsourcing</i> where necessary without detriment to the continuity and quality of its provision of services to <i>clients</i> ;	<u>Cease use of service</u> If you wish to stop using our services you may do so at any time.	Cea	
			Transition 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	Tra	
			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:	Dat	

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N/A
N/A
Significant Developments
Data Incidents (<u>Cloud Data Processing</u> <u>Addendum</u>)
N/A
Ceasing Services Use
Transition Term
Data Export (<u>Cloud Data Processing Addendum</u>)



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#	Framework	x reference	Google Cloud commentary	G re
			 <u>Google Kubernetes Engine</u> is a managed, production-ready environment that allows portability across different clouds as well as on premises environments. <u>Migrate for Anthos</u> 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 and storage options on our <u>Compute Engine</u> <u>Documentation</u> page 	
29.	8.1.8(8)	the service provider must co-operate with the FCA and any other relevant competent authority in connection with the outsourced activities;	Google will fully cooperate with supervisory authorities exercising their audit, information and access rights.	E
30.	8.1.8(9)	the firm, its auditors, the FCA and any other relevant <i>competent</i> <i>authority</i> must have effective access to data related to the <i>outsourced</i> activities, as well as to the business premises of the service provider; and the FCA and any other relevant <i>competent authority</i> must be able to exercise those rights of access;	Google recognizes that regulated entities must be able to audit our services effectively. Google grants audit, access and information rights to regulated entities and supervisory authorities, and both their appointees. This includes access to Google's premises used to provide the Services to conduct an on-site audit.	R C
31.	8.1.8(10)	the service provider must protect any confidential information relating to the <i>firm</i> and its <i>clients</i> ;	The security of a cloud service consists of two key elements: Security of Google's infrastructure Google manages the security of our infrastructure. This is the security of the hardware, software, networking and facilities that support the Services. Given the one-to-many nature of our service, Google provides the same robust security for all our customers. 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. More information is available at: • Our infrastructure security page • Our security whitepaper • Our cloud-native security whitepaper • Our infrastructure security design overview page • Our security resources page	

Google Cloud Financial Services Contract reference

Enabling Customer Compliance

Regulator Information, Audit and Access Customer Information, Audit and Access

Confidentiality

Data Security; Security Measures (<u>Cloud Data</u> <u>Processing Addendum</u>)



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			-
		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:	
		 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 	
		You can review Google's current <u>certifications and audit reports</u> at any time.	
		Security of your data and applications in the cloud	
		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.	
		(a) <u>Security by default</u>	
		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:	
		• Encryption at rest. Google encrypts customer data stored at rest by default, with no additional action required from you. More information is available at: https://cloud.google.com/security/encryption-at-rest/default-encryption.	
		• Encryption in transit. 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 at https://cloud.google.com/security/encryption-in-transit.	
		(b) <u>Security products</u>	
		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	

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			·	
			data. Information on Google's security products is available on our <u>Cloud Security</u> <u>Products</u> page.	
			(c) <u>Security resources</u>	
			Google also publishes guidance on:	
			 <u>Security best practices</u> <u>Security use cases</u> 	
32.	8.1.8(11) the <i>firm</i> and the service provider must establish, implement and maintain a contingency plan for disaster recovery and periodic testing of backup facilities where that is necessary having regard to the function, service or activity that has been <i>outsourced</i> .	contingency plan for disaster recovery and periodic testing of backup facilities where that is necessary having regard to the function, service or	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.	B
		In addition, information about how customers can use our Services in their own business contingency planning is available on the Google Cloud Platform <u>Disaster</u> <u>Recovery Planning Guide</u> page.		
33.	8.1.9	A UCITS investment firm must ensure that the respective rights and obligations of the firm and of the service provider are clearly allocated and set out in a written agreement.	The rights and obligations of the parties are set out in the Google Cloud Financial Services Contract.	N
34.	8.1.10	If a UCITS investment firm and the service provider are members of the same group, the firm may, for the purpose of complying with SYSC 8.1.7 R to SYSC 8.1.11 R and SYSC 8.2 and SYSC 8.3, take into account the extent to which the UCITS investment firm controls the service provider or has the ability to influence its actions.	This is a customer consideration.	N
35.	8.1.11	A firm (other than a common platform firm) must make available on request to the FCA and any other relevant competent authority all information necessary to enable the FCA and any other relevant competent authority to supervise the compliance of the performance of the outsourced activities with the requirements of the regulatory system.	Regulated entities may access their data on the services at any time and may provide their supervisory authority with access.	Re Ci

Google Cloud Financial Services Contract reference

Business Continuity and Disaster Recovery

N/A

N/A

Regulator Information, Audit and Access Customer Information, Audit and Access