Information Security Framework Agreement Version 4.0

DBG Emergency Contact

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Initials:____

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Version 4.0

between

Deutsche Börse AG, 60485 Frankfurt am Main, Germany

- hereafter referred to as DBAG -

and

[Vendor Name], [location and full headquarters address]

- hereafter referred to as Third-party -

PREAMBLE

DBAG and its affiliates (within the meaning of § 15 Aktiengesetz) (DBAG and each of its affiliates may individually or collectively be referred to herein as "Deutsche Börse Group" or "DBG") is a highly reputable international exchange organisation and innovative market infrastructure provider. DBG ensures capital markets that are transparent, reliable and stable. With its wide range of products, services and technologies. DBG organises safe and efficient markets for sustainable economies. DBG strongly relies on the availability, integrity, authenticity, and confidentiality of data and services. To that end, DBG must ensure that these protection requirements are met and maintained throughout its organisation and are equally met where services are provided to DBG. DBG is also obliged under law and regulation to ascertain that third-parties providing services to DBG are accountable for establishing and maintaining Information Security across all service deliveries.

Thus, the **Parties** agree to implement an **Information Security** framework as further set out in this **Information Security** Framework Agreement ("**ISFA**") which **shall** safeguard **Information Security** throughout the entire business relationship of the **Parties**.

1. INTERPRETATION / GOVERNING LAW / MISCELLANEOUS

- (a) This **ISFA** defines **DBG**'s **Information Security** requirements and the corresponding obligations of the **Third-party**. It constitutes a **third-party** beneficiary agreement to the benefit of, and enforceable by, DBAG's **affiliates** (§ 15 AktG), including its **affiliates** listed in Appendix 1 "**Affiliates**" ("echter Vertrag zugunsten Dritter").
- (b) This **ISFA shall** be effective as of the date of last signature below and **shall** be valid for an initial term of 3 years upon the effective date and **shall** renew thereafter for renewal terms

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of further 2 years if on the last date of the initial term or a renewal term of this **ISFA** the **Third- party** has an active contractual relationship with **DBG** besides this **ISFA**.

Notwithstanding anything herein, this **ISFA shall** in any case survive the termination or expiration of the last other contractual relationship with **DBG** for a term of 2 years.

Each Party's right to terminate this **ISFA** for good cause ("aus wichtigem Grund") **shall** remain unaffected.

A material breach of **Third-party's** obligations hereunder entitles DBAG and any of DBAG's **affiliates** to terminate any or all of its other contractual relationships with **Third-party**.

- (c) The **Parties** agree that terms printed in bold carry specific meaning as defined in the glossary of this document.
- (d) Amendments to this **ISFA must** be made in written form. Each amendment **shall** expressly reference the modified provision of the **ISFA** as a precondition for its validity.
- (e) Agreements that the **Parties** may conclude in their business relationship may entail further reaching obligations than those stipulated herein. Such further reaching obligations **shall** govern the respective agreement and do not constitute amendments to this **ISFA**. This **ISFA** does not limit or modify any other agreed rights or obligations.
- (f) Agreements already concluded between the **Parties**, or which **will** be included in the future may contain liability provisions. Such liability provisions **shall** not be modified by this agreement, but a breach of this **ISFA shall** constitute a breach of the respective agreements for which **Third-party** is required to fulfil Requirements under this **ISFA**, e.g. for an agreement on development services, the chapter #Development may be agreed to be appliable and thus a breach of the requirements under such chapter would constitute a breach of said agreement, whereas in the same situation other agreements with **Third-party** would not be breached where the chapter #Development was not agreed and thus is not applicable.
- (g) **Third-party** may not transfer this **ISFA** or any of its obligations or rights hereunder to any third party without the prior written consent of DBAG.
- (h) **Should** one or more provisions of this **ISFA** be or become invalid or unenforceable in whole or part, or contain a gap, this **shall** not affect the validity of the remaining provisions. The invalid or unenforceable provision **shall** be replaced by the **Parties** with a valid and enforceable provision which comes as close as possible to the economic purpose of the invalid or unenforceable provision. In the event of an omission, that valid provision **shall** be deemed agreed which corresponds to what would have been agreed, on the basis of the purpose of the respective contract, had the respective contracting parties given the matter their attention at the outset.

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(i) This Notwithstanding anything else agreed between the **Parties**, this **ISFA** and any dispute relating to this **ISFA shall** be governed by the laws of the Federal Republic of Germany without regard to its conflict of laws principles and the United Nations Convention on the International Sale of Goods.

Notwithstanding anything else agreed between the **Parties**, any dispute arising in relation to this **ISFA shall** be submitted to arbitration by, and finally decided according to the rules of arbitration, of the Chamber of Industry and Commerce of Frankfurt am Main without recourse to the ordinary courts of law. The right of the **Parties** to initiate judicial summary proceedings, as well as injunction proceedings **shall** remain unaffected. The place of arbitration **shall** be Frankfurt am Main. The number of arbitrators **shall** be three (3), at least two (2) of whom **must** be fully qualified lawyers.

2. APPLICABILITY

Requirements that may be applicable for the provisioning of the Services are listed below in sections 5 et seq. in the rows under the table column "Requirement". Their applicability is clustered into categories that are listed under the overarching table column "Chapter". The applicability of a Requirement for a certain chapter is determined by a cross in the table.

The chapters that constitute applicable and binding obligations of the **Third-party** are set forth in Appendix 2 "Applicable Chapters". In agreements concluded after the effective date of this **ISFA** the **parties** of such agreements may determine chapters that **shall** apply and be binding upon **Third-party** regarding the substance matter of each such agreement by making reference to such chapter.

DBG differentiates between the following seven chapters of requirements, which may be explained as follows:

- #Baseline
 Requirements marked as "Baseline" apply only to a narrow scope of services in which
 the Third-party's personnel will have access to DBG premises (such as facility
 services).
- #BaselineExtended

"Baseline Extended" is applicable to services which are typically not categorized as "Baseline". Requirements for "Baseline Extended" are applicable as determined by a cross in the table.

Additional requirements may be applicable, depending on five specific service types consumed by **DBG** as outlined below.

#Cloud
Requirements marked as "Cloud" apply to all cloud-based solutions, including software
as a service, platform as a service, infrastructure as a service and other cloudbased solutions.

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#Data Outside DBG

Requirements marked as "Data Outside **DBG**" apply to all services that receive, process or store **DBG data** but do not qualify as a cloud solution. This includes all services which enjoy access to **DBG data** or enjoy **privileged access** rights in tools and services utilised by **DBG**.

#Infrastructure

Requirements marked as "Infrastructure" apply to all services which include the provision of infrastructure such as data centres but do not qualify as a "as a service" solution.

#Development

Requirements marked as "Development" apply to all services which include the creation of **information assets**.

#Sub-contracting

Requirements marked as "Sub-contracting" apply to all **Third-parties** that rely on sub-contracting in the delivery of services to **DBG**.

It is possible, that several chapters may be applied in combination (e.g. "Baseline Extended + Cloud + Sub-contracting").

In the absence of any agreement on the applicability of certain requirements, the following chapter **shall** apply: "Baseline Extended".

Third-party shall procure in written form contracts with each sub-provider being relevant for the provisioning of **Third-party**'s Services to **DBG** terms and conditions that are equivalent to those set forth herein; it remains responsible for its sub-providers' compliance with such terms and conditions.

3. STANDARDS AND **STATE OF THE ART** TECHNOLOGY

The **Third-party shall** ensure that its service provision and organization comply with (i) industry accepted international standards for **information security**, such as the ISO/IEC 270xx framework, the **BSI C5** standard for cloud security, and (ii) the **state of the art** of technology and organizational measures. **State of the art** of technology and organizational measures mean the procedures, equipment and operating methods which application is most effective in achieving the **information security** objectives and legal protection objectives established by law and regulation and by the Framework Agreement and which have been proven effective in practice.

4. AUDIT, ASSESSMENTS AND MONITORING

4.1. AUDITS & ASSESSMENTS

The **Third-party** agrees that services provided to **DBG** are subject to assessments for **Third-Party**'s compliance with the requirements stipulated in this **ISFA**. These assessments may be

conducted by **DBG** or by another party on behalf of **DBG** as determined by **DBG** (the "Auditor").

In conducting these assessments, the **Third-party shall** correctly and comprehensively answer any questionnaire, that **Auditor** makes available to the **Third-party** either directly or via a tool in conducting its assessments. Within three weeks upon receiving **Auditor**'s request, **Third-party will** provide to **Auditor** topical and appropriate evidence (such as policies certificates, standards and implementation evidence; including screenshots, logfiles, etc.).

Third-party grants DBG unrestricted rights of inspection and auditing including full access to all relevant business premises, including the full range of relevant devices, systems, networks, information, and data used for providing the outsourced function, including related financial information, personnel, and the service provider's external auditors. The Third-party shall ensure that its sub-contractors grant DBG equivalent inspection and audit rights. Any audit on Third-party premises based on this ISFA shall be (i) conducted during Third-party's business hours, (ii) seek to minimize disruptions of Third-party's business, and (iii) take into account the confidentiality and security of Third-party's client data and installations. DBG or its affiliates shall provide reasonable prior notice of an audit under this ISFA to the Third-party, unless this is not possible due to an emergency or crisis situation.

Notwithstanding anything in any agreement between the **parties**, the **Third-party**, if considered **outsourcing**, grants **DBG** the right to conduct previously announced **penetration tests** regarding its infrastructure and organization which **shall** be conducted by **DBG** or a third party appointed by **DBG** in a best practise manner, including without limitations common **vulnerabilities** and exposures (CVE), or equivalent, reporting.

Should DBG's assessments, audits or **penetration tests** indicate an elevated risk exposure emanating from the **Third-party**'s service delivery, the **Third-party shall** develop and share with **DBG** risk-mitigation plans to remediate the risk and promptly execute such plans until the identified risks are mitigated as agreed with **DBG**.

4.2. LIVE MONITORING

The **Third-party** agrees that once a service goes live, the **Third-party may** be monitored by **DBG**. The **Third-party shall** support such monitoring by providing reports to **DBG** with content and cadence, as directed by **DBG** from time to time considering **DBG**'s risk exposure and regulatory requirements. **DBG** is entitled to complement the monitoring with automated tools which monitor **Third-party**'s compliance with the requirements stipulated in this **ISFA**.

Should such monitoring indicate an elevated risk exposure for **DBG**, the **Third-party shall** develop and share with **DBG** appropriate risk-mitigation plans, designed to remediate the risk and promptly execute such plans until the identified risks are mitigated.

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5. ORGANIZATIONAL REQUIREMENTS

Dequirement	Chantar						
Requirement	Chapter Baseline	Baseline	Cloud	Data	Infra-	Develop	Sub-
	Baseline	Exten-	Olouu	Outside	structure	-ment	contrac-
	14	ded		DBG			ting
5.1 Policies for information	security		1	Γ	T	T	1
Information security policy and		Х					
topic-specific policies shall be							
defined and approved by Third- party's management, published,							
communicated to and							
acknowledged by relevant							
personnel and relevant interested							
parties, and reviewed at planned							
intervals and if significant							
changes occur.							
5.2 Information security ro	les and	respons	ibilities				
Information security roles and		Χ					
responsibilities shall be defined							
and allocated by the Third-							
party.							
5.3 Segregation of duties	T		ı	T	T	T	1 1
Conflicting duties and conflicting		Х					
areas of responsibility shall be segregated by the Third-party .							
5.4 Management responsibil		V					
Management of the Third-party shall require all personnel to	Х	Х					
apply information security in							
accordance with the established							
information security policy,							
topic-specific policies and							
procedures of the Third-party .							
5.5 Contact with authorities							
The Third-party shall establish	X	Х					
and maintain contact with							
relevant authorities.							
5.6 Contact with special inte	rest grou		T	Γ	Γ	Γ	
The Third-party shall establish		Х					
and maintain contact with special interest groups or other							
special interest groups or other specialist security forums and							
professional associations.							
5.7 Threat intelligence			II.	l .	l .	l .	
Information relating to		Х					
information security threats		• •					
shall be collected and analysed							
by the Third-party to produce							
threat intelligence.							
5.8 Information security in	project i		ment	T	T	T	,
The Third-party shall integrate		Х					
information security into							
project management.							

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Requirement	Chapter						
	Baseline	Baseline	Cloud	Data	Infra-	Develop-	Sub-
		Exten- ded		Outside DBG	structure	ment	contrac- ting
5.9 Inventory of information	and othe	U. U. U.	ated ass				ting .
An inventory of information and			Х	Х	Χ		
other associated assets,							
including owners, shall be							
developed and maintained by							
the Third-party.							
5.10 Acceptable use of infor	mation a	nd othe	r associa	ated ass	ets		
Rules for the acceptable use		Х					
and procedures for handling							
information and other							
associated assets shall be							
identified, documented and							
implemented by the Third-							
party.							
5.11 Return of assets Personnel and other interested		V					
parties as appropriate shall		Х					
return all the Third-party 's							
assets in their possession upon							
change or termination of their							
employment, contract or							
agreement.							
5.12 Classification of information	ation			l.	<u> </u>	l.	
Information shall be classified		Х					
by the Third-party according to							
the information security needs							
of the Third-party based on							
confidentiality, integrity,							
availability, authenticity and							
relevant interested party							
requirements.							
5.13 Labelling of information							
An appropriate set of				Х		Χ	Х
procedures for information							
labelling shall be developed and							
implemented by the Third-party							
in accordance with the							
information classification scheme adopted by the Third -							
party.							
5.14 Information transfer			<u> </u>	<u> </u>			
Information transfer rules,							Х
procedures, or agreements							^
shall be in place for all types of							
transfer facilities within the							
Third-party and between the							
Third-party and other parties.							

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Requirement	Chapter						
Requirement	Baseline	Baseline Exten- ded	Cloud	Data Outside DBG	Infra- structure	Develop -ment	Sub- contrac- ting
5.15 Access control							
Rules to control physical and logical access to information and other associated assets shall be established and implemented by the Third-party based on business and information security requirements.		Х					
5.16 Identity management							<u>I</u>
The full life cycle of identities shall be managed by the Thirdparty.			Х	Х	Х	Х	
5.17 Authentication informati	ion						
Allocation and management of authentication information shall be controlled by a management process set up and run by the Third-party , including advising personnel on the appropriate handling of authentication information.			X	X	X	X	
5.18 Access rights	<u></u>						<u> </u>
Access rights to information and other associated assets shall be provisioned, reviewed, modified and removed by the Third-party in accordance with the Third-party 's topic-specific policy on and rules for access control.			X	Х	X	X	
5.19 Information security in	n Third-p	arty rela	ationship	os			
Processes and procedures shall be defined and implemented by the Third-party to manage the information security risks associated with the use of Fourth-party products or services.							X
5.20 Addressing information	n securi	ty within	n Third-p	arty agr	eement	S	
Relevant information security requirements shall be established by the Third-party and agreed with each Fourthparty based on the type of the relationship.			- 1	, - 0			X
5.21 Managing information	<u>security</u>	y in the	ICT supp	oly <mark>ch</mark> air	<u> </u>		
Processes and procedures shall be defined and implemented by the Third-party to manage the information security risks associated with the ICT products and services supply chain.							X

Initials:	/	

Requirement	Chapter						
	Baseline	Baseline Exten- ded	Cloud	Data Outside DBG	Infra- structure	Develop -ment	Sub- contrac -ting
5.22 Monitoring, review and	change	manage	ment of	Fourth-	-party so	ervices	
The Third-party shall regularly monitor, review, evaluate and manage change in Fourth-party information security practices and service delivery.							Х
5.23 Information security f	or use o	f cloud s	services				
Processes for acquisition, use, management and exit from cloud services shall be established by the Third-party in accordance with the Third-party's information security requirements.		Х					
5.24 Information security i	ncident	manage	ement pl	anning a	and prep	aration	
The Third-party shall plan and prepare for managing information security incidents by defining, establishing and communicating information security incident management processes, roles and responsibilities.	Х	Х					
5.25 Assessment and decisi	on on in	formati	on secu	rity eve	ents		
The Third-party shall assess information security events and decide if they are to be categorized as information security incidents.	X	X					
5.26 Response to informati	on secu	rity inci	idents		•		
Information security incidents shall be responded to by the Third-party in accordance with the documented procedures.	X	Х					
5.27 Learning from information	tion sec	urity in	cident s				
Knowledge gained from information security incidents shall be used by the Thirdparty to strengthen and improve the information security controls.	Х	X					
5.28 Collection of evidence							
The Third-party shall establish and implement procedures for the identification, collection, acquisition and preservation of evidence related to information security events .		Х					
5.29 Information security	during di	sruption					
The Third-party shall plan how to maintain information security at an appropriate level during disruption.			Х	Х	X		Х

Requirement	Chapter						
- requirement	Baseline	Baseline	Cloud	Data	Infra-	Develop	Sub-
		Exten- ded		Outside DBG	structure	-ment	contrac -ting
5.30 ICT readiness for busin	ess con	tinuity					
ICT readiness shall be planned, implemented, maintained and tested by the Third-party based on business continuity objectives and ICT continuity requirements.			Х	X	X		X
5.31 Legal, statutory, regulation	tory and	contrac	tual requ	uirement	ts		
Legal, statutory, regulatory and contractual requirements relevant to information security and the Third-party's approach to meet these requirements shall be identified, documented and kept up to date.		Х					
5.32 Intellectual property right	nts						
The Third-party shall implement appropriate procedures to protect intellectual property rights.			Х			Х	
5.33 Protection of records							
Records shall be protected by the Third-party from loss, destruction, falsification, unauthorized access and unauthorized release.			Х	X		X	X
5.34 Intentionally left blank5.35 Independent review of i	informa	tion sec	curity				
The Third-party's shall ensure that its approach to managing information security and its implementation including people, processes and technologies is reviewed independently at planned intervals, or when significant changes occur.			X	Х	Х		
5.36 Compliance with policie	es, rules	and star	ndards f	or infor i	mation s	security	<u> </u>
Compliance with the Third- party's information security policy, topic-specific policies, rules and standards shall be regularly reviewed by the Third- party.		Х					
5.37 Documented operating	procedu	ıres					
Operating procedures for information processing facilities shall be documented and made available by the		Х			1.	nitials:	
		[15/34]	1		II	าแสเร	

Third-party to personnel who				
need them.				

6. PEOPLE REQUIREMENTS

Requirement	Chapter						
	Baseline	Baseline	Cloud	Data	Infra-	Develop	Sub-
		Exten- ded		Outside DBG	structure	-ment	contrac- ting
6.1 Screening							J
Background verification checks	Х	Х					
on all candidates to become		,					
personnel shall be carried out							
by the Third-party prior to							
joining the Third-party and on							
an ongoing basis taking into							
consideration applicable laws,							
regulations and ethics and be proportional to the business							
requirements, the classification							
of the information to be							
accessed and the perceived							
risks.							
6.2 Terms and conditions of	emplovi	ment					<u></u>
The Third-party shall ensure	X	X					
that employment contractual							
agreements state the							
personnel's and the							
organization's responsibilities for							
information security.							
6.3 Information security av		1	tion and	training		Γ	T
The Third-party shall ensure	X	X					
that personnel and relevant interested parties receive							
appropriate information							
security awareness, education							
and training and regular updates							
of the organization's							
information security policy,							
topic-specific policies, and							
procedures, as relevant for their							
job function.							
6.4 Disciplinary process		- V	1	1	ı		
A disciplinary process shall be formalized and communicated	X	Х					
by the Third-party to take							
actions against personnel and							
other relevant interested parties							
who have committed an							
information security policy							
violation.							
6.5 Responsibilities after ter		or char	ige of er	nployme	ent		
Information security	Х	Х					
responsibilities and duties that							
remain valid after termination or							
change of employment shall be defined, enforced and							
communicated by the Third -							
party to relevant personnel and							
other interested parties.							
•				•			

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Requirement	Chapter							
	Baseline	Baseline Exten- ded	Cloud	Data Outside DBG	Infra- structure	Develop -ment	Sub- contracti ng	
6.6 Confidentiality or non-disclosure agreements								
The Third-party shall ensure that confidentiality or non-disclosure agreements reflecting the Third-party 's needs for the protection of information are identified, documented, regularly reviewed and signed by personnel and other relevant interested parties.	X	×						
6.7 Remote working								
Security measures shall be implemented by the Third-party when personnel are working remotely to protect information accessed, processed or stored outside the Third-party 's premises.		Х						
6.8 Information security ev	ent rep	orting						
The Third-party shall provide a mechanism for personnel to report observed or suspected information security events through appropriate channels in a timely manner.		X						

7. PHYSICAL REQUIREMENTS

Requirement	Chapter						
-requirement	Baseline	Baseline	Cloud	Data	Infra-	Develop	Sub-
		Exten- ded		Outside DBG	structure	-ment	contrac- ting
7.1 Physical security perime	ters	ded		BBO			ung
Security perimeters shall be			Х	Х	Х	Х	
defined and used by the Third-							
party to protect areas that							
contain information and other							
associated assets.							
7.2 Physical entry	1			T	T		T 1
Secure areas shall be protected		Х					
by the Third-party by appropriate entry controls and							
access points.							
7.3 Securing offices, rooms	and facil	litios					
Physical security for offices,		X					
rooms and facilities shall be							
designed and implemented by							
the Third-party .							
7.4 Physical security monito	ring						
Premises shall be continuously		Х					
monitored by the Third-party for							
unauthorized physical access.							
7.5 Protecting against physical and	cai and e	environm	nentai tr X	r eat s X	X		
Protection against physical and environmental threats , such as			^	^	^		
natural disasters and other							
intentional or unintentional							
physical threat s to infrastructure							
shall be designed and							
implemented by the Third -							
party.							
7.6 Working in secure areas Security measures for working	1	Х	1		1		
in secure areas shall be		^					
designed and implemented by							
the Third-party.							
7.7 Clear desk and clear scr	een						
Clear desk rules for papers and				Х		Х	
removable storage media and							
clear screen rules for							
information processing facilities shall be defined and							
appropriately enforced by the							
Third-party.							
7.8 Equipment siting and pro	otection						
Equipment shall be sited			Х	Х	Х		Х
securely and protected by the							
Third-party.							

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Requirement	Chapter						
	Baseline	Baseline Exten-	Cloud	Data Outside	Infra- structure	Develop -ment	Sub- contrac-
		ded		DBG	Structure	-IIICIII	ting
7.9 Security of assets off-pre	emises						
Off-site assets shall be			Х	Х	X		Х
protected by the Third-party .							
7.10 Storage media	I		1	1	1	I	
Storage media shall be managed through their life cycle		Х					
of acquisition, use,							
transportation and disposal in							
accordance with the Third-							
party's classification scheme							
and handling requirements by the Third-party .							
7.11 Supporting utilities							
Information processing			Х	X	Х		Х
facilities shall be protected by			^				
the Third-party from power							
failures and other disruptions							
caused by failures in supporting utilities.							
7.12 Cabling security Cables carrying power, data or			Х	Х	Х		Х
supporting information services							
shall be protected by the Third-							
party from interception,							
interference or damage.							
7.13 Equipment maintenanc	е	ī	,	T	1 1	ı	
Equipment shall be maintained correctly by the Third-party to			Х	X	X		X
ensure availability, integrity							
authenticity and							
confidentiality of information.							
7.14 Secure disposal or re-u	se of eq	uipment	t				
Items of equipment containing		Х					
storage media shall be verified							
by the Third-party to ensure that any sensitive da ta and							
licensed software has been							
removed or securely overwritten							
prior to disposal or re-use.							

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8. TECHNOLOGICAL REQUIREMENTS

Requirement	Chapter						
Requiement	Baseline	Baseline	Cloud	Data	Infra-	Develop	Sub-
		Exten- ded		Outside DBG	structure	-ment	contrac- ting
8.1 User endpoint devices						-	
Information stored on,			Х	Х		Х	Х
processed by or accessible via							
user endpoint devices shall be protected by the Third-party .							
8.2 Privileged access rights				1			
The allocation and use of	3		Х	X			
privileged access rights shall							
be restricted and managed by							
the Third-party.							
8.3 Information access restri	ction	T	I ,.	1 ,,	T	T	
Access to information and other			Х	X			
associated assets shall be restricted by the Third-party in							
accordance with the established							
topic-specific policy on access							
control.							
8.4 Access to source code	1	1	•		1	1	,
Read and write access to			Х	X		Х	
source code , development tools and software libraries shall							
be appropriately managed by							
the Third-party.							
8.5 Secure authentication			_				
Secure authentication		Х					
technologies and procedures							
shall be implemented by the Third-party based on							
information access restrictions							
and the topic-specific policy on							
access control.							
8.6 Capacity management							
The use of resources shall be			Х	X	X		
monitored and adjusted by the Third-party in line with current							
and expected capacity							
requirements.							
8.7 Protection against malwa	are						
Protection against malware		Χ					
shall be implemented and							
supported by the Third-party by appropriate user awareness.							
appropriate user awareness.			I	1]		<u> </u>

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Requirement	Chapter						
requirement	Baseline	Baseline	Cloud	Data	Infra-	Develop	Sub-
		Exten- ded		Outside DBG	structure	-ment	contrac- ting
8.8 Management of technica	vulner		5	DBO			ung
Information about technical			Х	Х		Х	Х
vulnerabilities of information							
systems in use shall be							
obtained by the Third-party, the							
Third-party's exposure to such							
vulnerabilities shall be							
evaluated and appropriate							
measures shall be taken.							
8.9 Configuration management	ent			ī	I	T	T 1
Configurations, including		Х					
security configurations, of hardware, software, services							
and networks shall be							
established, documented,							
implemented, monitored and							
reviewed by the Third-party .							
8.10 Information deletion							
Information stored in information		Х					
systems, devices or in any other							
storage media shall be deleted							
by the Third-party when no							
longer required.				1			
8.11 Data masking			V	l v	T		
Data masking shall be used by the Third-party in accordance			Х	X			
with the organization's topic-							
specific policy on access							
control and other related topic-							
specific policies, and business							
requirements, taking applicable							
legislation into consideration.							
8.12 Data leakage prevention	n	T		T	ı	T	T 1
Data leakage prevention		Х					
measures shall be applied by							
the Third-party to systems,							
networks and any other devices that process, store or transmit							
sensitive information.							
8.13 Information backup							
Backup copies of information,		Х					
software and systems shall be							
maintained and regularly tested							
by the Third-party in							
accordance with the agreed							
topic-specific policy on backup.							

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Requirement	Chapter						
resquiionien	Baseline	Baseline	Cloud	Data	Infra-	Develop	Sub-
		Exten- ded		Outside DBG	structure	-ment	contrac- ting
8.14 Redundancy of informa	ation pr		a facilit				9
Information processing			Х	X	Х		
facilities shall be implemented							
by the Third-party with							
redundancy sufficient to meet							
availability requirements.							
8.15 Logging							
Logs that record activities,			Х	X		X	
exceptions, faults and other relevant events shall be							
produced, stored, protected and							
analysed by the Third-party .							
8.16 Monitoring activities							
Networks, systems and			Х	Х	Х		
applications shall be monitored							
for anomalous behaviour by the							
Third-party and appropriate actions taken to evaluate							
potential information security							
incidents.							
8.17 Clock synchronization							
The clocks of information		Х					
processing systems used shall							
be synchronized to approved							
time sources by the Third-party.							
8.18 Use of privileged utility	program	IS					
The use of utility programs that			Х	Х	Х		
can be capable of overriding system and application controls							
shall be restricted and tightly							
controlled by the Third-party .							
8.19 Installation of software	on opera	ational s	ystems				
Procedures and measures shall	•		Х	Χ	Χ		
be implemented by the Third -							
party to securely manage software installation on							
operational systems.							
8.20 Networks security							
Networks and network devices		Х					
shall be secured, managed and		``					
controlled by the Third-party to							
protect information in systems							
and applications.							
8.21 Security of network serv	vices						1
Security mechanisms, service		Х					
levels and service requirements of network services shall be							
identified, implemented and							
monitored by the Third-party .							
monitored by the rima party.	l l						

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Requirement	Chapter						
	Baseline	Baseline Exten-	Cloud	Data Outside	Infra- structure	Develop -ment	Sub- contrac-
		ded		DBG			ting
8.22 Segregation of network	S						
Third-party shall ensure that		X					
groups of information services,							
users and information systems							
are segregated in the Third- party 's networks.							
8.23 Web filtering Access to external websites				Х			
shall be managed by the Third-				^			
party to reduce exposure to							
malicious content.							
8.24 Use of cryptography	•						
Rules for the effective use of		Х					
cryptography, including							
cryptographic key management,							
shall be defined and							
implemented by the Third -							
party.							
8.25 Secure development life	e cycle				I	I	1
Rules for the secure development of software and		X					
systems shall be established							
and applied by the Third-party .							
8.26 Application security req	uiremen	te					<u> </u>
Information security	unemen	X					
requirements shall be identified,							
specified and approved by the							
Third-party when developing or							
acquiring applications.							
8.27 Secure system architec	ture and	engine	ering pri	nciples			
Principles for engineering		Х					
secure systems shall be							
established, documented,							
maintained and applied by the Third-party to any information							
system development activities.							
8.28 Secure coding	<u> </u>	<u> </u>			<u> </u>	<u> </u>	1
Secure coding principles shall			Х			Х	
be applied by the Third-party to			``				
software development.							
8.29 Security testing in development and acceptance							
Security testing processes shall			Х			Х	
be defined and implemented by							
the Third-party in the							
development life cycle.							
8.30 Outsourced developme	nt	T			Т	Т	
The Third-party shall direct,		Х					
monitor and review the activities related to outsourced system							
development.							
acroiopinont.		<u> </u>			<u> </u>	<u> </u>	<u> </u>

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Requirement	Chapter						
	Baseline	Baseline Exten- ded	Cloud	Data Outside DBG	Infra- structure	Develop -ment	Sub- contrac- ting
8.31 Separation of developm	nent, tes	t and pro	oduction	environ	ments		
Development, testing and			Х	Х		Х	
production environments shall							
be separated and secured by							
the Third-party.							
8.32 Change management							
Changes to information		Χ					
processing facilities and							
information systems shall be							
subject to Third-party 's change management procedures.							
8.33 Test information	ı						
Test information shall be			Х			Х	
appropriately selected, protected							
and managed by the Third-							
party.		1 2.	Pc.				
8.34 Protection of information	n systen	ns durin		esting			
Audit tests and other assurance			Х			Х	
activities involving assessment							
of operational systems shall be planned and agreed between							
the tester and appropriate							
management of the Third-party .							

9. ADDITIONAL REQUIREMENTS

Requirement	Chapter						
	Baseline	Baseline Extende d	Cloud	Data Outside DBG	Infra- structure	Develop -ment	Sub- contracti ng
9.1 Change of Information	Security	/ Contac	ct				
Changes in the nomination of the Third-party 's Information Security contact shall be communicated to DBG , including name, mail address and phone number		X					
9.2 Changes in the internal of	controls	system					
Significant changes in the Third-party's internal controls system affecting information security shall be communicated to DBG should the Third-party be considered outsourcing.		X					

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Requirement	Chapter						
resquirement	Baseline	Baseline	Cloud	Data	Infra-	Develop	Sub-
		Exten- ded		Outside DBG	structure	-ment	contrac-
0.2 Socurity incident notifies	tion	ueu		DDO			ting
9.3 Security incident notification in the event of a security incident	UUII	Х		1			
_		^					
which may have compromised or							
has the potential to compromise							
DBG data, DBG shall be							
notified by the Third-party							
without undue delay.							
The notification must contain							
information on the disruption, on							
possible cross-border effects as							
well as on the technical							
framework conditions, in							
particular the suspected or							
actual cause, the information							
technology affected, the type of							
facility or installation affected as							
well as the critical service							
provided and the effects of the							
disruption on this service.							
Beyond the initial notification,							
Third-party shall reporting							
continue at least daily for the							
complete duration of the incident							
and cover at least the							
requirements of the initial							
notification.							
Notifications must be							
made/send to:							
+352 243 33555 and							
cert@deutsche-boerse.com.							
Vice versa, Third-party shall							
also provide a 24/7 emergency							
contact (mail and phone) to							
DBG.							
9.4 Audit and Information Ri	gnts			T			
Third-party shall grant		X					
unrestricted audit and							
information rights by a) DBG 's							
1st, 2nd or 3rd Line of Defense, b) DBG 's Third-party risk team, c)							
external auditors acting either on							
behalf of DBG and d)							
supervisory authorities or							
external auditors acting on							
behalf of the supervisory							
authorities.							
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Requirement	Chapter						
	Baseline	Baseline Exten- ded	Cloud	Data Outside DBG	Infra- structure	Develop -ment	Sub- contrac- ting
9.5 Annual Reports							
Third-party, if considered outsourcing and if the risk picture mandates it, shall submit an annual report on its overall security risk profile, covering at least relevant security risk scenarios and corresponding risk treatment strategies, as well as material incidents.		X					
9.6 Fourth-Parties							
Third-party shall submit a list of all Fourth-parties involved in the delivery of services to DBG and therefore sub-outsourcings. It shall update that list without undue delay when Fourth-parties utilised in the service delivery are changed. If the Third-party is considered outsourcing, changes in the Fourth-party selection shall be made contingent on DBG's approval.		X					

10. GLOSSARY

This glossary lists items that carry specific meaning in this ISFA.

Term	Definition
Affiliate	means any person that, directly or indirectly, controls, is controlled
	by or is under common control with such Party; the term "control"
	means the possession of (i) 50% or more of the voting rights in
	the general meeting of a person or (ii) the power, directly or
	indirectly, whether by contract or ownership, to direct or cause the direction of the management and affairs of a person, including
	investment decisions.
Authenticity	means the property that an entity is what it claims to be.
Availability	means the property of being accessible and usable on demand by
-	an authorised entity.
BSI C5	means the C5 criteria catalogue (Cloud Computing Compliance
	Criteria Catalogue) by Bundesamt für Sicherheit in der
	Informationstechnik/ Federal Office for Information Security
	(BSI) specifies minimum requirements for secure cloud
Confidentiality	computing.
Confidentiality	means the property that information is not made available or disclosed to unauthorized individuals, entities, or processes.
DBG	Refers to Deutsche Börse Group, a group of companies
	comprised of Deutsche Börse AG (DBAG), 60485 Frankfurt and
	its Affiliates (within the meaning of § 15 Aktiengesetz).
DBG Data	means DBG information in electronic form that can be stored and
	processed by a computer. It (i) belongs to DBG (ii) is provided to
	DBG or (iii) originates from DBG.
Deletion	means a way of removing a file from a computer's file system and
	securely overwriting it.
Fourth-party	means parties that do not have a direct relationship with DBG but
Information asset	are utilised by the Third-party in the service provision to DBG . means information such as data, values or documents, and
IIIOIIIIatioii asset	information processing facilities such as networks, systems
	and applications.
Information Processing	means any information processing system, service or
Facilities	infrastructure supporting business processes considering the
	physical location housing it.
Information Security	means the preservation of confidentiality, integrity, availability,
	and authenticity of information.
ISFA	means this Information Security Framework Agreement.
Information Security Event	means an identified occurrence of a system, service or network
	state indicating a possible breach of information security policy
	or failure of controls, or a previously unknown situation that can be security relevant.
Information Security	means a single or a series of unwanted or unexpected
Incident	information security events.
Information Security	means a management system that defines the methodology,
Management System (ISMS)	rules, procedures, measures, and control measures for protection
	of information in the organisation pursuant to the ISO standard
	series ISO/IEC:27001.

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Infrastructure as a Service	means the capability provided to the consumer is to provision
	processing, storage, networks, and other fundamental computing
	resources where the consumer is able to deploy and run arbitrary
	software, which can include operating systems and applications.
	The consumer does not manage or control the underlying cloud
	infrastructure but has control over operating systems, storage,
	and deployed applications; and possibly limited control of select
	networking components (e.g., host firewalls).
Integrity	means the property of accuracy and completeness.
"must"/"will"	means the implementation of/adherence to the requirement is
	mandatory.
"Modification"	means any amendment or change to this ISFA.
Outsourcing	means outsourcing as defined in (i) the EBA Guidelines on
	Outsourcing Arrangements (EBA/GL/2019/02), and (ii) the
	Minimum Requirements for Risk Management (MaRisk) circular
	by BaFin.
Parties	Third-Party and DBG
Penetration Test	means a security assessment which aims to identify the security
	vulnerabilities on the target systems that can be exploited by
	attackers.
Platform as a Service	means the capability provided to the user is to deploy onto the cloud
	infrastructure consumer-created or acquired applications created
	using programming languages, libraries, services, and tools
	supported by the provider. The consumer does not manage or
	control the underlying cloud infrastructure including network,
	servers, operating systems, or storage, but has control over the
	deployed applications and possibly configuration settings for the
	application-hosting environment.
Policy	Intentions and direction of an organisation, as formally expressed
	by its top management.
Privileged Access	means users that need multiple accounts, some of which enjoy
	additional rights to perform administrative tasks, for example.
"shall"	Indicates a mandatory responsibility not subject to exceptions.
"should"	means that the implementation of/adherence to the requirement is
	mandatory, unless there is an unreasonable technological effort
	involved or a business justification for not implementing the
	requirement exists, is documented and available for review.
Software as a Service	means the capability provided to the consumer is to use the
	provider's applications running on a cloud infrastructure. The
	applications are accessible from various client devices through
	either a thin client interface, such as a web browser (e.g., web-
	based email), or a program interface. The consumer does not
	manage or control the underlying cloud infrastructure including
	network, servers, operating systems, storage, or even individual
	application capabilities, with the possible exception of limited user- specific application configuration settings.
Source Code	Human readable code written in a specific code language.
State of the Art	means the state of the art as outlined in the "Guideline State of
State Of the Art	the art Technical and organizational measures" 2021, released by
	the art Technical and organizational measures 2021, released by the European Union Agency for Cybersecurity (ENISA) in
	cooperation with the TeleTrusT – IT Security Association
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Third-party	means a legal or natural person having a direct relationship to
	DBG , usually through a contract as supplier or service partner.
Threat	means a potential cause of an unwanted incident which can result
	in harm to a system or organisation.
Vulnerability	means a weakness of an asset or control that can be exploited by
	one or more threats.

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Deutsche Börse AG

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Signature	Signature
Name:	Name:
Position:	Position:
[Supplier]	
Place, date	Place, date
Signature	Signature
Name:	Name:
Position:	Position:

APPENDIX 1: Affiliates

This list of DBAG **Affiliates** may be amended by DBAG, eligible for amendment are companies that qualify as **affiliates** under § 15 et sec. Aktiengesetz.

List of DBAG Affiliates:

Börse Frankfurt Zertifikate AG

Börse Frankfurt Zertifikate AG Central Functions & others

Clearstream Australia

Clearstream Banking AG

Clearstream Banking London

Clearstream Banking Luxembourg Central Functions & others

Clearstream Banking SA

Clearstream Banking SA Singapore Branch

Clearstream Banking SA Singapore Branch Central Functions & others

Clearstream Fund Centre AG

Clearstream Global Security Services Ltd. Cork

Clearstream Global Security Services Ltd. Cork Central Functions & others

Clearstream Holding AG

Clearstream International SA

Clearstream Operations Prague s.r.o

Clearstream Operations Prague s.r.o Central Functions & others

Clearstream Services

Clearstream Services SA

DBAG Cash

DBAG London

DBAG Paris

Deutsche Börse Beteiligungen GmbH

Deutsche Börse Digital Exchange Central Functions & others

Deutsche Börse Photography Foundation GmbH

Deutsche Börse Services s.r.o.

Deutsche Börse Systems Inc (USA) Central Functions & others European Commodity Clearing AG **Eurex Clearing AG** Eurex Clearing AG Prague Eurex Frankfurt AG Eurex Frankfurt AG Singapore Branch Eurex Global AG Eurex Global AG Central Functions & others Eurex Repo GmbH European Energy Exchange AG Lux CSD SA Regis-TR SA Limited Regis-TR UK Limited Regulatory Services GmbH GER Regulatory Services GmbH UK Branch Stoxx Limited Frankfurt Stoxx Limited London Stoxx Limited New York Stoxx Limited Tokyo Stoxx Ltd Switzerland Stoxx Ltd. Prague

Deutsche Börse Systems Inc (USA)

APPENDIX 2: Applicable Chapters

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