

تجلس محافظي المصارف المركزية ومؤسست النقد العربيت COUNCIL OF ARAB CENTRAL BANKS AND MONETARY AUTHORITIES GOVERNORS



صندوق النقـد الـعربـي ARAB MONETARY FUND

# **Arab Regional Fintech Working Group**

# **Financial Technology Glossary**

دليل مصطلحات التقنيات المالية الحديثة

**Arab Monetary Fund** 

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This document was produced within the Arab Regional Fintech Working Group (WG) mandate, which implies the exchange of knowledge and expertise, strengthening the capacity of the Arab regulators, as well as building a network of peer to peer between Arab and international experts from the public and private sectors to promote Fintech industry and foster innovation.

The Fintech glossary aims at enhancing the understanding of Fintech terms shedding light on related Fintech activities by defining the term in English and providing the equivalent terms in both Arabic and French. Then, it has been designed as divided into 13 chapters covering different Fintech sectors. Moreover, and will be reviewed on a regular basis.

The glossary is prepared by Ayman Saleh and Nouran Youssef from the Arab Monetary Fund and benefited from the review and comments of Irfan Al Hasani and Mahmoud Abdel Salam from the Arab Monetary Fund.

Any queries regarding this report should be addressed to: Nouran Youssef, DBA Senior Financial Sector Specialist, Arab Monetary Fund Economic Department, Financial Sector Development Division Corniche Street, P.O Box 2818, Abu Dhabi, United Arab Emirates Tel. +971 2617 1454 E-mail: Economic@amfad.org.ae; FintechWG@amf.org.ae, nouran.youssef@amf.org.ae; Website: www.amf.org.ae

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#### الذكاء الاصطناعي وتعلم الآلة (Artificial Intelligence and Machin learning (AI & ML)

Terms	Definition	المصطلحات	Les Termes
Agent	Any third party acting on behalf of a bank or other financial services provider (including an e-money issuer or distributor) to deal directly with customers. The term 'agent' is commonly used even if a principal agent relationship does not exist under the law of the country in question. <sup>3</sup>	الوكيل – مزود الخدمة	L'agent
Artificial Intelligence (AI)	Advanced computer systems that can simulate human capabilities, such as analysis, based on a predetermined set of rules. <sup>32</sup>	الذكاء الاصطناعي	Intelligence Artificielle
Application Programming Interface (API)	A set of rules and specifications followed by software programmes to communicate with each other, and an interface between different software programmes that facilitates their interaction; APIs enable direct database-to-database data transmission enabling granular, real-time reporting and automated validation. <sup>17</sup>	واجهة إدارة التطبيقات	Interface de Programmation d'Application (API)
Autonomous Robot	Robot free from external control or influence and able to control itself independently. <sup>42</sup>	روبوت <sup>1</sup> ذاتي التحكم	Robot Autonome
Backward Chaining	Strategy of working backward for Reason/Cause of a problem. <sup>42</sup>	التسلسل العكسي	Chaînage Arrière

.2008 ،English Arabic Technical Computing Dictionary عربي: المعلوماتي إنجليزي – عربي: 2008.

Blackboard	It is the memory inside computer, which is used for communication between the cooperating expert systems. <sup>42</sup>	اللوحة السوداء	Tableau noir
Bodily-Kinesthetic Intelligence	The ability to use complete or part of the body to solve problems or fashion products, control over fine and coarse motor skills, and manipulate the objects. <sup>43</sup>	الذكاء الجسدي الحركي	Intelligence Corporelle- Kinesthésique
Chatbot	Virtual assistance programmes that interact with users in natural language; chatbots enable automated capture and interpretation of qualitative data, enabling data collection in real time. <sup>17</sup>	خدمة التحاور الالي	Chatbot Agent Conversationnel
Deep Learning	Deep Learning is a technique to implement Machine Learning (see below) and one of drivers behind the recent success and popularity of AI as documented in the victory of DeepMind's AlphaGo program beating a human Go champion in 2016. Deep Learning is a subset of Machine Learning algorithms inspired by the structure and function of the brain called artificial neural networks. It can take vast amounts of data and recognize certain characteristics for text- based searches, fraud detection, handwriting recognition, speech recognition, and more. <sup>39</sup>	التعلم العميق	Apprentissage Profond
Forward Chaining	Strategy of working forward for conclusion /solution of a problem. <sup>42</sup>	التسلسل الأمامي	Chaînage Avant
Heuristics	It is the knowledge based on Trial-and-error, evaluations, and experimentation. <sup>42</sup>	الاستدلال	Heuristique
Interpersonal Intelligence	The ability to recognize and make distinctions among other people's feelings, beliefs, and intentions. <sup>43</sup>	الاستخبارات الشخصية	Intelligence Interpersonnelle

Intra-Personal Intelligence	The ability to distinguish among one's own feelings, intentions, and motivations. <sup>43</sup>	الذكاء الداخلي الشخصي	Intelligence Intrapersonnelle
Knowledge Engineering	Acquiring knowledge from human experts and other resources. <sup>42</sup>	هندسة المعرفة	Ingénierie des Connaissances
Linguistic intelligence	The ability to speak, recognize, and use mechanisms of phonology (speech sounds), syntax (grammar), and semantics (meaning). <sup>43</sup>	الذكاء اللغوي	Intelligence Linguistique.
Logical-Mathematical Intelligence	The ability of use and understand relationships in the absence of action or objects. Understanding complex and abstract ideas. <sup>43</sup>	الذكاء المنطقي الرياضي	Intelligence Logico- Mathématique
Machine learning	A method of designing a sequence of actions to solve a problem that optimise automatically through experience and with limited or no human intervention. <sup>28</sup>	تعلم الآلة	Apprentissage Automatique
Machine-Readable Regulation	Machine-readable regulation refers to information in the form of data that can be accessed directly by software. Regulation that can be read and analyzed directly without the need for "translation" would allow more automation and could significantly reduce the cost of regulatory change <sup>. 39</sup>	اللوائح المقروءة آليًا	<b>Règlement Lisible par</b> Machine
Musical intelligence	The ability to create, communicate with, and understand meanings made of sound, understanding of pitch, rhythm. <sup>43</sup>	ذكاء التعرف على الاصوات	Intelligence Musicale.
Natural Language Processing	An interdisciplinary field of computer science, artificial intelligence and computation linguistics that focuses on programming computers and algorithms to parse, process and understand human language. <sup>13</sup>	معالجة اللغة الطبيعية	Traitement du Langage Naturel

Pruning	Overriding unnecessary and irrelevant considerations in AI systems. <sup>17</sup>	التقليم	Élagage
Robo-advisors	Applications that combine digital interfaces and algorithms, and can also include machine learning, in order to provide services ranging from automated financial recommendations to contract brokering to portfolio management to their clients. Such advisors may be standalone firms and platforms or can be in-house applications of incumbent financial institutions. <sup>41</sup>	مستشارو الروبوت	Conseillers-robots
<b>Robotic Process Automation</b>	Partial or full automation of manual, rule-based and repetitive human activities by robotics software or "bots". <sup>17</sup>	أتمتة العمليات الروبوتية	Automatisation des Processus Robotiques
Rule	It is a format of representing knowledge base in Expert System. It is in the form of IF-THEN-ELSE. <sup>42</sup>	القاعدة	Règlement
Self-Organizing Maps	A type of artificial neural network that is trained using unsupervised learning to produce a low-dimensional, discretized representation of the input space of the training samples, called a map, and is therefore a method of performing dimensionality reduction. <sup>13</sup>	خرائط ذاتية التنظيم	Cartes Auto-Adaptative
Spatial Intelligence	The ability to perceive visual or spatial information, change it, and re-create visual images without reference to the objects, construct 3D images, and to move and rotate them. <sup>43</sup>	الذكاء المكاني	Intelligence Spatiale
Supervised Learning	The machine learning task of learning a function that maps an input to an output based on example input-output pairs. <sup>13</sup>	التعلم الخاضع للإشراف اختبار تورينج للمحاكاة	Apprentissage Supervisé
Turing Test	A test developed by Allan Turing to test the intelligence of a machine as compared to human intelligence. <sup>42</sup>	اختبار تورينج للمحاكاة	Test de Turing

#### تقنية قواعد البيانات المتسلسلة Blockchain

Terms	Definition	المصطلحات	Les Termes
Acquirer	A company that buys the rights to another company or business relationship. Acquirers are also financial institutions which buy rights to a merchant account which allows them to service and manage the merchant's bank account. <sup>10</sup>	المستحوذ	Acquéreur
Advanced Encryption Standard (AES)	The Advanced Encryption Standard (AES) is a symmetric- key block cipher algorithm and US government standard for secure and classified data encryption and decryption. It was originally known as Rijndael. <sup>10</sup>	معيار التشفير المتقدم	Standard de Chiffrement Avancé
Altcoin	Altcoins are primarily abbreviation of "Bitcoin alternative." They are considered to be alternative cryptocurrencies that were launched after the success of Bitcoin. Generally, they project themselves as better substitutes to Bitcoin. <sup>10</sup>	عملة رقمية بديلة	Altcoin
Assets Under Management (AUM)	Assets under management (AUM) refers to the total market value of the investments that a person or entity manages on behalf of clients. <sup>10</sup>	الأصول تحت الإدارة	Encours Sous Gestion
Automated Clearing House (ACH)	The Automated Clearing House (ACH) Network is an electronic funds-transfer system run by NACHA, formerly the National Automated Clearing House Association, since 1974. This payment system deals with payroll, direct deposit, tax refunds, consumer bills, tax payments, and many more payment services in the United States. <sup>10</sup>	غرفة المقاصة الآلية	Chambre de Compensation Automatique
Bitcoin	Bitcoin is a digital currency that was created in January 2009. Also, known as a cryptocurrency, Bitcoins are not backed by any country's central bank or government. They offer the	عملة البتكوين	Bitcoin

	promise of lower transaction fees than traditional online payment mechanisms and is operated by a decentralized authority, unlike government-issued currencies. <sup>10</sup>		
Bitcoin Cash	Bitcoin cash is a cryptocurrency that was created in August 2017, arising from a fork of Bitcoin Classic. It is often considered to be an altcoin version of the popular Bitcoin cryptocurrency. Bitcoin Cash increases the size of blocks, allowing more transactions to be processed. <sup>10</sup>	بيتكوين النقدية	L'Argent Bitcoin Trésorerie Bitcoin
Bitcoin Gold	Bitcoin Gold is a distributed digital currency. It is a hard fork of Bitcoin, the open source cryptocurrency. The stated purpose of the hard fork is to restore the mining functionality with common Graphics Processing Units (GPU), in place of mining with specialized ASIC (customized chipsets), used to mine Bitcoin. <sup>10</sup>	بيتكوين الذهبية	Bitcoin l'or
Bitcoin Wallet	A Bitcoin Wallet is a software program where Bitcoins are stored. Technically, Bitcoins are not stored anywhere; there is a private key (secret number) for every Bitcoin address that is saved in the Bitcoin wallet of the person who owns the balance. Bitcoin wallets facilitate sending and receiving Bitcoins and gives ownership of the Bitcoin balance to the user. The Bitcoin wallet comes in many forms; desktop, mobile, web and hardware are the four main types of wallets. <sup>10</sup>	حافظة البيتكوين	Portefeuille Bitcoin Porte-Monnaie Bitcoin
Blockchain	A form of distributed ledger in which details of transactions are held in the ledger in the form of blocks of information. A block of new information is attached into the chain of pre- existing blocks via a computerized process by which transactions are validated. <sup>27</sup>	قواعد البيانات المتسلسلة سلسلة الكتل	Blockchain Chaîne de Blocs

<b>Blockchain Indicators</b>	Indicators covering on-chain transactions, i.e. those cleared and settled directly on the respective blockchain. For example, for the Bitcoin blockchain include the number of transactions and addresses used over time, transaction values and transaction fees. <sup>47</sup>	مؤشرات قواعد البيانات المتسلسلة	Indicateurs de la Blockchain Indicateurs de la Chaîne de Blocs
Blockchain operating system	An operating system that primarily uses blockchain as a support in the background. When a blockchain-based OS is installed on a device captures all commands and transactions from a user's device but authenticating, executing, and recording them occurs on the blockchain. <sup>10</sup>	نظام تشغيل قاعدة البيانات المتسلسلة	Système d'Exploitation Blockchain
Block	A package of data containing multiple transactions over a given period of time. <sup>31</sup>	الكتلة	Bloc
Blockchain-as-a-Service (BaaS)	Blockchain-as-a-Service refers to the growing landscape of services based around blockchain technology. BaaS platforms allow companies to begin working with blockchain technology without having to first make significant investments in hardware. <sup>7</sup>	قاعدة البيانات المتسلسلة كخدمة	Blockchain en tant que Service
Chain	The cryptographic link that keeps blocks together using a 'hash' function. <sup>31</sup>	سلمية	Chaîne
Data lake	Scalable storage solution for diverse structured, semi- structured, and unstructured data. <sup>17</sup>	بحيرة البيانات	Lac de Données
Data mining	The process of solving cryptographic problems using computer hardware to add newly hashed blocks to a public blockchain such as bitcoin. In fulfilling this function, successful data miners keep the blockchain actively	التنقيب عن البيانات	Exploration de Données

	recording transactions and, as an incentive, are awarded newly minted bitcoins for their trouble. <sup>31</sup>		
Data Standard	The data standards issued by Open Banking from time to time in compliance with the Authority Order. <sup>37</sup>	معيار البيانات	Standard de Données
Double-spending	Strategy that consists of spending in one block and later undoing this by releasing a forged blockchain in which the transactions are erased. In blockchains based on proof-of- work, this requires short-term access to enough computational power to overwhelm the rest of a cryptocurrency's network of miners. In those based on proof- of-stake, this requires owning or bribing a majority of the staked resources. <sup>5</sup>	مضاعفة الإنفاق	Double-dépense
Electronic money (e-money)	A type of monetary value electronically recorded and generally understood to have the following attributes: (i) issued upon receipt of funds in an amount no lesser in value than the value of the e-money issued; (ii) stored on an electronic device (e.g. a chip, prepaid card, mobile phone, or computer system); (iii) accepted as a means of payment by parties other than the issuer; and (iv) convertible into cash. <sup>3</sup>	النقود الإلكترونية	Monnaie Electronique l'argent électronique
Ethereum	A public blockchain system developed as an open-source project, its architecture running remotely on the Ethereum Virtual Machine. It uses 'ethers', a cryptocurrency, as its token and supports the storage and execution of 'smart contracts'. <sup>31</sup>	ايثريوم	Ethereum
Hash	The result of applying an algorithmic function to data in order to convert them into a random string of numbers and letters.	ناتج عملية التشفير	Hachis
Hashing		التشفير	Hachage

	This acts as a digital fingerprint of that data, allowing it to be locked in place within the blockchain. <sup>31</sup>		
Hyperledger	An umbrella project set up by the Linux Foundation comprising various tools and systems for building open source blockchains. <sup>31</sup>	السجل الهجين (المختلط)	Hyperledger
Hyperledger Composer	Hyperledger Composer is Blockchain Application Development framework which simplify the blockchain application development on Hyperledger fabric. <sup>9</sup>	مؤلف السجل الهجين (المختلط)	Compositrice Hyperledger
Immutable	"unable to be changed" Data stored in a blockchain is unable to be changed. (not even by administrators) <sup>9</sup>	البيانات غير القابلة للتغيير	Inalterable
Initial Coin Offering (ICO)	The form in which capital is raised to fund new cryptocurrency ventures. Modeled after an Initial public offering (IPO). Funders of an ICO receive tokens. <sup>9</sup>	طرح العملة الأولى	Initial Coin Offering (ICO)
Miner	Class of agents, who update the blockchain via computational work, and in return receive block rewards and transaction fees when they add batches of valid transactions to the blockchain. <sup>5</sup>	المنقب	Miner
Membership Service Provider (MSP)	A Hyperledger Fabric blockchain network can be governed by one or more MSPs. <sup>9</sup>	مقدم خدمة العضوية	Appartenance via un Fournisseur de Services
Node	A copy of the ledger operated by a participant with a blockchain network. <sup>31</sup>	نقطة اتصال	Nœud
Nonce	A number only used once in a cryptographic communication (often includes a timestamp) <sup>9</sup>	أرقام التشفير	Nonce

On-chain governance	A system for managing and implementing changes to a	الحوكمة على السلسلة	Gouvernance de la
	cryptocurrency blockchain.9	(للعملات المشفرة)	Chaîne
Permissioned ledger	A large, distributed network using a native token, with access restricted to those with specific roles. <sup>31</sup>	السجل المصرح به	Registres Permissioned
Private blockchains	A closely controlled network operated by consortia in which the data is confidential and is accessed only by trusted members. Private blockchains do not require a token. <sup>31</sup>	قواعد البيانات المتسلسلة الخاصة سلاسل الكتل الخاصة	<b>Blockchains Privés</b>
Private key	A unique string of data that represents proof of identification within the blockchain, including the right to access and own that participant's wallet within a cryptocurrency. It must be kept secret: it is effectively a personal password. <sup>31</sup>	مفتاح سري / مفتاح خاص	Clé Privée
Proof of stake	A system in which coordination on blockchain updates is enforced by ensuring that transaction verifiers pledge their coin holdings as guarantees that their payment confirmations are accurate. <sup>5</sup>	إثبات الحصة -النسبة	Preuve d'enjeu
Proof of work	Repeatedly running a hash function, the mechanism by which data miners win the right to add blocks to a bitcoin-style blockchain. <sup>31</sup>	دليل العمل	Preuve de Travail
Protocol	The coded "laws" of a cryptocurrency. Set of rules that governs what constitutes a blockchain that is accepted by the network of users. <sup>5</sup>	برتوكول (قواعد حوكمة قواعد البيانات المتسلسلة)	Protocole
Public blockchain	A large distributed network using a native token (such as bitcoin), open to everyone to participate and maintain. <sup>31</sup>	سلسلة الكتل العامة	Blockchain Publique.

Public key	A unique string of data that identifies a participant within the blockchain. It can be shared publicly. <sup>31</sup>	المفتاح العام	Clé Publique
Public key cryptography	Public key cryptography Encryption that uses two mathematically related keys. A public and private key. It is impossible to derive the private key based on the public key. <sup>9</sup>	تشفير المفتاح العام	Cryptographie à Clé Publique
<b>Unspent Transaction</b> <b>Outputs (UTXO)</b>	Unspent transaction outputs are used to determine whether a transaction is valid. <sup>9</sup>	مخرجات المعاملات غير المنفقة	
VIPER	A programming language created to be a formal introduction to smart contracts. <sup>9</sup>	لغة الفايبر (برمجة)	VIPÈRE
Solidity	A contract-oriented programming language for writing smart contracts. It is used for implementing smart contracts on various blockchain platforms <sup>.9</sup>	لغة برمجة لكتابة العقود الذكية	Solidité

## الحوسبة السحابية Cloud Computing



Terms	Definition	المصطلحات	Les Termes
Application as a Service	This is solely one or more applications hosted in the cloud, not in connection with our desktop. Very handy for 3D and graphic heavy software as that's normally not available in the cloud. <sup>4</sup>	التطبيق كخدمة	Applicatif sous la Forme d'un Service
Brute Force Attack	A trial-and-error method used to obtain information such as a user password or personal identification number (PIN). In a brute force attack, automated software generates a large number of consecutive guesses in an attempt to determine the desired data. <sup>15</sup>	هجوم القوة الغاشمة "هجوم عشوائي للحصول على البيانات"	Attaque par Force Brute
Cloud Adoption	<ul> <li>Cloud adoption is a strategic move by organizations of reducing cost, mitigating risk and achieving scalability in applications and services by moving these to the Cloud. There are varying degrees of Cloud adoption across organizations. The depth of adoption depends on the maturity of best practices and enterprise-ready Cloud services availability.</li> <li>Organizations that go ahead with the strategic decision of adopting Cloud-based technologies have to identify potential security vulnerabilities and controls, required to keep data and applications in the Cloud secured, hence there is a need for compliance assessment during Cloud adoption. <sup>16</sup></li> </ul>	اعتماد السحابة	Adoption du Cloud
Cloud Architecture	Cloud architecture refers to the components and subcomponents required for Cloud computing. These	البنية السحابية	L'Architecture Cloud

	components typically consist of a front-end platform, back end platforms, a Cloud-based delivery, and a network. <sup>16</sup>		
Cloud Computing	The process of delivering IT services in which resources (data, applications) are stored, managed and processed in remote servers hosted on the Internet, rather than on a local server or personal computer. Data and software packages are stored on remote servers in secure data centres. Cloud computing provides access to this information as long as an electronic device has access to the web, allowing employees to work remotely. <sup>4</sup>	الحوسبة السحابية	Cloud Computing - Informatique en Nuage
Cloud Computing – 3 Main Models: 1. Infrastructure as a Service (IaaS) 2. Platform as a Service (PaaS) 3. Software as a Service (SaaS)	Cloud computing is a model for enabling convenient, on- demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. <sup>16</sup>	الحوسبة السحابية ثلاثة نماذج رئيسة: 1- البنية التحتية كخدمة 2- المنصة كخدمة 3- البرمجيات كخدمة	Informatique en Nuage Trois modèl principaux: 1- Infrastructure en tant que Service 2- Plateforme en tant que Service 3- Logiciel en tant que Service
Cloud Infrastructure	Encompasses the servers, virtual machines, storage systems, networking, and other components required for cloud computing and infrastructure as a service. Cloud infrastructure provides the building blocks, or primitives, for creating hybrid and private clouds that deliver cloud computing services. <sup>45</sup>	البنية التحتية السحابية	Infrastructure de Cloud
Cloud Management Platform (CMP)	A suite of integrated software tools that an enterprise can use to monitor and control Cloud computing resources. Allows	منصة إدارة السحابة (CMP)	Plateforme de Gestion Cloud

	administrative control over public, private, hybrid and multicloud deployments. <sup>16</sup>		
Cloud Migration	The process of moving data, applications or other business elements to a cloud computing environment. One common model is the transfer of data and applications from a local, on-premises data center to the public Cloud. <sup>16</sup>	الهجرة السحابية	Migration vers le Nuage Migration dans le Cloud
Cloud Native	Cloud Native is an approach to building and running applications that exploit the advantages of the Cloud computing delivery model. It is about 'How' these applications are created and deployed, not 'Where'. Though it does tend to imply that these applications live in the public Cloud. <sup>16</sup>	السحابة الأصلية	Cloud Native
<b>Cloud Native Computing</b> <b>Foundation "CNCF"</b>	An open source project hosted by the Linux Foundation, the CNCF hosts Kubernetes and other key open source projects, including Prometheus, Open Tracing, Fluentd, and linkerd. VMware is a member of the Linux Foundation and the Cloud Native Computing Foundation. <sup>45</sup>	مؤسسة الحوسبة السحابية الأصلية "CNCF"	
Cloud Provider	A company that provides cloud-based platform, infrastructure, application or storage services to other organizations and/or individuals. <sup>4</sup>	مزود الخدمات السحابية	Fournisseur de Cloud Fournisseur de Services Infonuagiques
Cloud Services	Services provided using cloud computing, that is, a model for enabling ubiquitous, convenient, on demand network access to a shared pool of configurable computing resources (e.g.	الخدمات السحابية	Services de Cloud Services en Nuage

	networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. <sup>20</sup>		
Cloud Services Brokerage (CSB)	An IT role and business model in which a company or other entity adds value to one or more (public or private) Cloud services on behalf of one or more consumers of that service via 3 primary roles; aggregation, integration and customisation brokerage. A CSB provider offers a combination of technologies, people and methodologies to implement and manage Cloud-based projects <sup>16</sup>	خدمات الوساطة السحابية	Services de Courtage Infonuagique
Cloud Service Provider (CSP)	CSPs are companies that offer network services, infrastructure, or business applications in the Cloud. The large public CSPs are Amazon Web Services (AWS), Microsoft Azure and Google Cloud Platform. <sup>16</sup>	مزود الخدمة السحابية (CSP)	Fournisseurs de Services Cloud Fournisseurs de Services Infonuagiques
Cloud Service Provider (CSP) Lock-in	The ease (or lack thereof) of moving data between providers or services. Many cloud platforms and services are proprietary, making it difficult to migrate to another provider.	تأمين مزود الخدمة السحابية (CSP)	
Cloud Types	There are three types of clouds: private, public, and hybrid. See separate entries for definitions. Cloud types should not be confused with the three types of services offered through the cloud (IAAS, SAAS or PAAS). <sup>15</sup>	أنواع الخدمات السحابية	Types de Nuages
Cognitive Computing "CC"	Refers to technology platforms that are based on the scientific disciplines of artificial intelligence and signal processing. These platforms use tools such as machine	الحوسبة المعرفية	Informatique Cognitive

	learning, face recognition or natural language processing and more. <sup>7</sup>		
Consumption Based Pricing	A consumption-based pricing model is a service provision and payment scheme in which the customer pays according to the resources used. This model is becoming a popular approach within Cloud Managed Services. <sup>16</sup>	التسعير على أساس الاستهلاك	Tarification Fondé Sur la Consommation
Data Center	A facility built for the purpose of housing cloud-based resources such as servers and other service-based equipment. Many companies operate multiple data centers in different geographic locations to ensure redundancies against data center failures, thus allowing an always-online service offering. <sup>4</sup>	مركز البيانات	Centre de Données.
Disaster Recovery as a Service (DRAAS)	In event of disaster, DRAAS means a business has access to a hosted desktop with Office, Skype for Business and their chosen data and apps. This ensures minimum downtime and maximum business continuity by allowing employees to keep working without an office, for example. <sup>4</sup>	التعافي من الكوارث كخدمة (DRAAS)	Reprise Après Sinistre en Tant que Service
Elasticity in the Cloud	In Cloud computing, Elasticity is a term used to reference the ability of a system to adapt to changing workload demand by provisioning and de-provisioning pooled resources so that provisioned resources match current demand as well as possible. <sup>16</sup>	مرونة السحابة	Élasticité du Cloud Flexibilité du Nuage
Encryption	A technology that codes data into an unreadable form so it can only be decoded by a computer that has the correct key. Encryption prevents unauthorized users from reading data that is transmitted over a network. <sup>15</sup>	التشفير	Chiffrement

Fog Computing	<ul> <li>Fog computing extends cloud computing's services to the edge of the network, in other words closer to the end user. This provides a better quality of service, reduced latency and increased mobility.</li> <li>By better distributing data, fog computing enables the effective use of Internet of Things applications that demand real-time service.<sup>4</sup></li> </ul>	الحوسبة الضبابية	Informatiques de Fog
Github	A cloud-based service that allows developers to store and manage source code (a source code repository), enabling them to track and control changes to the code using the 'Git' open-source version control system. <sup>16</sup>	جيت هب (خدمة من الحوسبة السحابية)	Github
Google Cloud Platform "GCP"	a Cloud computing service that runs on the same infrastructure that Google uses internally for its end-user products, such as YouTube. It provides a series of modular Cloud services including computing, data storage, data analytics and machine learning. <sup>16</sup>	منصة جوجل السحابية	Google Plateforme Cloud
Hybrid Cloud	A cloud computing environment that uses a mix of on- premises private cloud and public cloud services with orchestration between the two platforms. By allowing workloads to move between private and public clouds as computing needs and costs change, a hybrid cloud gives businesses greater flexibility, and more data deployment options. <sup>15</sup>	الحوسبة المختلطة	Cloud Hybride
Hyper-converged Infrastructure	Integrates the same key types of IT components that converged infrastructure does, but in a scalable rack or appliance that simplifies management, improves performance, and adds elastic scalability. See converged infrastructure. <sup>45</sup>	البنية التحتية فائقة التقارب	Infrastructure Hyperconvergée

Infrastructure	Cloud Infrastructure refers to a virtual infrastructure that is delivered or accessed via a network or the internet. This usually refers to the on-demand services or products being delivered through the model known as Infrastructure as a Service (IaaS). <sup>16</sup>	البنية التحتية	Infrastructure
Infrastructure as Code (IaC)	The process of managing and provisioning IT resources through machine-readable definition files, rather than physical hardware configuration or interactive configuration tools. The IT infrastructure managed in this way comprises both physical equipment such as bare-metal servers as well as virtual machines and associated configuration resources. It can use either scripts or declarative definitions, rather than manual processes. IaC approaches are promoted for Cloud computing, which is sometimes marketed as infrastructure as a service (IaaS). IaC supports IaaS but should not be confused with it. <sup>16</sup>	البنية التحتية كرمز	Infrastructure en tant que Code
Infrastructure as a Service (IAAS)	Cloud infrastructure services, whereby a virtualised environment is delivered as a service over the internet by the provider. The infrastructure can include servers, network equipment, and software. <sup>4</sup>	البنية التحتية كخدمة (IAAS)	Infrastructure en tant que Service
Insider Threat	A malicious threat to an organization that comes from people within the organization, such as employees, former employees, contractors, vendors, or business associates who have inside information concerning the organization's security practices, data, and computer systems. <sup>15</sup>	التهديد الداخلي (تهديد من الداخل)	Menaces Internes
Man-in-the-Middle Attack (MITM)	A type of cyberattack where a malicious actor inserts him/herself into the communication between two parties,	هجوم وسيط	Attaque de l'Intercepteur

	intercepts online traffic for his own use, and then sends it on to the recipient. <sup>15</sup>		Attaque par Intrusion Humaine
Metadata	Is information that describes various facets of an information asset to improve its usability throughout its life cycle. <sup>28</sup>	الميتاداتا البيانات الوصفية	Métadonnées
Natural Language Processing (NLP)	An interdisciplinary field of computer science, artificial intelligence, and computation linguistics that focuses on programming computers and algorithms to parse, process, and understand human language. NLP can be regarded as a form of AI. <sup>28</sup>	معالجة اللغة الطبيعية	Traitement du Langage Naturel
Pay-As-You-Go	A cost model for cloud services that encompasses both subscription-based and consumption-based models, in contrast to traditional IT cost models that requires up-front capital expenditures for hardware and software. <sup>4</sup>	الدفع عند الاستخدام	Prépayé Pay-As-You-Go
Platform as a Service (PAAS)	A cloud computing model that provides a development and hosting platform over the internet, simulating the operating system level of a server. In a PAAS model, a cloud provider delivers hardware and software tools (usually those needed for application development) to its users as a service, allowing users to develop applications without the need to build or maintain the infrastructure of a server. <sup>15</sup>	المنصة كخدمة (PAAS)	Plateforme en tant que Service
Predictive Analytics	The use of data to predict patterns of activity. As applied to SupTech, predictive analytics may for example identify potential signals such as the unusual use of communications, fraud, likelihood of default, non-routine patterns of leaving the office and non-completion of training. Such signals may predict elevated misconduct risks. Predictive analytics may	التحليلات التنبؤية	Analyse Prédictive.

	involve technologies such as machine learning or visualisation tools. <sup>28</sup>		
Private Cloud	Used to describe a cloud computing platform that is implemented within the corporate firewall, under the control of the IT department. A private cloud is designed to offer the same features and benefits of cloud systems but removes a number of objections to the cloud computing model including control over enterprise and customer data, worries about security, and issues connected to regulatory compliance. <sup>4</sup>	سحابة خاصة	Cloud Privé
Public Cloud	A type of cloud computing in which a service provider makes resources, such as applications and storage, available to the general public over the internet. Public cloud services may be free or offered on a pay-per-usage model. <sup>15</sup>	سحابة عامة	Public Cloud Nuage Publicque
Pull Technology	Network communication where the initial request for data originates from the client, and then is responded to by the server. <sup>28</sup>	تقنية السحب	Technologie de Pull
Push Technology	Software that automates the delivery of information to users. 28	تقنية الدفع	Technologie de Push
Serverless Computing	Serverless computing is a Cloud-based technology where an application runs on-demand. It does not require the customer to manage a server to run their code. Pricing is calculated based on memory usage and execution duration. <sup>16</sup>	الحوسبة بدون خادم	Informatique sans Serveur
Session Riding	An attack in which a hacker steals a user's cookie in order to use an application in the name of the user. An attacker might also use a cross-site request forgery attack in order to trick	امتطاء الجنسة	Séance d'Équitation

	the user into sending authenticated requests to arbitrary websites in order to achieve various objectives. <sup>15</sup>		
Software as a Service (SAAS)	Provides you with a completed product that is run and managed by the service provider. In most cases, people referring to SaaS are referring to end-user applications as you do not have to think about how the service is maintained or how the underlying infrastructure is managed; you only need to think about how you will use that particular piece software.	البرمجيات كخدمة (نموذج حوسبة سحابية)	Logiciel en tant que Service
Structured Data	Information that has a pre-defined data model or is organised in a predefined manner. <sup>28</sup>	البيانات المهيكلة	Données Structurées
Supply Chain	The system of organizations, people, activities, information, and resources involved in creating, building, and moving a product or service from supplier to customer. <sup>15</sup>	سلسلة التوريد	Chaîne d'Approvisionnement Chaîne Logistique
Two Factors Authentication (2FA)	Cloud-based strong authentication service that enables enterprises to secure access to networks and applications while preventing access by malicious unauthorised attackers. "Multi-Factor Authentication" requires not only a password and username but also something that only that user has on them, i.e. a piece of information only they should know or have immediately to hand – such as a physical token. <sup>4</sup>	توثيق ذو عاملين	Authentification à Deux Facteurs (A2F)
Unstructured Data	Information that either does not have a pre-defined data model or is not organized in a pre-defined manner. <sup>28</sup>	بيانات غير مهيكلة	Données non Structurées
Virtual Machine Escape	A cloud vulnerability that exploits a hypervisor remotely by using a vulnerability present in the hypervisor itself. Such	الهروب الالي الافتراضي	Évasion de Machine Virtuelle

	vulnerabilities are quite rare, but they do exist. Additionally, a virtual machine can escape from the virtualized sandbox environment and gain access to the hypervisor, and consequentially all the virtual machines running on it. <sup>15</sup>		
Virtual Private Cloud (VPC)	A Virtual Private Cloud (VPC) is an on-demand configurable pool of shared computing resources allocated within a public Cloud environment, providing for a level of isolation between the different organizations using the resources. This network separation allows for the protection of applications and data using software defined networks, firewalls, load balancers, etc. <sup>16</sup>	السحابة الافتراضية الخاصة (VPC)	Nuage Privé Virtuel

## التشفير Cryptography

Terms	Definition	المصطلحات	Les Termes
Advanced Encryption Standard "AES"	The Advanced Encryption Standard or AES is a symmetric block cipher used by the U.S. government to protect classified information and is implemented in software and hardware throughout the world to encrypt sensitive data. <sup>21</sup>	معيار التشفير المتقدم	Standard d'Encryptage Avancé Standard de Chiffrement Avancé
Asset-Backed Token	A digital representation of an actual asset or revenue stream.	رمز مدعوم بالأصول	Jeton Adossés à des Actifs
Asymmetric cryptography	Asymmetric cryptography or public-key cryptography is cryptography in which a pair of keys is used to encrypt and decrypt a message so that it arrives securely. Initially, a network user receives a public and private key pair from a certificate authority. Any other user who wants to send an encrypted message can get the intended recipient's public key from a public directory. They use this key to encrypt the message, and they send it to the recipient. When the recipient gets the message, they decrypt it with their private key, which no one else should have access to. <sup>21</sup>	التشفير غير المتماثل	Cryptographie Asymétrique
Back Door	A back door is a means of access to a computer program that bypasses security mechanisms. A programmer may sometimes install a back door so that the program can be accessed for troubleshooting or other purposes. However, attackers often use back doors that they detect or install themselves, as part of an exploit. In some cases, a worm is designed to take advantage of a back door created by an earlier attack. For example, Nimda gained entrance through a back door left by Code Red. <sup>21</sup>	الباب الخلفي	Porte Arrière Porte Dérobée

Black Hat	Black hat is used to describe a hacker (or, if you prefer, cracker), who breaks into a computer system or network with malicious intent. Unlike a white hat hacker, the black hat hacker takes advantage of the break-in, perhaps destroying files or stealing data for some future purpose. The black hat hacker may also make the exploit known to other hackers and/or the public without notifying the victim. This gives others the opportunity to exploit the vulnerability before the organization is able to secure it. <sup>21</sup>	القبعة السوداء	Chapeau Noir
Certificate Authority (CA)	A certificate authority (CA) is an authority in a network that issues and manages security credentials and public keys for message encryption. As part of a public key infrastructure (PKI), a CA checks with a registration authority (RA) to verify information provided by the requestor of a digital certificate. If the RA verifies the requestor's information, the CA can then issue a certificate <sup>-21</sup>	المرجع المصدق (سلطة التصديق)	Autorité de Certification
Crypto-Assets	A type of private digital asset that depends primarily on cryptography and distributed ledger or similar technology as part of their perceived or inherent value. <sup>5</sup>	الأصول المُشفرة	Crypto-Actifs
Crypto-asset trading platform	Any trading platform where Crypto-Assets can be bought and sold, regardless of legal status. <sup>27</sup>	منصبة تداول الأصول المشفرة	Plateforme de Trading de Crypto-Actifs Platesforme de Négociation de Crypto- Actifs
Crypto-Asset Coin Versus Token	The difference between a coin and token is that a coin is issued on the crypto-asset developer's platform (e.g. Bitcoin, Ethereum) whereas a token can be issued on other platform. <sup>23</sup>	عملة الأصول المشفرة مقابل الرمز	Monnaie de Crypto- Actif contre Jeton

Crypto-Currencies	A crypto asset used exclusively/primarily for payments.	العملات المشفرة	Cryptomonnaies
			<b>Crypto-Monnaies</b>
CryptoAsset Custody	Refers to the secure storage of cryptographic keys that are required to unlock and move funds. <sup>8</sup>	حفظ الأصول المشفرة	
Cryptocurrency Exchange	A cryptocurrency exchange is any system that operates on the basis of trading cryptocurrencies with other assets. Like a traditional financial exchange, the cryptocurrency exchange's core operation is to allow for the buying and selling of these digital assets, as well as others. A cryptocurrency exchange is also known as a digital currency exchange (DCE). <sup>10</sup>	تبادل العملات المشفرة	Échange de Crypto- monnaie
Cryptography	the conversion of data into private code using encryption algorithms, typically for transmission over a public network.	التشفير	Cryptographie Chiffrement
Cryptographic Hash Function	A function that returns a unique fixed-length string. The returned string is unique for every unique input. Used to create a "digital ID" or "digital thumbprint" of an input string.	وظيفة تجزئة التشفير	Fonction de Hachage Cryptographique
Crypto-token	Crypto-tokens represent a particular fungible and tradable asset or a utility that is often found on a blockchain. <sup>10</sup>	رمز التشفير	Jeton Cryptographique
Digital Token	Any digital representation of an interest, which may be of value, a right to receive a benefit or perform specified functions or may not have a specified purpose or use. <sup>14</sup>	رمز رقمي	Jeton Numérique
Digital Wallet Provider	A firm that offers storage services to investors in crypto- assets. These may be connected online ('hot' storage) or kept offline ('cold' storage). <sup>14</sup>	مزود الحافظة الرقمية	Fournisseur de Portefeuille Numérique

Cryptoasset Exchanges	Venues enabling users to buy and sell cryptoassets for other	تبادل الأصول المشفرة	
	assets. They serve as the on-off ramps to the cryptoasset ecosystem. <sup>8</sup>		Actifs
Fungible Token	These tokens are divisible and uniform, because they don't have any specific information associated to them that would make them unique. All fungible tokens from the same blockchain are interchangeable. <sup>30</sup>	رمز قابل للاستبدال أو التبادل	Jeton Interchangeable
Non-Fungible Token	These tokens are not interchangeable within the same blockchain. They are unique and non-divisible, which enables the transfer of information and value. <sup>30</sup>	رمز قابل للاستبدال أو التبادل	Jeton Non- Interchangeable
Public Key Infrastructure (PKI)	A public key infrastructure (PKI) supports the distribution and identification of public encryption keys, enabling users and computers to both securely exchange data over networks such as the Internet and verify the identity of the other party. Without PKI, sensitive information can still be encrypted (ensuring confidentiality) and exchanged, but there would be no assurance of the identity (authentication) of the other party. <sup>21</sup>	البنية التحتية للمفتاح العام	Infrastructure à Clé Publique (ICP)
Session Key	A session key is an encryption and decryption key that is randomly generated to ensure the security of a communication session between a user and another computer or between two computers. <sup>21</sup>	مفتاح الجلسة	Clé de Session
Stablecoin	Cryptoassets designed to maintain price stability, either in relation to a pegged asset or a basket of goods ("purchasing power"). <sup>8</sup>	عملة مستقرة	Stablecoin

## أمن الفضاء الإلكتروني Cyber Security

Terms	Definition	المصطلحات	Les Termes
Actionable intelligence	Information that can be acted upon to address, prevent or mitigate a cyber threat. <sup>2</sup>	الذكاء العملي	Intelligence Exploitable
Cyber	Refers to the interconnected information infrastructure of interactions among persons, processes, data, and information and communications technologies, along with the environment and conditions that influence those interactions. <sup>2</sup>	الفضاء الإلكتروني	Cyber
Cyber Attack	The use of an exploit by an adversary to take advantage of a weakness(es) with the intent of achieving an adverse effect on the ICT environment. <sup>2</sup>	هجوم إلكتروني	Cyberattaque
Cyber Event	An observable occurrence in an information system or network. <sup>2</sup>	حدث إلكتروني	Événement de Cyber Cyber Evénement
Cyber Governance	Arrangements an organisation puts in place to establish, implement and review its approach to managing cyber risks. cyber maturity model A mechanism to have cyber resilience controls, methods and processes assessed according to management best practice, against a clear set of external benchmarks. <sup>2</sup>	حوكمة الفضاء الالكتروني	Cybergouvernance
Cyber Maturity Model	A mechanism to have cyber resilience controls, methods and processes assessed according to management best practice, against a clear set of external benchmarks. <sup>2</sup>	نموذج نضج الفضاء الالكتروني	Modèle de Cyber Maturité
Cyber Resilience	A Financial Market Infrastructure's ability to anticipate, withstand, contain and rapidly recover from a cyber-attack. <sup>2</sup>	متانة الأمن الالكتروني	Cyberrésilience

			Cyber-résilience
Cyber Resilience Framework	Consists of the policies, procedures and controls a Financial Market Infrastructure has established to identify, protect, detect, respond to and recover from the plausible sources of cyber risks it faces. <sup>2</sup>	إطار متانة الأمن الالكتروني	
Cyber Resilience Strategy	A Financial Market Infrastructure's high-level principles and medium-term plans to achieve its objective of managing cyber risks. <sup>2</sup>	استراتيجية متانة الأمن الالكتروني	Stratégie de Cyberrésilience
Cyber Risk	The combination of the probability of an event occurring within the realm of an organization's information assets, computer and communication resources and the consequences of that event for an organisation. <sup>2</sup>	مخاطر الأمن الالكتروني	Cyberrisques Cyber-risques
Cyber Risk Management	The process used by a Financial Market Infrastructure to establish an enterprise-wide framework to manage the likelihood of a cyber-attack and develop strategies to mitigate, respond to, learn from and coordinate its response to the impact of a cyber-attack. The management of a Financial Market Infrastructure's cyber risk should support the business processes and be integrated in the Financial Market Infrastructure's overall risk management framework. <sup>2</sup>	إدارة مخاطر الأمن الالكتروني	Gestion des Cyberrisques
Cyber risk profile	The cyber risk actually assumed, measured at a given point in time. <sup>2</sup>	بيان مخاطر الأمن الالكتروني	Profil de Cyberrisques
Cyber risk tolerance	The propensity to incur cyber risk, being the level of cyber risk that Financial Market Infrastructure intends to assume in pursuing its strategic objectives. <sup>2</sup>	تحمل مخاطر الأمن الالكتروني	Tolérance au Cyber- risque

Cyber Security	The protection of information assets by addressing threats to information processed, stored, and transported by internetworked information systems. <sup>33</sup>	أمن الفضاء الالكتروني	Cybersécurité
Cybersecurity architecture	Describes the structure, components and topology (connections and layout) of security controls within an enterprise's IT infrastructure Scope Note: The security architecture shows how defense-in-depth is implemented and how layers of control are linked and is essential to designing and implementing security controls in any complex environment <sup>-32</sup>	هندسية أمن الفضاء الإلكتروني	Architecture de cybersécurité
Cyber Security Incident	<ul> <li>An occurrence or activity of a system, service or network state indicating a possible breach of protective security policy or failure of safeguards, or a previously unknown situation that may be security relevant. Examples include:</li> <li>Receiving suspicious or seemingly targeted emails with attachments or links.</li> <li>Any compromise or corruption of information.</li> <li>Unauthorised access or intrusion into an identity service.</li> <li>Data spill.</li> <li>Intentional or accidental introduction of viruses to a network.</li> <li>Denial of service attacks.</li> <li>Suspicious or unauthorised network activity.<sup>18</sup></li> </ul>	حدث الأمن الالكتروني	Un Incident de Cybersécurité
Cyber threat	A circumstance or event with the potential to intentionally or unintentionally exploit one or more vulnerabilities in Financial Markets Infrastructures' systems, resulting in a loss of confidentiality, integrity or availability. <sup>2</sup>	تهديد الكتروني	Cybermenaces Menace Cybernétique

Cyber Threat Intelligence	Information that provides relevant and sufficient understanding for mitigating the impact of a potentially harmful event (may also be referred to as "cyber threat information"). <sup>2</sup>	المعلومات المتعلقة بالتهديدات الإلكترونية	Renseignements sur les Menaces
Data Breach	An unauthorized access and retrieval of sensitive information by an individual, group, or software system. It is a cybersecurity mishap which happens when data, intentionally or unintentionally, falls into the wrong hands without the knowledge of the user or owner. <sup>10</sup>	خرق البيانات	Violation de Données
Defence in Depth	The security controls deployed throughout the various layers of the network to provide for resiliency in the event of the failure or the exploitation of a vulnerability of another control (may also be referred to as "layered protection"). <sup>2</sup>	الدفاع في العمق	Défense en Profondeur
Detection	Development and implementation of the appropriate activities in order to identify the occurrence of a cyber event. $^2$	اكتشاف التهديد	Détection de Cyberattaques
Disruption	A disruption is an event affecting an organization's ability to perform its critical operations. <sup>2</sup>	إخلال بالأمن الالكتروني	Perturbation
Distributed Denial-of-Service (DDoS)	A distributed denial-of-service (DDoS) attack is one in which a multitude of compromised systems attack a single target, thereby causing denial of service for users of the targeted system. The flood of incoming messages to the target system essentially forces it to shut down, thereby denying service to the system to legitimate users. <sup>21</sup>	هجوم رفض الخدمة الموزع	Attaque de Déni de Service Distribuée
Ecosystem	A system or group of interconnected elements formed linkages and dependencies. For a Financial Market	النظام البيئي	Écosystème

	Infrastructure, this may include participants, linked Financial Market Infrastructure, service providers, vendors and vendor products. <sup>2</sup>		
Financial Market Infrastructure (FMI)	A multilateral system among participating institutions, including the operator of the system, used for the purposes of clearing, settling or recording payments, securities, derivatives or other financial transactions. <sup>2</sup>	البنية التحتية للأسواق المالية	Infrastructure des Marchés Financiers
Forensic Investigation	The application of investigative and analytical techniques to gather and preserve evidence from a digital device impacted by a cyber-attack. <sup>2</sup>	تحقيق الأمن الالكتروني	Enquête judiciaire
Forensic Readiness	The ability of a Financial Market Infrastructure to maximise the use of digital evidence to identify the nature of a cyber attack. <sup>2</sup>	استعداد الأمن الالكتروني	Préparation
Gray Hat	Gray hat describes a cracker (or, if you prefer, hacker) who exploits a security weakness in a computer system or product in order to bring the weakness to the attention of the owners. Unlike a black hat, a gray hat acts without malicious intent. The goal of a gray hat is to improve system and network security. However, by publicizing a vulnerability, the gray hat may give other crackers the opportunity to exploit it. This differs from the white hat who alerts system owners and vendors of a vulnerability without actually exploiting it in public. <sup>21</sup>	القبعة رمادية	Chapeau Gris
Identification	To develop the organizational understanding required to manage cyber risk to systems, assets, data and capabilities. <sup>2</sup>	الهوية	Identification

Information Asset	Any piece of data, device or other component of the environment that supports information-related activities. Information assets include data, hardware and software. Information assets are not limited to those that are owned by the entity. They also include those that are rented or leased, and those that are used by service providers to deliver their services. <sup>2</sup>	أصول المعلومات	Actif d'Informations
Integrity	With reference to information, an information system or a component of a system, the property of not having been modified or destroyed in an unauthorized manner. <sup>2</sup>	سلامة المعلومات	Intégrité
Layered protection	As relying on any single defence against a cyber threat may be inadequate, a Financial Market Infrastructure can use a series of different defences to cover the gaps in and reinforce other protective measures. For example, the use of firewalls, intrusion detection systems, malware scanners, integrity auditing procedures and local storage encryption tools can serve to protect information assets in a complementary and mutually reinforcing manner. May also be referred to as "defence in depth". <sup>2</sup>	طبقات الحماية	Protection Multicouche
Malware	Malicious software used to disrupt the normal operation of an information system in a manner that adversely impacts its confidentiality, availability or integrity. <sup>2</sup>	البرمجيات الخبيثة	Logiciel Malveillant Malware
<b>Operational Resilience</b>	The ability of a Financial Market Infrastructure to: (i) maintain essential operational capabilities under adverse conditions or stress, even if in a degraded or debilitated state; and (ii) recover to effective operational capability in a time frame consistent with the provision of critical economic services. <sup>2</sup>	المتانة التشغيلية	Résilience Opérationnelle

Protection	Development and implementation of appropriate safeguards, controls and measures to enable reliable delivery of critical infrastructure services. <sup>2</sup>	الحماية	La Protection
Recover	To restore any capabilities or services that have been impaired due to a cyber event. <sup>2</sup>	الاستعادة	Récupérer
Red Team	An independent group that challenges the cyber resilience of an organisation to test its defences and improve its effectiveness. A red team views the cyber resilience of a Financial Market Infrastructure from an adversary's perspective. <sup>2</sup>	(فريق اختبار متانة الأمن	Équipe Rouge
Resilience by design	The embedding of security in technology and system development from the earliest stages of conceptualization and design. <sup>2</sup>	متانة الأمن الإلكتروني من خلال التصميم	Cyberrésilience par Design
Respond	Of Financial Market Infrastructure, to develop and implement appropriate activities to be able to take action when it detects a cyber event. <sup>2</sup>	الاستجابة	Répondre
Resume	To recommence functions following a cyber incident. Financial Market Infrastructure should resume critical services as soon as it is safe and practicable to do so without causing unnecessary risk to the wider sector or further detriment to financial stability. The plan of action should incorporate the use of a secondary site and be designed to ensure that critical ICT systems can resume operations within two hours following a disruptive event. <sup>2</sup>	استئناف الخدمات الحيوية الالكترونية	Résumé

Security Operations Centre	A function or service responsible for monitoring, detecting and isolating incidents. <sup>2</sup>	مركز العمليات الأمنية	Centre des Opérations de Sécurité
Secure Sockets Layer (SSL)	Uses a combination of public-key and symmetric-key encryption to secure a connection between two machines, typically a Web or mail server and a client machine, communicating over the Internet or an internal network. <sup>21</sup>	طبقة الوصلات الآمنة	Protocole Sécurisé de Cryptage Secure Sockets Layer
Situational Awareness	The ability to identify, process and comprehend the critical elements of information through a cyber threat intelligence process that provides a level of understanding that is relevant to act upon to mitigate the impact of a potentially harmful event. <sup>2</sup>	الوعي بالحالة	Conscience de la Situation
Threat	A circumstance or event that has or indicates the potential to exploit vulnerabilities and to adversely impact (create adverse consequences for) organizational operations, organizational assets (including information and information systems), individuals, other organizations or society in general. <sup>2</sup>	التهديدات الإلكترونية	Menace
Threat Intelligence	Threat intelligence is evidence-based knowledge, including context, mechanisms, indicators, implications and actionable advice, about an existing or emerging menace or hazard to assets that can be used to inform decisions regarding the subject's response to that menace or hazard. <sup>2</sup>	معلومات التهديدات الالكترونية	Renseignements sur les Menaces
Vulnerability	A weakness, susceptibility or flaw in a system that an attacker can access and exploit to compromise system security. Vulnerability arises from the confluence of three elements: the presence of a susceptibility or flaw in a system; an attacker's access to that flaw; and an attacker's capability to exploit the flaw. <sup>2</sup>	نقاط الضعف	Vulnérabilité

Vulnerability Assessment	Systematic examination of an information system and its controls and processes, to determine the adequacy of security measures, identify security deficiencies, provide data from which to predict the effectiveness of proposed security measures and confirm the adequacy of such measures after implementation. Source: Adapted from NIST/FSB Cyber Lexicon. <sup>2</sup>	تقييم نقاط الضعف	Évaluation de la Vulnérabilité
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#### حماية البيانات Data Protection



Terms	Definition	المصطلحات	Les Termes
Accountability	There's a great deal of responsibility that Data Controllers have to bear in the GDPR Era but one of them tops it all – ensuring compliance. Controllers must be able to demonstrate the steps they take to abide by GDPR before taking up any business. <sup>29</sup>	المسؤولية	Responsabilité
Age Verification	The age requirement at which data subjects can lawfully give consent introduces a need to verify children's ages. Rules for the language used in consent requests which are targeted at children, and the way online services obtain children's consent, is regulated. Under the GDPR changes, the default age at which a person is no longer considered a child is 16. However, member states can adjust that limit between 13 and 16. Data controllers need to know the age of consent in every member state and cannot seek consent from anyone under that age. Consent must be obtained from a person holding "parental responsibility". Reasonable efforts are required to verify that the person providing that consent is indeed a parental figure. See Parental Consent. <sup>34</sup>	التحقق من العمر	Vérification de l'âge
Anonymous Data	Data from which no individuals can be identified, and which is therefore outside the scope of GDPR. <sup>34</sup>	بيانات مجهولة المصدر	Données Anonymes
Automated Data	Information processed by any type of computer or other equipment that operates automatically <sup>. 24</sup>	البيانات الآلية	Données Automatisée

Binding Corporate Rules (BCRS)	A set of binding rules designed to allow multinational companies and organisations to transfer personal data from the EU to the organization's affiliates based outside the EU but within the organization. BCRs must demonstrate adequate safeguards and be authorized by the appropriate lead authority in the EU to vouch for data protection compliance. <sup>34</sup>	قواعد ملزمة للشركات	<b>Règles d'Entreprise</b> <b>Contraignantes</b>
Biometric Data	Any data created during a biometric process. This includes physical samples, fingerprints as well as verification and identification data. <sup>34</sup>	البيانات الحيوية	Données Biométriques
Breach	A breach of security leading to the accidental or unlawful loss, destruction, unauthorized disclosure of, or access to, the personal data. <sup>34</sup>	خرق أمني	La Violation
Breach Notification	Organisations are required to report data breaches to the ICO within 72 hours of the breach and/or the organization becoming aware of the breach. In the case of Data Subjects being caused potential harm by the breach, they must also be notified. <sup>34</sup>	إشعار بالخرق الأمني	Notification des Violations Notification des Atteintes
Consent	Freely given, specific, informed and unambiguous consent given by the data subject either by statement or clear affirmative action which signifies agreement to the subject's personal data being processed. <sup>34</sup>	الموافقة المسبقة	Consentement
Cross-Border Processing	The processing of data by a Controller or Processor who operates in more than one EU member state, or the processing of data in one EU member state of subjects resident in one or more member state. <sup>34</sup>	معالجة البيانات عبر الحدود	Traitement Transfrontalier

Data Controller	Any person or organization (the legal entity or individual) that determines the purposes, conditions and methodology for the processing of personal data. <sup>34</sup>	متحكم بيانات	Responsable du Traitement
Data Erasure	Also known as the Right to be Forgotten. The right to have the Data Controller erase the personal data, stop publishing the data and cease processing the data. <sup>34</sup>	محو البيانات	Effacement de Données
Data Portability	The right to allow individuals to obtain and reuse their personal data for their own purposes across different services so they can move, copy or transfer the data easily in a safe and secure way. <sup>34</sup>	قابلية نقل البيانات	Portabilité des Données
Data Privacy Impact Assessment (DPIA)	A methodology or tool used to identify and reduce the privacy risks of individuals when planning projects or policies to protect the data. <sup>34</sup>	تقييم تأثير خصوصية البيانات (DPIA)	Évaluation de l'Impact de la Confidentialité des Données.
Data Processor	Any person or organization [the entity or individual] that processes data on behalf of the Data Controller. Processing is defined very widely and includes collection, storage, use, recording, disclosure or manipulation of data whether or not by automated means. <sup>34</sup>	معالج البيانات	Traitement de Données
Data Protection	The tools and techniques used to ensure data is not lost or corrupted. When selecting a cloud service provider (CSP), consider their services or protocols for backup, recovery, business continuity, and disaster recovery. <sup>15</sup>	حماية البيانات	Protection des Données
Data Protection Act (DPA)	The Data Protection Act 2018 was introduced in the UK to give effect to GDPR. <sup>34</sup>	قانون حماية البيانات (DPA)	Loi sur la Protection des Données

Data Protection Authority	The national authority in every EU member state that enforces data protection in that member state. <sup>34</sup>	سلطة حماية البيانات	Autorité de Protection des Données
Data Protection Officer (DPO)	The role in an organization which has responsibility for ensuring that individual's personal data is protected under data protection legislation and that the organization is compliant with the legislation. <sup>34</sup>	مسؤول حماية البيانات (DPO)	Responsable de la Protection des Données
Data Sovereignty	The concept that information which has been converted and stored in binary digital form is subject to the laws of the country in which it is located. <sup>34</sup>	سيادة البياثات	Souveraineté des Données
Encrypted Data	Data that is secure as protected by translating the data into another form that can only be read by those with authorized access through a key or password. <sup>34</sup>	البيانات المشفرة	Données Chiffrées Données Cryptées
Enforcement Notice	A Notice served by the Information Commissioner requiring us to take (or refrain from taking) specific action regarding our data processing activities, in order to comply with the Act. <sup>24</sup>	إشعار الإنفاذ	Avis d'Exécution
General Data Protection Regulation (GDPR)	It came into force on 25 <sup>th</sup> May 2018. The GDPR further harmonizes data protection rules across EU member states. It applies to data processing carried out by individuals and organisations operating within the EU, but also applies to organisations outside the EU that offer goods and services to EU citizens. The GDPR significantly enhances the rights of data subjects in the processing of their personal data. <sup>34</sup>	اللائحة العامة لحماية البيانات / الاتحاد الأوربي	<b>Règlement Général sur la Protection des Données (RGPD) - Union Européenne</b>
Data Protection Officer DPO	An appointment of a Data Protection Officer is obligatory if: (1) processing is carried out by a public authority; or (2) the "core activities" of a data controller / data processor either	مسؤول حماية البيانات DPO	Le Délégué à la Protection des Données (DPD)

	require "the regular and systematic monitoring of data subjects on a large scale," or consist of processing of special categories of data or data about criminal convictions "on a large scale." <sup>19</sup>		
Fair Processing Notice (FPN)	Fair processing notices are the "small print" that appear on forms, which are sometimes called privacy statements or collection texts. They are used to inform the person from whom personal data are being collected, the data subject, how their data will be processed. <sup>44</sup>	إشعار المعالجة العادلة (FPN)	Traitement Loyal des Données
Genetic Data	Data that is unique concerning the characteristics of an individual which are inherited or acquired. See Biometric Data. <sup>34</sup>	البيانات الوراثية	Données Génétiques
Grounds for Processing	An organization's lawful basis for processing personal data – consent; contractual; legal basis; vital interests; public interest; legitimate interests. <sup>34</sup>	أسباب المعالجة	Motif de Traitement
Information Commissioners Office (ICO)	The UK's independent authority set up to uphold information rights in the public interest, promoting openness by public bodies and data privacy for individuals. <sup>34</sup>	مكتب مفوضي المعلومات (ICO)	Bureau du Commissariat à l'Information
Lawful Basis of Data Processing	It is the need to have a valid lawful reason to process personal data. This could be consent, a legitimate interest or contractual necessity. <sup>29</sup>	الأساس القانوني لمعالجة البيانات	Base Légale du Traitement des Données
Legitimate Interest	It is a valid alternative to consent as lawful basis for processing— but not for special categories of data. It will not be valid if it harms the rights, interests or freedoms of the individual. Records of your legitimate interest should be documented. <sup>29</sup>	المصلحة المشروعة	Intérêt Légitime

Parental Consent	Consent from a person holding parental authority over children under 16 (age varies across member states). It is the responsibility of the Data Controller to set up the verification procedures that guarantee the age of the child and the authenticity of the Parental Consent. See Age Verification. <sup>34</sup>	موافقة ولي الأمر	Consentement Parental
Personal Data Breach	A breach of security leading to the accidental or unlawful destruction, loss, disclosure or access to, personal data. See Breach. <sup>34</sup>	خرق البيانات الشخصية	Violation de Données Personnelles
Privacy By Design	The principle of the inclusion of data protection from the onset of the designing and planning of systems, rather than as a later addition (also Privacy by Default). <sup>34</sup>	الخصوصية حسب التصميم	Protection des données dès la Conception (Privacy by Design)
Privacy Impact Assessment (PIA)	The GDPR imposes a new obligation on data controllers and data processors to conduct a Data Protection Impact Assessment (also known as a privacy impact assessment, or PIA) before undertaking any processing that presents a specific privacy risk by virtue of its nature, scope, or purposes. <sup>19</sup>	تقييم تأثير الخصوصية (PIA)	Évaluation de l'Impact de la Confidentialité
Privacy Notice	A notice informing Data Subjects how their personal information is going to be used and their rights when their data is provided, collected and processed. <sup>34</sup>	إشعار الخصوصية	Déclaration de Confidentialité Politique de Confidentialité Avis de Confidentialité
Pseudonymisation	A process undertaken to ensure that no personal data can be attributed to an individual data subject without the use of additional information. A procedure by which the most identifying fields within a data record/ database are replaced	التسميه المستعارة	Pseudonymisation

	by one or more artificial identifiers, or pseudonyms. GDPR explicitly encourages organizations to consider pseudonymization as a security measure provided the "key" that enables re-identification is kept separate and secure. <sup>34</sup>		
Recipient	Person to whom the personal data are disclosed in the course of processing. <sup>34</sup>	المتلقي	Destinataire
Rectification	The right for Data Subjects to have inaccurate personal information corrected. <sup>34</sup>	التصحيح	Rectification
Relevant Filing System	Any set of information relating to individuals which is structured either by reference to individuals or by reference to criteria relating to individuals in such a way that specific information relating to a particular individual is readily accessible even where processing does not take place automatically. This would include any paper files relating to an individual student or member of staff. <sup>24</sup>	نظام الملفات ذات الصلة	Système de Fichiers Associé
Right To Be Forgotten	See Data Erasure. <sup>34</sup>	الحق في النسيان	Droit à l'Oubli
Right To Access	See Subject Access Right.	الحق في الوصول	Droit d'Accéder Droit d'Avoir Accès
Safe Harbour	A Safe harbour is a list of countries that have an adequate level of security standards in terms of processing and handling personal information and acceptable to the European Union. The term originated during an agreement between EU and US department of commerce to maintain adequate level of data security. <sup>29</sup>	الملاذ الآمن	Sphère de Sécurité La Zone Sûre

Standard Contractual Clauses	The SCCs or "model clauses" are standardized contract language (approved by the European Commission) and one method of permission for controllers/processors to send personal data to third countries. <sup>42</sup>	البنود التعاقدية المعيارية	Clauses Contractuelles Standard
Sensitive Personal Data	Personal Data that is of a private nature and includes racial origin, sexual life, political or religious views and affiliations, and physical or mental health. <sup>34</sup>	بيانات شخصية حساسة	Données Personnelles Sensibles Données Personnelles Confidentielles
Subject Access Request	A written or electronic request by an individual to an organization asking for access to information about the individual held by the organization. <sup>34</sup>	طلب الوصول الموضوع	Demande d'Accès aux Données
Subject Access Right	Also known as the Right to Access, it entitles the Data Subject to have access to and information about the personal data that a Controller holds. Application is by a Subject Access Request that is free of charge. <sup>34</sup>	حق الوصول إلى الموضوع	Droit d'Accès au Sujet
Supervisory Authority	The lead authority in the EU member state that manages data protection compliance. <sup>34</sup>	السلطة الإشرافية	L'Autorité de Contrôle
Third Party	Any person other than the Data Subject, Data Controller or Data Processor. <sup>34</sup>	الطرف الثالث	Tiers
User Managed Access (UMA)	A standard protocol adopted in 2015 and designed to give an individual data subject, a unified control point for authorizing access to their personal data, content, and services, no matter where that data is stored. <sup>34</sup>	الوصول الذي يديره المستخدم (UMA)	Accès Géré par l'Utilisateur

# الهوية الرقمية Digital ID

Terms	Definition	المصطلحات	Les Termes
Authentication	Establishes that the claimant who asserts his or her identity is the same person whose identity was obtained, verified, and credentialed during on-boarding. <sup>25</sup>	المصادقة	Authentification
Authenticator	Something the claimant possess and controls that is used to authenticate (confirm) that the claimant is the individual to whom a credential was issued, and therefore (depending on the strength of the authentication component of the digital ID system) is (to varying degrees of likelihood, specified by the authentication assurance level) the actual subscriber and account holder. <sup>25</sup>	المصدق	Authentificateur
Claimant	A person who seeks to prove his/her identity and obtain the rights associated with that identity (e.g., to open or access a financial account). A Claimant can also be described as a Subscriber who asserts ownership of an identity to a Relying Party (RP) and seeks to have it verified, using authentication protocols. <sup>25</sup>	المدعي	Demandeur
Continuous Authentication	A dynamic form of authentication. It can leverage biomechanical biometrics, behavioural biometric patterns, and/or dynamic Transaction Risk Analysis to focus on ensuring that certain data points collected throughout the course of an online interaction with an individual (such as geolocation, MAC and IP addresses, typing cadence and mobile device angle) match "what should be expected" during the entire session. <sup>25</sup>	المصادقة المستمرة	Authentification Continue

<b>Credential Service Provider</b> (CSP)	Entity that issues and/or registers authenticators and corresponding electronic credentials (binding the authenticators to the verified identity) to subscribers. The CSP is responsible for maintaining the subscriber's identity credential and all associated enrolment data throughout the credential's lifecycle and for providing information on the credential's status to verifiers. <sup>25</sup>	مقدم خدمة اعتماد الهوية	Fournisseur de Services Justificatifs d'Identité
Digital Identity	A set of the attributes about a person that uniquely describes the person engaged in an online transaction under the Trust Framework identity eco-system. <sup>18</sup>	الهوية الرقمية	Identité Numérique
<b>De-duplication</b>	The process of resolving identity evidence and attributes to a single unique identity within a given population or context(s). <sup>25</sup>	إزالة الازدواجية	Déduplication
Digital ID systems	For the purposes of this Guidance, are systems that cover the process of identity proofing/enrolment and authentication. Identity proofing and enrolment can be either digital or physical (documentary), or a combination, but binding, credentialing, authentication, and portability/federation must be digital. <sup>25</sup>	أنظمة الهوية الرقمية	Systèmes d'Identités Numériques
<b>Digital ID Assurance</b> <b>Frameworks and Technical</b> <b>Standards</b>	A set of open sources, consensus-driven assurance frameworks and technical standards for digital ID systems that have been developed in several jurisdictions and also by international organizations and industry bodies See Appendix D: Digital ID assurance framework and technical standard setting bodies. See for example NIST standards and eIDAS Regulation at Appendix E: Overview of US and EU digital ID assurance frameworks and technical standards. <sup>25</sup>	أطر ضمان الهوية الرقمية والمعايير الفنية	Cadres d'Assurance de l'Identité Numérique et Normes Techniques

eIDAS Regulation	(EU) N°910/2014 on electronic identification and trust	اللائحة التنظيمية للاتحاد	Règlement eIDAS
	services for electronic transactions in the internal market. <sup>25</sup>	الأوروبي لتحديد الهوية الإلكترونية وخدمات الثقة	
		للمعاملات الإلكترونية	
Electronic Identity Verification (eIDV)	The use of public and private databases to quickly confirm whether an individual is who they claim to be. eIDV uses personal information such as name, date of birth, Social Security number and address. The result of trying to confirm an individual's identity could be a match, non-match, or partial match. <sup>10</sup>	التحقق من الهوية الإلكترونية	Validation électronique de l'identité
Enrolment	The process by which an IDSP registers (enrolls) an identity- proofed applicant as a 'subscriber' and establishes their identity account. This process authoritatively binds the subscriber's unique verified identity (i.e., the subscriber's attributes/identifiers) to one or more authenticators possessed and controlled by the subscriber, using an appropriate binding protocol. The process of binding the subscriber's identity to authenticator(s) is also referred to as 'credentialing'. <sup>25</sup>	التسجيل	Inscription
General-Purpose Identity Systems (or Foundational Identity Systems)	Typically provide documentary and/or digital credentials that are widely recognized and accepted by government agencies and private sector service providers as proof of official identity for a variety of purposes (for example, national ID systems and civil registration). <sup>25</sup>	أنظمة الهوية ذات الأغراض العامة (أو أنظمة الهوية التأسيسية)	Systèmes d'Identité à Usage Général ou Systèmes d'Identité Fondamentaux
Identity lifecycle	Management refers to the actions that should be taken in response to events that can occur over the identity lifecycle and affect the use, security and trustworthiness of authenticators, for example, loss, theft, unauthorized	دورة حياة الهوية	Cycle de Vie d'Identité

	duplication, expiration, and revocation of authenticators and/or credentials. <sup>25</sup>		
Identity Proofing	Answers the question, "Who are you?" and refers to the process by which an identity service provider (IDSP) collects, validates and verifies information about a person and resolves it to a unique individual within a given population or context. It involves three actions: (1) collection/resolution, (2) validation, and (3) verification. <sup>25</sup>	إثبات الهوية	Preuve d'Identité
Identity Service Provider (IDSP)	Generic umbrella term that refers to all of the various types of entities involved in providing and operating the processes and components of a digital ID system or solution. IDSPs provide digital ID solutions to users and relying parties. A single entity can undertake the functional roles of one or more IDSPs – see Appendix A: Description of a Basic Digital Identity System and its Participants for a summary of all the relevant entities including – identity provider, credential service provider (CSP), registration authority (RA) (or identity manager), verifier, user/Individual, applicant, subscriber, claimant, relying party and Trust Framework Provider / Trust Authority <sup>. 25</sup>	مقدم خدمة الهوية (IDSP)	Fournisseur de Service d'Identité
Official Identity	For the purposes of this Guidance, is the specification of a unique natural person that (1) is based on characteristics (identifiers or attributes) of the person that establish a person's uniqueness in the population or particular context(s), and (2) is recognized by the state for regulatory and other official purposes. <sup>25</sup>	الهوية الرسمية	Identité Officielle
Phishing	A fraudulent attempt to gather credentials from unknowing victims using deceptive emails and websites. For example, a	التصيد الاحتيالي	Hameçonnage ou Phishing

(also referred to as man-in- the-middle or credential interception)	criminal attempt to trick its victim into supplying names, passwords, government ID numbers or credentials to a seemingly trustworthy source. <sup>25</sup>		(Aussi Appelé Interception de l'Homme au Milieu ou des Titres de Compétences)
Portability / Interoperability	Portable identity means that an individual's digital ID credentials can be used to prove official identity for new customer relationships at unrelated private sector or government entities, without their having to obtain and verify personally identifiable information (PII) and conduct customer identification/verification each time. Portability requires developing interoperable digital identification products, systems, and processes. Portability/interoperability can be supported by different digital ID architecture and protocols <sup>. 25</sup>	قابلية النقل / التشغيل البيني	Interopérabilité / Portabilité
<b>Progressive Identity</b>	Official identity that can change over time as the identified individual develops a progressively more robust digital footprint that provides an increasing number of attributes and/or authenticators that can be verified against an increasing number and range of sources. <sup>25</sup>	الهوية التقدمية	Identité progressive
Public-key encryption (Used in Public Key Infrastructure (PKI) Certificates)	Where a pair of keys are generated for an entity—a person, system, or device—and that entity holds the private key securely, while freely distributing the public key to other entities. Anyone with the public key can then use it to encrypt a message to send to the private key holder, knowing that only they will be able to open it. <sup>25</sup>	تشفير المفتاح العام (المستخدم في شهادات البنية التحتية للمفتاح العام (PKI)	Chiffrement à Clé Publique (Utilisé dans les Certificats d'Infrastructure à Clé Publique)

Synthetic Identities	Developed by criminals by combining real (usually stolen) and fake information to create a new (synthetic) identity, which can be used to open fraudulent accounts and make fraudulent purchases. Unlike impersonation, the criminal is pretending to be someone who does not exist in the real world rather than impersonating an existing identity. <sup>25</sup>	الهويات التركيبية الهويات الاصطناعية	Identités Synthétiques
Validation (identity)	Part of identity proofing and involves determining that the evidence is genuine (not counterfeit or misappropriated) and the information the evidence contains is accurate by checking the identity information/evidence against an acceptable (authoritative/reliable) source to establish that the information matches reliable, independent source data/records. <sup>25</sup>	المصادقة	Validation
Verification	Part of identity proofing and involves confirming that the validated identity relates to the individual (applicant) being identity proofed. <sup>25</sup>	التحقق	Vérification

## تقنية السجلات اللامركزية (DLT) المركزية (Distributed Ledger Technology

Terms	Definition	المصطلحات	Les Termes
Administrator	Actors that controls access to the core codebase repository and can decide to add, remove and amend code to change system rules. An administrator is often considerably involved in the governance process. <sup>11</sup>	المدير (نظام تقنية السجلات اللامركزية)	Administrateur
Alt-coin	Any cryptocurrency that exists as an alternative to bitcoin. <sup>9</sup>	العملة البديلة	Alt-coin
Asset-Backed Token	A DLT-based digital representation of an actual real asset or revenue stream. <sup>5</sup>	رمز مدعوم بالأصول	Jeton Adossé à des Actifs
Candidate Record	A record that has not yet been propagated to the network and thus not been subject to network consensus. <sup>11</sup>	سجل المرشح	Dossier du Candidat
Censorship Resistance	Inability of a single party or cartel to unilaterally perform any of the following: 1) change rules of the system; 2) block or censor transactions; and 3) seize accounts and/or freeze balances. <sup>11</sup>	المقاومة الرقابية	Résistance à la Censure
Crowdfunding	This is the practice of funding a project or venture by raising monetary contributions from a large number of people. It is often performed via internet mediated registries that facilitate money collection for the borrower (lending) or issuer (equity). <sup>6</sup>	التمويل الجماعي	Financement Participatif Crowdfunding
Consensus Algorithm	A set of rules and processes used by the network to reach agreement and validate records. <sup>11</sup>	الخوارزمية المتوافقة	Algorithme de Consensus

DASH	A peer-to-peer cryptocurrency that was forked out of Bitcoin to offer faster and more private transactions to users. It is also considered to be one of the first digital currency with a decentralized blockchain governance system. Dash is a blend word for Digital Cash and its currency symbol in the markets is DASH. <sup>10</sup>	عملة مشفرة	DASH
Digital Asset	Any text or media that is formatted into binary source. <sup>9</sup>	الأصول الرقمية	Actifs Numériques
Digital signature	A mathematical scheme used for presenting the authenticity of digital assets. <sup>9</sup>	التوقيع الالكتروني	Signature Numérique
Disaster-Recovery-as-a- Service	A cloud computing and backup service model that uses cloud resources to protect applications and data from disruption caused by disaster. It gives an organization a total system backup that allows for business continuity in the event of system failure. DRaaS is often offered in conjunction with a disaster recovery plan (DRP) or business continuity plan (BCP). The other name for DRaaS is business continuity as a service (BCaaS). <sup>10</sup>	التعافي من الكوارث كخدمة	Récupération après Sinistre en tant que Service Reprise après Sinistre en Tant que Service
Distributed Ledger Technology (DLT)	A means of recording information through a distributed ledger, i.e. a repeated digital copy of data at multiple locations, as in blockchain. These technologies enable nodes in a network to securely propose, validate, and record a full history, state changes (or updates) to a synchronised ledger that is distributed across the network's nodes. <sup>28</sup>	تقنية السجلات اللامركزية	Technologie des Registres Distribués (TRD)
DLT System	A system of electronic records that (i) enables a network of independent participants to establish a consensus around (ii) the authoritative ordering of cryptographically validated ('signed') transactions. These records are made (iii)	نظام تقنية السجلات اللامركزية	Système des Registres Distribués

	persistent by replicating the data across multiple nodes, and (iv) tamper-evident by linking them by cryptographic hashes. (v) The shared result of the reconciliation/ consensus process - the 'ledger' - serves as the authoritative version for these records. <sup>11</sup>		Système de Technologie du Grand Livre Distribué
Dogecoin	A peer-to-peer open source cryptocurrency and falls under the category of altcoins. Launched in December 2013 with a Shibu Inus (Japanese dog) as its logo, Dogecoin looked casual in its approach but is gaining wide acceptance for online transactions. It is a decentralized virtual currency and uses peer-to-peer technology to carry out its operations. Dogecoin is script based (i.e. based on a password key) and enables fast payments to anyone, anywhere across the globe. <sup>10</sup>	عملة مشفرة	Dogecoin
Endogenous reference	Data which can be created and transferred solely through the means of the system and has meaning within the system. Enforcement is automatically performed by the system. <sup>11</sup>	المرجعية الذاتية	Référence Endogènes
Exogenous reference	Data that makes reference to some real-world condition and needs to be incorporated from the outside. This generally requires a gateway to make the connection to the external system and enforce decisions outside the DLT system. <sup>11</sup>	المرجعية الخارجية	Référence Exogène
Fork	The event of a DLT system splitting into two or more networks. A fork can occur when two or more record producers publish a valid set of records at roughly the same time, as a part of an attack (e.g. 51% attack) or when a DLT system protocol change is attempted (such a fork is 'hard' if all users are required to upgrade, otherwise it is 'soft'). <sup>11</sup>	تشعب أو تفريع	Fourche Bifurcation

Hard Fork	Alters the blockchain data in a public blockchain. Require s all nodes in a network to upgrade and agree on the new version. <sup>9</sup>	التشعب الصلب	Fourche dur
Gateway	Actor that provides interfaces to the system by acting as a bridge between the system and the external world. <sup>11</sup>	المدخل _ البوابة	Passerelle
Hierarchical DL	Distributed ledger where each node has a full copy of the ledger but some details are hidden using cryptography. Only one or more trusted third parties have a full view of the ledger. <sup>7</sup>	التسلسل الهرمي للسجلات اللامركزية	DL Hiérarchique
Hybrid reference	Data that shares both endogenous and exogenous characteristics. Enforcement is dependent to some extent on gateways. <sup>11</sup>	مرجع مختلط	Référence Hybride
Independent validation	Ability of the system to enable each participant to independently verify the state of their transactions and integrity of the system. <sup>11</sup>	المصادقة المستقلة	Validation Indépendante
Ledger	The authoritative set of records collectively held by a substantial proportion of network participants at any point in time, such that records are unlikely to be erased or amended (i.e. 'final'). <sup>11</sup>	السجل	Registre Grand livre
Log	An unordered set of valid transactions held by a node, which have not yet been incorporated into a formal record subject to network consensus rules (i.e. 'unconfirmed' transactions). Also called mempool. <sup>11</sup>	السجل	Log
Multi-party consensus	Ability of the system to enable independent parties to come to agreement on a shared set of records without requiring a central authority. <sup>11</sup>	توافق متعدد الأطراف إجماع متعدد الأطراف	Consensus Multipartite

Native Asset	The primary digital asset(s), if any, specified in the protocol that are typically used to regulate record production, pay transaction fees on the network, conduct 'monetary policy', or align incentives. <sup>11</sup>	الأصول المحلية	Actif Natif
Oracle	A gateway that bridges the gap between the DLT system and external systems by serving as a source of information. <sup>11</sup>	أوراكل كوسيط	Oracle
Peer-to-peer (P2P)	The direct sharing of data between nodes on a network, as opposed to via a central server. <sup>31</sup>	المشاركة المباشرة للبيانات	Pair à Pair
Programmatically - Executed Transaction	A computer script that, when triggered by a particular message, is executed by the system. When the code is capable of operating as all parties intend, the deterministic nature of the execution reduces the level of trust required for individual participants to interact with each other. They are commonly referred to as smart contracts due to the scripts' ability to replace certain fiduciary relationships, such as custody and escrow, with code. However, they are not autonomous or adaptive ('smart'), nor contracts in a legal sense - rather, they can be the technological means of implementing a contract or agreement. <sup>11</sup>	المعاملات المنفذة برمجياً (تنفيذ المعاملات المبرمجة)	Par Programme - Transaction Exécutée
<b>Record Reorganisation</b>	A node discovers that a new ledger version has been formed which excludes one or more records that the node previously thought were part of the ledger. These excluded records then become 'orphaned'. <sup>11</sup>	إعادة تنظيم السجل	<b>Réorganisation des Enregistrements</b>
Shared Recordkeeping	The ability of the system to enable multiple parties to collectively create, maintain, and update a shared set of records. <sup>11</sup>	حفظ السجلات المشتركة	Archivage Partagé

Tamper resistance	The ability to make it hard for a single party to unilaterally change past records (i.e. transaction history). <sup>11</sup>	مقاومة العبث	Inviolabilité
Transaction	Any proposed change to the ledger; despite the connotation, a transaction need not be economic (value-transferring) in nature. Transactions can be unconfirmed (not included in the ledger) or confirmed (part of the ledger). <sup>11</sup>	معاملة (عملية تجارية)	Transaction
Transaction finality	Determines when a confirmed record can be considered 'final' (i.e. not reversible). Finality can be probabilistic (e.g. Pow-based systems that are computationally impractical to revert) or explicit (e.g. systems that incorporate 'checkpoints' that must appear in every transaction history). Finalised records are considered permanently settled, whereas records that have been produced but which are feasible to revert are referred to as provisionally settled. <sup>11</sup>	المعاملة النهائية	Transaction de Finalité
Transaction processing	The set of processes that specifies the mechanism of updating the ledger: (i) which participants have the right to update the shared set of authoritative records (permission less vs. permissioned) and (ii) how participants reach agreement over implementing these updates. Also called mining. <sup>11</sup>	معالجة المعاملات	Traitement des Transactions
Validation (ledger)	The set of processes required to ensure that actors independently arrive at the same conclusion with regard to the state of the ledger. This includes verifying the validity of unconfirmed transactions, verifying record proposals, and auditing the state of the system. <sup>11</sup>	المصادقة (السجل)	Validation (registre)
Wallet	A software program capable of storing and managing public and private key pairs used to store and transfer digital assets.	حافظة نقود	Le Portefeuille

#### مصطلحات عامة General Terms

Terms	Definition	المصطلحات	Les Termes
Application Binary Interface (ABI)	An interface between two binary program modules, often one program is a library and the other is being run by a user. <sup>9</sup>	واجهة التطبيق الثنانية	Interface Binaire d'Application
AML & AML requirements	means anti-money laundering and anti-money laundering requirements respectively based on AML/ CFT laws. <sup>12</sup>	متطلبات مكافحة غسل الأموال وتمويل الأر هاب	Exigences en matière de Lutte contre le Blanchiment de Capitaux et le Financement du Terrorisme (LBC/FT)
Attack Surface	The sum of an information system's characteristics in the broad categories (software, hardware, network, processes and human) which allows an attacker to probe, enter, attack or maintain a presence in the system and potentially cause damage to Financial Market Infrastructure. A smaller attack surface means that the Financial Market Infrastructure is less exploitable and an attack less likely. However, reducing attack surfaces does not necessarily reduce the damage an attack can inflict. <sup>2</sup>	المساحة المعرضة للهجمات	Surface d'Attaque
Availability	The property of being accessible and usable as expected upon demand. <sup>2</sup>	الإتاحة	Disponibilité
Bank-based Model	A mobile financial services business model (bank-led or nonbank-led) in which (i) the customer has a contractual relationship with the bank and (ii) the bank is licensed or otherwise permitted by the regulator to provide the financial service(s). <sup>3</sup>	نموذج قائم على البنك	Modèle Bancaire Modèles Basés Sur un Système Bancaire

Bank-led Model	A mobile financial services business model (bank-based or nonbank-based) in which the bank is the primary driver of the product or service, typically taking the lead in marketing, branding, and managing the customer relationship. <sup>3</sup>	نموذج بقيادة البنك	Modèle Dirigé par les Banques
Banking beyond branches / Branchless Banking	The delivery of financial services outside conventional bank branches. Banking beyond branches usesagents or other third- party intermediaries as the primary point of contact with customers and relies on technologies such as card-reading point-of-sale (POS) terminals and mobile phones to transmit transaction details. <sup>3</sup>	الخدمات المصرفية خارج الفروع / الخدمات المصرفية بدون فروع	Services bancaires hors Succursales / Services Bancaires sans Succursales Services Bancaires au- Delà des Succursales / Banque à Distance
Big Data	A generic term that designates the massive volume of data that is generated by the increasing use of digital tools and information systems. Big data encompasses technologies that significantly increase the volume, variety, velocity and validity of data under management. <sup>17</sup>	البيانات الضخمة	MégaDonnées Big Data
<b>Big Data Analytics</b>	Analytical uses of massive volumes of data generated by the use of digital tools and information systems. <sup>47</sup>	تحليلات البيانات الضخمة	Analyse du Big Data
Big Techs	Large, globally active technology firms with a relative advantage in digital technology. <sup>47</sup>	شركات التقنيات الكبرى	Tech Giants Big Techs
Biotechnology	Technology based on biology. It harnesses cellular and biomolecular processes to develop technologies and products that help improve our lives and the health of our planet. <sup>40</sup>	التكنولوجيا الحيوية	Biotechnologique
<b>Business network card</b>	Provides necessary information for a user, entity or node to connect a blockchain business network. <sup>9</sup>	بطاقة شبكة الأعمال	Carte Réseau d'Entreprise

Business process	A collection of linked activities that takes one or more kinds of input and creates an output that is of value to a Financial Market Infrastructure's stakeholder. A business process may comprise several assets, including information, ICT resources, personnel, logistics and organizational structure, which contribute either directly or indirectly to the added value of the service. <sup>2</sup>	عملية تجارية	Processus d'Affaires
Cash-In	Cash exchanged for e-money. <sup>3</sup>	التدفق النقدي	Entrée d'Espèces
Cash-Out	E-money exchanged for cash. <sup>3</sup>	السحب النقدي	Décaissement
Casper	Consensus algorithm that combines proof of work and proof of stake. Ethereum is going to use casper as a transition to proof of stake. <sup>9</sup>	كاسبر	Casper
Central Bank Digital Currency (CBDC)	Digital form of central bank money that is different from balances in traditional reserve or settlement accounts (eg balances in accounts held by commercial banks at the central bank). <sup>7</sup>	العملة الرقمية للبنك المركزي	Monnaie Digitale de la Banque Centrale
CDN (Content Delivery Network)	Allows for a quick transition of assets needed to load internet content (html, j s, css, etc.) <sup>9</sup>	شبكة توصيل المحتوى	Réseau de Distribution de Contenu
Chain code	A program that initializes and manages a ledgers state through submitted applications. It is the Hyperledger Fabric equal to Smart Contracts. <sup>9</sup>	رمز السلسلة	Code de Chaîne
Coinbase	Coinbase is a bitcoin broker that provides a platform for traders to buy and sell bitcoin with fiat money. In addition to its primary operation as a broker, Coinbase is also a bitcoin exchange and wallet provider. <sup>10</sup>	وسيط لتداول البيتكوين	Coinbase

Collaborative Customer Due Diligence (CCDD)	Customer due diligence (CDD) on its own comprises customer information that enables an organization to assess the extent to which the customer exposes the organization to a range of risk. Collaborative CDD (CCDD) is a new approach to CDD that seeks to address the shortcomings of current CDD processes. Examples include creating a public utility that FSPs can use to identify clients and verify identities on an ongoing basis, access to KYC as a service (a centralized database where banks can share and access KYC information on corporate clients), and self-sovereign IDs. <sup>38</sup>	العناية التعاونية الواجبة تجاه العملاء	Devoir Collaborative de Vigilance Relatif de la Clientèle
Collaborative Finance	A category of financial transaction that occurs directly between individuals without the intermediation of a traditional financial institution. This new way to manage informal financial transactions has been enabled by advances in social media and peer-to-peer online platforms. <sup>10</sup>	التمويل التعاوني	Finance Participative
Crowdfunding	The practice of funding a project or venture by raising monetary contributions from a large number of people. It is often performed via internet-mediated registries that facilitate money collection for the borrower (lending) or issuer (equity). <sup>22</sup>	التمويل الجماعي	Financement Participatif
Critical Operations	Any activity, function, process, or service, the loss of which, for even a short period of time, would materially affect the continued operation of a Financial Market Infrastructure, its participants, the market it serves, and/or the broader financial system. <sup>2</sup>	العمليات التجارية الهامة	<b>Opérations Essentielles</b>
Customer Due Diligence (CDD)	Often used synonymously with Know Your Customer (KYC) measures, but generally refers more broadly to a financial institution's policies and procedures for obtaining customer	العناية الواجبة للعملاء	Devoir de Vigilance Relatif à la Clientèle

	information and assessing the value of the information for detecting, monitoring, and reporting suspicious activities. <sup>3</sup>		
Dashboards	Customisable, dynamic interactive reporting tools that automatically fetch and render data in meaningful and actionable visualisations. <sup>17</sup>	لوحة القيادة	Tableaux de Bord
Data Cubes	Granular data storage and transmission solution enabling real- time data collection. <sup>17</sup>	مكعبات البيانات	Cubes de Données
DDos Attacks	A denial-of-service attack is a cyber-attack in which the perpetrator seeks to make a machine or network resource unavailable to its intended users by temporarily or indefinitely disrupting services of a host connected to the Internet. <sup>9</sup>	هجمات الحرمان من الخدمة	Attaques de DDoS
Devops	Represents a change in IT culture, focusing on rapid IT service delivery through the adoption of agile, lean practices in the context of a system-oriented approach. <sup>28</sup>	منهجية التطوير والتشغيل	Devops
Digital Financial Services	The broad range of financial services accessed and delivered through digital instruments, including payments, credit, savings, remittances, and insurance. <sup>3</sup>	الخدمات المالية الرقمية	Services Financiers Numériques
Digital Infrastructure	Refers to the enabling digital structures, facilities, ecosystem and capabilities surrounding the provision of FinTech/DFS, but can be more widely applicable beyond financial services. For the purposes of this study, this might typically include infrastructure related to identity (e.g. digital identity initiatives), data analytics and sharing, credit information and/or payment systems and risk mitigations. While these may be directly or indirectly relevant for the regulation and	البنية التحتية الرقمية	Infrastructure Numérique

	supervision of FinTech/DFS, not all of these may be under the remit or influence of financial regulators. <sup>46</sup>		
Digitalisation	The use of digital technologies to change a business model, or the process of moving to a digital business. <sup>28</sup>	الرقمنة	Numérisation
Digitisation	The process of transforming analogue to digital form. <sup>28</sup>	الرقمنة	Numérisation
Ecosystem (in general)	The community of interacting firms and the financial services environment. <sup>26</sup>	النظام البيئي	Écosystème
Fast Fail System	Designed to stop normal operation rather than attempt to continue a possibly flawed process. <sup>28</sup>	نظام سريع الفشل	Système Fast Fail
Fiat currency	Fiat currency is "legal tender" backed by a central government, such as the Federal Reserve, and with its own banking system, such as fractional reserve banking. It can take the form of physical cash, or it can be represented electronically, such as with bank credit. <sup>1</sup>	عملة نقدية	Monnaie Fiat Monnaie Fiduciaire
FinTech	A technologically enabled innovation in financial services that could result in new business models, applications, processes, or products, with an associated material effect on financial markets and institutions and the provision of financial services. <sup>38</sup>	التقنيات المالية الحديثة	FinTech Technologies Financières
Fintech Data Gaps	Data gaps emerging as a by-product of fintech. They encompass measurement problems in the current statistical infrastructure, and lack of data on new items. <sup>47</sup>	فجوات بيائات التقنيات المالية الحديثة	Lacunes des Données de la Fintech
Fintech firms / Fintechs	Recently incorporated institutions that use technology- enabled innovation to provide financial services. As per BIS	شركات التقنيات المالية الحديثة	Entreprises de la Fintech / Fintechs

	survey they are classified as neobanks, and fintech credit institutions (notably fintech credit platforms), fintech insurance companies, fintech asset managers, and fintech providers of payment, settlements and clearing services.		
FinTech Market	The provision, transaction and facilitation of financial activities across emerging verticals including digital lending (e.g. P2P lending), digital capital raising (e.g. equity-based crowdfunding), digital banking, digital savings, digital payments and remittances, digital custody, InsurTech, WealthTech, cryptoasset exchanges and the supply of enterprise technologies, RegTech, alternative data analytics and other services. <sup>46</sup>	سوق التقنيات المالية الحديثة	Marché FinTech
Fintech Services	Financial services provided using technology-enabled innovation. Examples include online lending platforms, which can be operated by traditional banks. <sup>47</sup>	خدمات التقنيات المالية الحديثة	Services de la Fintech
Geographic Information Systems	Automated analysis of spatial or geographic data. <sup>17</sup>	نظم المعلومات الجغرافية	Système d'Information Géographique
Innovation Accelerator	A partnership arrangement between FinTech providers and central banks/supervisory agencies to 'accelerate' growth or develop use cases which may involve funding support and/or authorities' endorsement/approval for future use in central banking operations or in the conduct of supervisory tasks. <sup>28</sup>	مسرع الابتكار	Accélérateur d'Innovation
Innovation Facilitator	Public sector initiatives to engage with the FinTech sector, such as regulatory sandboxes, innovation hubs and innovation accelerators. <sup>28</sup>	ميسىر الابتكار	Facilitateur de l'Innovation
Innovation Hub	Innovation facilitator set up by supervisory agencies that provide support, advice or guidance to regulated or	مركز الابتكار	Centre d'Innovation Digitale

	unregulated institutions in navigating the regulatory framework or identifying supervisory, policy or legal issues and concerns. <sup>28</sup>		
Innovation Office	A dedicated function within a regulator which engages with and provides regulatory clarification to innovative financial services providers. These may also be known as Innovation or FinTech "Hubs". <sup>46</sup>	مكتب الابتكار	Bureau d'Innovation Digitale
Internal Fintech Hub (Central Bank)	Hub set up by central banks to coordinate initiatives concerning fintech across business areas and departments. <sup>47</sup>	مركز داخلي للتقنيات المالية الحديثة (البنك المركزي)	Fintech Hub Interne (Banque Centrale)
Internet of Things (IoT)	Devices with the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction. This includes (but isn't limited to!) cell phones, coffee makers, washing machines, headphones, lights, wearable devices, and components of machines (for example a car engine, or wheel bearing). <sup>40</sup>	إنترنت الأشياء (IoT)	Internet des Objets
Interoperability (in general)	Technical or legal compatibility that enables a system or mechanism to be used in conjunction with other systems or mechanisms. Interoperability allows participants in different systems to conduct, clear and settle payments or financial transactions across systems without participating in multiple systems. <sup>7</sup>	قابلية التشغيل البيني / إمكانية التشغيل البيني	Interopérabilité
Issuer	Means the PSP <sup>(see Payments)</sup> providing the stored value instrument, enabling Customers to use the instruments at various merchants. <sup>12</sup>	المصدر	Émetteur

Know Your Customer (KYC)	A set of due diligence measures undertaken by a financial institution, including policies and procedures, to identify a customer and the motivations behind his or her financial activities. KYC is a key component of AML/CFT regimes. <sup>3</sup>	أعرف عميلك	Identification de la Clientèle Connaissez Votre Client
Merkle Tree	A tree in which every leaf node is labelled with the hash of a data block and every non-leaf node is labelled with the cryptographic hash of the labels of its child nodes. <sup>9</sup>	شجرة ميركل	Arbre de Merkle
Neobanks	Newly created banks that offer mobile-only banking products and services using smartphone applications that serve as an alternative to traditional banking with bricks-and-mortar branch networks. <sup>47</sup>	البنوك الجديدة عبر الانترنت	Neobanks
Network Analysis	The process of investigating structures through the use of networks and graph theory. <sup>17</sup>	تحليل الشبكات	Analyse du Réseau
Proof of Concept	An implementation of a certain method or idea using specific technologies — in order to assess and demonstrate its feasibility and confirm its practical potential. See also Prototype and MVP. <sup>40</sup>	إثبات المفهوم	Preuve de Concept
Prototype	A prototype is a way to test one part of a complicated system or product. It is an early sample/model built to test a concept or assumption or to act a a thing to be tested and learned from. See also MVP and Proof of concept and Mock-up and Wireframe. <sup>40</sup>	النموذج المبدئي	Prototype
<b>Regulatory Innovation</b> <b>Initiatives</b>	A broad set of activities carried out by regulators to innovate regulatory and supervisory functions, processes, organizations and applications, which often but not necessarily involve the use of technological solutions. <sup>46</sup>	مبادرات الابتكار التنظيمية	Initiatives d'Innovation Réglementaire

Regulatory Technology "RegTech"	Any range of applications of FinTech for regulatory and compliance requirements and reporting by regulated institutions. <sup>28</sup>	الحلول التنظيمية الحديثة	RegTech Outils pour la Régulation
<b>Regulatory Sandbox</b>	Formal regulatory programmes that allow market participants to test new financial services or models with live customers, subject to certain safeguards and oversight. <sup>46</sup>	المختبر التنظيمي	Sandbox Réglementaire
Remote Working	Remote working / telecommuting is a work arrangement in which Employees do not commute to a central place of work. They use the cloud as a method of accessing their work system and files from anywhere at any time. A person who telecommutes is known as a "telecommuter", "teleworker", and sometimes as a "home sourced," or "work-at-home" employee. <sup>15</sup>	العمل عن بعد	Le Travail à Distance
Risk-based approach	A method for complying with AML/CFT standards set forth in FATF Recommendation 1. The risk-based approach is based on the general principle that where there are higher risks, countries should require financial services providers to take enhanced measures to manage and mitigate those risks. Where risks are lower (i.e. no suspicion of money laundering or terrorist financing), simplified measures may be allowed. <sup>3</sup>	النهج القائم على المخاطر	Approche Fondée Sur les Risques
Robotics	The design, construction, operation, and use of robots, as well as computer systems for their control, sensory feedback, and information processing. <sup>40</sup>	علم الروبوتات	Robotiques
Text Mining	The process of exploring and analysing large amounts of unstructured text data aided by software that can identify concepts, patterns, topics, keywords and other attributes in the data. <sup>17</sup>	التنقيب في النصوص	Exploration de Texte

Notary services	Digitizing, storing, and verifying documents or contracts and proof of ownership or transfer.	خدمات التصديق	Services de Notaire
Network Analysis	The process of investigating structures through the use of networks and graph theory. <sup>13</sup>	تحليل الشبكات	Analyse de Réseau
Self-Organising Maps	A type of artificial neural network that is trained using unsupervised learning to produce a low-dimensional, discretised representation of the input space of the training samples, called a map, and is therefore a method of performing dimensionality reduction. <sup>17</sup>	خرائط ذاتية التنظيم	Cartes Auto-Organisées
Supervisory Technology ''SupTech''	Any application of FinTech used by regulatory, supervisory and oversight authorities. <sup>28</sup>	تقنية الإشراف	Technologie de Supervision (Technologie pour le Superviseur)
Supply-side Statistics	Statistics on use of basic financial services by customers, obtained from financial corporations. <sup>47</sup>	إحصاءات جانب العرض	Statistiques du Côté de l'Offre
Web Portal	Static file upload via web site with built-in automated validation checks. <sup>17</sup>	بوابة الويب	Portail Web
Web Scraper	Automated capture of web data by programs or "bots". <sup>17</sup>	مكشطة الويب	Grattoir Web
			Extraction de sites Web

### InsurTech التقنيات الحديثة

Terms	Definition	المصطلحات	Les Termes
Adjuster	A person appointed by an insurance company to investigate claims and recommend settlement amounts. <sup>36</sup>	الضابط	Ajusteur
Asset Vault	Enables consumers to catalogue all of their assets in a secure online register and better understand their total value. The firm also works with insurance providers to protect the consumer and their assets with appropriate insurance products. <sup>35</sup>	الأصول المدفونة	Voûte d'actifs
Binder	An authority given by an insurer to an intermediary to accept risks or settle claims. A person who acts under a binder is said to have a binding authority. <sup>36</sup>	الموثق	Liant
Blink	An insurance product with an automated claims process that allows travelers to instantly book a new ticket on their mobile device in the event of a flight cancellation. <sup>35</sup>	منتج تأمين آلي المطالبة	Cligner
Bordereau	A summary of underwriting information or claims data. Bordereaux may be exchanged between an insurer and a reinsurer or between an intermediary and an insurer. <sup>36</sup>	حدود التأمين	Bordereau
Dispute resolution process	A system to resolve Complaints All AFSL holders are required to have a dispute resolution process. <sup>36</sup>	عملية حل النزاعات	Processus de Règlement des Différends
Distribution Agreement / Authorized Representative	A contract regulating the sale and promotion of insurance products. A distribution agreement may also include an	اتفاقية التوزيع / اتفاقية الممثل المعتمد	Entente de Distribution/ Entente de
Agreement	appointment of the distributor as an Insurance Distributor or Authorized Representative. <sup>36</sup>		Représentant Autorisé

Endorsement	A document which varies the terms of a policy. <sup>36</sup>	التأييد	Endorsement/ Approbation
Etherisc	Uses smart contracts on a blockchain to provide fully automated decentralized flight insurance. <sup>35</sup>	اثيرسك	Etherisc
External dispute resolution	A third-party dispute resolution provider, usually the Australian Financial Complaints Authority. Disputes that cannot be resolved through internal dispute resolution can be referred to external dispute resolution. <sup>36</sup>	حل النزاعات الخارجية	Externe de Résolution des Différends
FloodFlash	Provides event-based flood insurance, even in high-risk areas. Customers receive a pre-agreed settlement as soon as the company's sensor detects that flood waters have exceeded a certain depth. <sup>35</sup>	التأمين ضد الفيضانات	Flash d'Inondation
Meet Mia	Chatbot on Facebook Messenger that allows customers to buy and manage travel insurance. Policies are written in plain English and customers can ask the chatbot what they are covered for. Group discounts and automated claims handling will also be available. <sup>35</sup>	المحاور الرقمي ''قابل مايا''	Rencontre Mia
Misrepresentation	Incorrect information given to an insurer if fraudulent, an insurer may be able to treat the policy as if it never existed. $_{36}^{36}$	التزييف	Fausse Déclaration
Proposal form	A form prepared by an insurer which asks questions of the insured to determine whether cover can be offered. <sup>36</sup>	نموذج طلب التمويل	Formulaire de Proposition
Sherpa Management Services	Insurance solution where members set up one account to manage multiple insurance risks. Offers dynamic products which provide the ability to increase and decrease the sum assured as needs change. <sup>35</sup>	خدمات إدارة شيربا	Services de gestion Sherpa

Stablecoin	Crypto asset that seeks to stabilise its price by linking its value to that of an asset or pool of assets. <sup>7</sup>	عملة مستقرة	Stablecoin
Third Party Administrator Agreement	Used when an insurer appoints a third party to manage and settle claims. <sup>36</sup>	اتفاقية مسؤول الطرف الثالث	Entente avec un Tiers Administrateur
Universal Tokens	Service that leverages blockchain technology in the distribution of insurance products to increase trust and improve user experience. <sup>35</sup>	الرموز العالمية	Jeton Universel
Wrisk	Usage-based contents insurance product with innovative risk-scoring method. <sup>35</sup>	منتج تأمين على المحتويات	Wrisk
YouToggle	An app that uses mobile phone telematics to monitor a user's driving and create an individual score that can then be shared with a car insurer to obtain a discount. Driving information captured by the app could also be used as evidence in the event of motor accident. <sup>35</sup>	تطبيق التأمين	YouToggle

# العمليات المصرفية المفتوحة Open Banking Operations

Terms	Definition	المصطلحات	Les Termes
Account aggregator	A category of nonbanking financial company created by the Reserve Bank of India in 2016. Account aggregators securely transfer financial data from data holders to data users based on customer consent. <sup>38</sup>	مجمع الحسابات	Agrégateurs de Comptes
Account Information Service Provider (AISP)	A third-party AISP provides customers with consolidated online information about their financial accounts with other payment service providers. <sup>38</sup>	مزود خدمة معلومات الحساب	Prestataire de Services d'Information sur les Comptes
Account Servicing Payment Service Provider - ASPSP	Account Servicing Payment Service Providers provide and maintain a payment account for a payer as defined by the Payment Services Regulations (PSRs) and, in the context of the Open Banking Ecosystem are entities that publish Read/Write APIs to permit, with customer consent, payments initiated by third party providers and/or make their customers' account transaction data available to third party providers via their API end points. <sup>37</sup>	مزود خدمات الدفع لخدمة الحساب	Prestataire de services de Paiement Gestionnaire du Compte
Account Servicing Payment Service Provider Brand- ASPSP	An ASPSP brand is any registered or unregistered trademark or other Intellectual Property Right provided by an ASPSP. 37	العلامة التجارية لمقدم خدمة الدفع لخدمة الحساب	Marque du Prestataire de Services de Paiement Gestionnaire du Compte
Aggregated Data	Data concerning financial services, such as service quality and customer use, that are collected on an aggregate basis. <sup>38</sup>	البيانات المجمعة	Données Agrégées
<b>Application Programming</b> <b>Interface (API)</b>	A set of routines, protocols, and tools for building software applications. APIs are the conduit for data transmission between two parties. <sup>37</sup>	واجهة إدارة التطبيقات	L'Interface de Programmation d'Application

API User	An API User is any person or organization who develops web or mobile apps which access data from an API Provider. <sup>37</sup>	مستخدم واجهة إدارة التطبيقات	Utilisateur API
Application Programming Interface User		# <b>6</b> * *	Utilisateur d'Interface de Programmation d'Application
API Provider Application Programming Interface Provider	An API Provider is a service provider implementing an Open Data API. An API Provider provides Open Data via an API gateway. <sup>37</sup>	مزود واجهة إدارة التطبيقات	Fournisseur API Fournisseur d'Interfaces de Programmation d'Application
Competent Authority	A Competent Authority, in the context of the Open Banking Ecosystem, is a governmental body or regulatory or supervisory authority having responsibility for the regulation or supervision of the subject matter of Participants. <sup>37</sup>	السلطة المختصة	Autorité Compétente
Consumer Data Right (CDR)	Under Australian law, the right of a consumer to access his or her own data or to share it with an accredited data recipient to whom the consumer has given permission to access. <sup>38</sup>	حق بيانات المستهلك (CDR)	Droit d'Accès des Données de Consommateurs
Customer Acquisition Services	Services, including customer referrals and loyalty programs, provided by third parties that help the principal obtain new clients. <sup>38</sup>	خدمات اكتساب العملاء	Service d'Acquisition de Clients
Customer Data	Personally identifiable customer information that can be used for data on account opening and use, including registration, KYC, and CDD data. <sup>38</sup>	بيانات العميل	Données de Client
<b>Customer Transaction Data</b>	Data from a customer's bank or payment account(s) that show the customer's transaction history. <sup>38</sup>	بيانات معاملات العملاء	Données de Transactions de Clients

Data Holders	Entities that hold or possess customer data. <sup>38</sup>	أصحاب البيانات	Les Détenteurs des
Data portability	The ability of data subjects to download a full set of their data and "port" or share it with whomever they choose. <sup>38</sup>	قابلية نقل البيانات	Données Portabilité des Données
Data Sharing Regime	Another term for open banking. <sup>38</sup>	نظام مشاركة البيانات	Régime de Partage des Données
Data subject	An individual or company that creates data. <sup>38</sup>	موضوع البيانات	Sujet des Données
Data User	An entity that uses the data belonging to data subjects to propose a service. <sup>38</sup>	مستخدم البياثات	Utilisateur de Données
Directory Sandbox	The Open Banking Directory Sandbox is a test instance of the Directory. The Directory Sandbox may be used to support testing applications with test API endpoints and testing integration with the Open Banking Directory. <sup>37</sup>	دليل البيئة التجريبية	Annuaire de Sandbox Répertoire de Sandbox
Financial Services Provider (FSP)	An entity that provides financial services to consumers and other businesses. <sup>38</sup>	مزود الخدمات المالية (FSP)	Fournisseur de Services Financiers
Open Application Programming Interface '' Open API''	An open API (also referred to as a public API) is a publicly available application programming interface (API) that provides developers with programmatic access to a proprietary software application or web service. <sup>38</sup>	واجهة إدارة التطبيقات المفتوحة	API Ouverte Interface Ouverte de Programmation d'Applications
Open Banking	Open banking is a system that provides a user with a network of financial institutions' data through the use of application programming interfaces (APIs). The Open Banking Standard defines how financial data should be created, shared and accessed. By relying on networks instead of centralization, open banking helps financial services customers to securely share their financial data with other financial institutions. Benefits include more easily transferring funds and	النظام المصرفي المفتوح	Données Bancaire Ouvertes

	comparing product offerings to create a banking experience that best meets each user's needs in the most cost-effective way. Open banking is also known as "open bank data." <sup>10</sup>		
<b>Open Banking Ecosystem</b>	The Open Banking Ecosystem refers to all the elements that facilitate the operation of Open Banking. This includes the API Standards, the governance, systems, processes, security and procedures used to support participants. <sup>37</sup>	بيئة النظام المصرفي المفتوح	Ecosystème Bancaire Ouvert
Open Banking Implementation Entity (OBIE)	The Open Banking Implementation Entity is the delivery organization working with the CMA9 and other stakeholders to define and develop the required APIs, security and messaging standards that underpin Open Banking. Otherwise known as Open Banking Limited. <sup>37</sup>	كيان تنفيذ الخدمات المصر فية المفتوحة	Entité de Mise en Oeuvre des Services Bancaires Ouverts
<b>Open Banking Services</b>	The open banking services to be provided by Open Banking to Participants, including but not limited to, the provision and maintenance of the Standards and the Directory. <sup>37</sup>	الخدمات المصر فية المفتوحة	Système Bancaire Ouvert
Open Data	Information on ATM and Branch locations, and product information for Personal Current Accounts, Business Current Accounts (for SMEs), and SME Unsecured Lending, including Commercial Credit Cards. <sup>37</sup>	البيانات المفتوحة	Données Ouvertes
Open Data Regime	A public sector-driven framework for data sharing that goes beyond financial services to include the sharing of telecoms, utilities, health, social media, and/ or other types of data. <sup>38</sup>	نظام البيانات المفتوحة	Régime de Données Ouvertes.
PSD2 (Revised Payment Services Directive)	The Payment Services Directive 2015/2366, as amended or updated from time to time and including the associated Regulatory Technical Standards developed by the European Banking Association (EBA) and agreed by the European	التوجيه المنقح لخدمات الدفع	Directive sur les Services de Paiement Révisée

	Commission and as implemented by the PSR and including any formal guidance issued by a Competent Authority. <sup>37</sup>		
Participant	An API Provider, API User, ASPSP, or TPP that currently participates in the Open Banking Ecosystem. <sup>37</sup>	مشارك بواسطة نظم الدفع	Le Participant
Primary Business Contact (PBC)	A Primary Business Contact is an individual nominated by an entity to have access to the Directory and will be able to nominate other Directory business users. This should be a formal business point of contact and a senior member of staff responsible for systems and controls related to Open Banking. <sup>37</sup>	جهة اتصال العمل الأساسية	Contact d'Entreprise Principal
Screen Scraping	The action of using a computer program to copy data from a website. <sup>38</sup>	شاشة نسخ البيانات من الويب	Grattage Écran
Services Data	Data concerning specific financial services and products, including pricing and product description. <sup>38</sup>	بيانات الخدمات	Données sur les Services
Third-party provider (TPP)	Third Party Providers are organizations or natural persons that use APIs developed to Standards to access customer's accounts, in order to provide account information services and/or to initiate payments. <sup>37</sup>	مزود الطرف الثالث	Tiers Prestataire Fournisseur Tiers
Voluntary Account Servicing Payment Service Provider Brand (Voluntary ASPSP)	Voluntary ASPSPs are those entities who, although not obliged to enrol with Open Banking, have elected to do so in order to utilise the Standards to develop their own APIs, to enrol onto the Open Banking Directory, and to use the associated operational support services. <sup>37</sup>	العلامة التجارية لمقدم خدمة الدفع لخدمة الحساب التطوعي	Marque Volontaire du Fournisseur de services de Paiement du service de Compte
X2A	Also known as "Access to Account," X2A is another term for the data-sharing component of PSD2. <sup>38</sup>	الوصول إلى الحساب	Accès au Compte X2A

# المدفوعات Payments

Terms	Definition	المصطلحات	Les Termes
Atomic settlement	The use of a smart contract to link two assets to ensure that the transfer of one asset occurs if and only if the transfer of the other asset also occurs (e.g. to achieve delivery versus payment in a securities transaction or payment versus payment in a foreign exchange transaction). <sup>7</sup>	التسوية الآلية	Règlement Atomique
Automated Clearing House (ACH)	Multilateral arrangement that facilitates the exchange of payment instructions between payment service providers. <sup>7</sup>	غرفة المقاصة الآلية	Chambre de Compensation Automatisée
Bearer Security	Security issued as a paper certificate where the bearer is presumed to be the owner. <sup>7</sup>	حامل شهادة الأمن "المالك"	Titres au Porteur
Beneficial Owner	Means the legal person(s) who ultimately own(s) or control(s) a PSP. <sup>12</sup>	المالك المنتفع	Bénéficiaire Effectif
Business-to-Business (B2B) payment	Payment where both the payer and the payee are businesses (eg payment for raw materials). <sup>7</sup>	دفع الأعمال من الأعمال	Paiement Interentreprises
Card Based Payment Instrument Issuer - CBPII	A Card Based Payment Instrument Issuer is a payment services provider that issues card-based payment instruments that can be used to initiate a payment transaction from a payment account held with another payment service provider. <sup>37</sup>	مصدر وسيلة الدفع بالبطاقة	Émetteur d'Instrument de Paiement Fondé sur la Carte
Card-not-Present Fraud	Card-not-present fraud is a type of credit card scam in which the customer does not physically present the card to the merchant during the fraudulent transaction. Card-not-present fraud can occur with transactions that are conducted online or over the phone. It is theoretically harder to prevent than	احتيال البطاقة غير الموجودة	Fraude par Carte non Présente

	card-present fraud because the merchant cannot personally examine the credit card for signs of possible fraud, such as a missing hologram or altered account number. <sup>10</sup>		
Cash Services	Means –(a)cash-in services and;(b) cash-out services. <sup>12</sup>	الخدمات النقدية	Services en Espèces
Cash-in Services	Means the exchange of cash for digital money deposited in a payment account. <sup>12</sup>	خدمات إيداع النقود	Services d'Encaissement
Cash-out Services	Means the exchange of digital money for cash, withdrawn from a payment account. <sup>12</sup>	خدمات السحب النقدي	Services de Cash-out
Central Counterparty (CCP)	Entity that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer and thereby ensuring the performance of open contracts. <sup>7</sup>	الطرف المقابل المركزي	Contrepartie Centrale
<b>Central Securities Depository</b> (CSD)	Entity that provides securities accounts, central safekeeping services and asset services, which may include the administration of corporate actions and redemptions, and plays an important role in helping to ensure the integrity of securities issues (that is, ensure that securities are not accidentally or fraudulently created or destroyed or their details changed). <sup>7</sup>	الإيداع المركزي للأوراق المالية	Dépositaire Central de Titres (CSDs)
Clearing	Process of transmitting, reconciling and, in some cases, confirming transactions prior to settlement. If obligations are settled on a net basis, clearing can also involve the calculation of net positions for settlement. <sup>7</sup>	المقاصة	Compensation

Closed Loop	Payment system that provides services directly to both payers and payees. Sometimes known as an in-house or intragroup transfer system. <sup>7</sup>	حلقة الدفع المغلقة	Boucle Fermée
Contactless Payments	Transmission of payment information from a physical device to the terminals at the point of sale or ATM without the need for physical contact between the physical device and the terminal. <sup>47</sup>	المدفو عات بدون تلامس	Paiements sans Contact
CORE Banking "Centralized Online Real- time Exchange" Banking	A centralized system established by a bank which allows its customers to conduct their business irrespective of the bank's branch. Thus, it removes the impediments of geo-specific transactions. In fact, CORE is an acronym for "Centralized Online Real-time Exchange", thus the bank's branches can access applications from centralized data centers. Other than retail banking customers, core banking is now also being extended to address the requirements of corporate clients and provide for a comprehensive banking solution. <sup>10</sup>	الخدمات المصرفية الأساسية	Solution Bancaire CORE '' Solution Bancaires en Ligne Centralisés en Temps Réel ''
Correspondent Banking	Arrangement whereby one bank (correspondent) holds deposits owned by other banks (respondents) and provides those banks with payment and other services. <sup>7</sup>	البنوك المراسلة	Banque Correspondante
Credit risk	Risk that a counterparty, whether a participant or other entity, will be unable to meet fully its financial obligations when due, or at any time in the future. <sup>7</sup>	مخاطر الائتمان	Risque de Crédit
Cross-border Payment	Payment where the payer and the payee are located in different jurisdictions. Many cross-border payments are also cross currency payments. <sup>7</sup>	الدفع عبر الحدود	Paiement Transfrontalier

<b>Cross-Currency Payment</b>	Payment where the amount debited to the payer is in a different currency than the amount credited to the payee, ie the payment involves a currency conversion along its route from payer to payee. <sup>7</sup>	الدفع متعدد العملات	Paiement en Devises Croisées
Deferred Net Settlement	Net settlement mechanism which settles on a net basis at the end of a predefined settlement cycle. <sup>7</sup>	صافي التسوية المؤجلة	Règlement Net Différé
Delivery leg	One of two legs of a securities trade: the transferring of ownership of the securities from the seller to the buyer. See also "payment leg". <sup>7</sup>	طرف التسليم	Jambe de Livraison
Delivery Versus Payment (DVP)	Securities settlement mechanism that links a securities transfer and a funds transfer in such a way as to ensure that delivery occurs if and only if the corresponding payment occurs. <sup>7</sup>	التسليم مقابل الدفع	Livraison Contre Paiement
Demand-side statistics	Statistics on use of basic financial services obtained from customers of financial services. <sup>47</sup>	إحصاءات جانب الطلب	Statistiques de la Demande
Designated Payment System	Means a payment system designated by the Central Bank as systemically important. <sup>12</sup>	نظام الدفع المعين	Systems de Paiements Désignés
Digital Payments	A form of digital financial service where the financial service is a payment. this includes payments where either the payer or the payee uses a digital instrument but does not include payments that are initiated and collected in cash (e.g., cash to cash services), even where the agent transacts electronically. <sup>1</sup>	المدفوعات الرقمية	Paiement Numérique
Direct Holding System	Arrangement for registering ownership of securities (or similar interests) whereby each and every final investor in the securities is registered with a single entity (for example, the	نظام القابض المباشر نظام الاحتجاز المباشر	Système de Maintien Direct

	issuer itself, a CSD or a registry). In some countries, the use of a direct holding system is required by law. <sup>7</sup>		Régime de la Détention Directe
Domestic Payment	Payment involving a payee and a payer that reside within the same jurisdiction and use the same currency. <sup>7</sup>	الدفع المحلي	Paiement Domestique
DVP model 1 Delivery Versus Payment Model 1	DVP model where securities and funds are settled on a gross and obligation-by-obligation basis, with final (irrevocable and unconditional) transfer of securities from the seller to the buyer (delivery) if and only if final transfer of funds from the buyer to the seller (payment) occurs. <sup>7</sup>	نموذج 1 للتسليم مقابل الدفع	Livraison Contre Paiement Modèle 1
DVP model 2	DVP model where securities are settled on a gross basis, with final transfer of securities from the seller to the buyer occurring throughout the processing cycle, but funds are settled on a net basis, with final transfer of funds from the buyer to the seller occurring at the end of the processing cycle. <sup>7</sup>	نموذج 2 للتسليم مقابل الدفع	Livraison Contre Paiement Modèle 2
DVP model 3	DVP model where both securities and funds are settled on a net basis, with final transfers of both securities and funds occurring at the end of the processing cycle. <sup>7</sup>	نموذج 3 للتسليم مقابل الدفع	Livraison Contre Paiement Modèle 3
e-Check	A form of payment made via the Internet, or another data network, designed to perform the same function as a conventional paper check. Since the check is in an electronic format, it can be processed in fewer steps. Additionally, it has more security features than standard paper checks including authentication, public key cryptography, digital signatures, and encryption, among others. <sup>10</sup>	الشيك الإلكتروني	Chèque électronique

Electronic payment (e-payment)	Any payment made with an electronic funds transfer. <sup>3</sup>	الدفع الإلكتروني	Paiement Électronique
Electronic Payment Service Provider (EPSP)	A term used by Japan's Financial Services Agency to identify which entities can access customer data under its open banking regime. EPSPs include payment initiation service providers (PISPs) and account information service providers (AISPs). <sup>38</sup>	مزود خدمة الدفع الإلكتروني (EPSP)	Fournisseurs de Services de Paiements Électroniques.
E-money account	An e-money holder's account that is held with the e-money issuer. In some jurisdictions, e-money accounts may resemble conventional bank accounts, but are treated differently under the regulatory framework because they are used for different purposes. <sup>3</sup>	حساب النقود الإلكترونية	Compte de Monnaie Électronique
E-money issuer	The entity that initially issues e-money against receipt of funds. Some countries only permit banks to issue e-money whereas other countries permit nonbanks to issue e-money. <sup>1</sup>	مّصدر النقود الإلكترونية جهة إصدار النقود الإلكترونية نظام الدفع السريع	Émetteur de Monnaie Électronique
Fast-Payment System (FPS)	Retail payment system in which the payment message is transmitted, and the final funds are made available to the payee in real time or near real time on as near to a 24/7 basis as possible. <sup>7</sup>	نظام الدفع السريع	Système de Paiement Rapide
Final Settlement	Legally defined moment when funds (or other assets) have been irrevocably and unconditionally transferred. <sup>7</sup>	التسوية النهائية	Règlement Final
Free of Payment (FOP)	Transfer of securities without a corresponding transfer of funds. <sup>7</sup>	خالية من الدفع	Sans Paiement Exonéré du Paiement
<b>Global Payment Innovation</b> ( <b>GPI</b> )	An initiative by SWIFT that aims to streamline and increase transparency of cross-border payments. The initiative introduces a multilateral service level agreement across	ابتكار الدفع العالمي	Innovation Mondiale de Paiement

	banks to create a common standard for processing cross- border payments, which in turn will transform correspondent banking. Through the first of these service level agreements, corporate treasurers will gain same-day use of funds, have access to rich payment information which is transferred between parties to a transaction, and have greater transparency and predictability of fees, including FX costs. <sup>10</sup>		
Government Digital Payment Services	Means any payment involving the transfer of funds from a User of a PSP to a:(a) Ministry or Federal Authority; or (b) local Government Authority of an Emirate or a local Government Authority. <sup>12</sup>	خدمات الدفع الالكترونية الحكومية	Services Gouvernementaux de Paiement Numérique
Hash Timelock Contract (HTLC)	Type of smart contract that combines a hashlock function with a timelock function to facilitate two-leg transfers across unconnected ledgers. <sup>7</sup>	عقود تشفير محددة زمنياً	Contrat Hash Time lock (HTLC)
Hybrid Settlement System	System that combines the characteristics of RTGS and deferred net settlement systems. <sup>7</sup>	نظام التسوية المختلط	Système de Règlement Hybride
Indirect Holding System	Multi-tiered arrangement for the custody and transfer of ownership of securities (or the transfer of similar interests therein) in which holders are identified only at the level of their custodian or intermediary. <sup>7</sup>	نظام الحجز غير المباشر	Système de Détention Indirecte
Infrastructure Model	Back-end arrangement for cross-border payments involving a payment system or linked payment systems operating across borders. <sup>7</sup>	نموذج البنية التحتية لنظم للمدفو عات	Modèl d'Infrastructure
Licensing Manual	Means the Central Bank's REGULATION Licensing Manual. <sup>12</sup>	دليل الترخيص	Modèle d'Infrastructure

Liquidity Risk	Risk that a counterparty, whether a participant or other entity, will have insufficient funds to meet its financial obligations as and when expected, although it may be able to do so in the future. <sup>7</sup>	مخاطر السيولة	<b>Risque de Liquidité</b>
Liquidity Saving Mechanism (LSM)	Mechanism that seeks to save liquidity, including through frequent netting or offsetting of transactions (payments and/or securities) in the course of the operating day. A typical approach is to hold transactions in a central queue and to net or offset those transactions on a bilateral or multilateral basis at frequent intervals. <sup>7</sup>	آلية توفير السيولة	Mécanisme de Fourniture de Liquidités
Load limit	Means the maximum amount of digital money that can be transferred into a Payment Account held by a User of a Payment Instrument as per regulation. <sup>12</sup>	حد التحميل للنقود الالكترونية	Limite de Charge
Mandatory Account Servicing Payment Service Provider (or Mandatory ASPSP)	Mandatory ASPSPs are entities that are required by the CMA Order to enrol with Open Banking. <sup>37</sup>	مزود خدمة الدفع الإلزامي لخدمة الحساب	Fournisseur de Services de Paiement du Service de Compte Obligatoire
Mobile Banking (m-banking)	The use of a mobile phone to access banking services and execute financial transactions. This covers both transactional and non-transactional services, such as viewing financial information on a bank customer's mobile phone. <sup>3</sup>	الخدمات المصرفية عبر الهاتف المحمول	Services Bancaires Mobiles
Mobile Financial Services (MFS)	The use of a mobile phone to access financial services and execute financial transactions. This includes both transactional and non-transactional services, such as viewing financial information on a user's mobile phone. <sup>3</sup>	الخدمات المالية عبر الهاتف المحمول	Services Financiers Mobiles

Mobile Money	A mobile-based transactional service that can be transferred electronically using mobile networks. A mobile money issuer may, depending on local law and the business model, be an MNO or a third party such as a bank. Often used synonymously with 'mobile financial services. <sup>3</sup>	المعاملات المالية عبر الهاتف	Argent Mobile
Mobile Payment	A form of mobile financial services in which payments are initiated through a mobile phone (both smartphones and digital feature phones). <sup>3</sup>	الدفع عبر الهاتف المحمول	Paiement Mobile
Mobile Payment Services Providers (MPSP)	Terminology specific to Jordanian case. An MPSP is an e- money issuer licensed by the Central Bank of Jordan to issue e-money and connect to the JoMoPay national payment switch. Also referred to as a payment services provider. <sup>3</sup>	مقدمو خدمات الدفع عبر الهاتف المحمول	Fournisseurs de Services de Paiement Mobile
Mobile Wallet	A type of e-wallet which is accessed through a mobile phone. Often used synonymously with mobile money account. <sup>3</sup>	حافظة النقود الهاتفية	Portefeuille Mobile
Money Transfer Operator (MTO)	Non-deposit-taking payment service provider where the service involves payment per transfer (or possibly payment for a set or series of transfers) by the sender to the payment service provider (for example, by cash or bank transfer) – ie as opposed to a situation where the payment service provider debits an account held by the sender at the payment service provider. <sup>7</sup>	مشغل تحويل الأموال	Opérateur de Transfert d'Argent
Multilateral Netting	Offsetting of obligations between or among multiple participants to result in a single net position per participant. <sup>7</sup>	المعاوضة متعددة الأطراف	Netting Multilatéral
Nonbank-based model	A mobile financial services business model (bank led or nonbank-led) in which (i) the customer has a contractual relationship with a nonbank financial service provider and	نموذج أعمال للخدمات المالية غير مصرفي	Modèle non Bancaire

	(ii) the nonbank is licensed or otherwise permitted by the regulator to provide the financial service(s). <sup>3</sup>		
Nonbank-led model	A mobile financial services business model (bank based or nonbank-based) in which the nonbank is the primary driver of the product or service, typically taking the lead in marketing, branding, and managing the customer relationship. <sup>3</sup>	نموذج أعمال للخدمات المالية غير مصرفي	Modèle non Bancaire
Offshore System	Financial market infrastructure for the processing of payments or securities denominated in a currency different from the one of the jurisdiction in which the Financial Market Infrastructure is located. It could also cover a CCP. <sup>7</sup>	النظام الخارجي	Système Offshore Système Outre Mer
Overlay System	System that provides innovative customer interfaces to initiate payments (i.e. front ends). <sup>7</sup>	واجهة بدء المدفوعات	Système de Superposition
Participant	Means an entity recognized by a Payment System and is allowed, either directly/ indirectly, to send and receive payment instructions to and from that payment system. <sup>12</sup>	مشارك بواسطة نظم الدفع	Participant
Payment Card Industry Compliance '' PCI Compliance ''	The Payment Card Industry Data Security Standard (PCI DSS) is a set of security standards designed to ensure that all companies that accept, process, store or transmit credit card information maintain a secure environment. Although the PCI DSS must be implemented by all entities that process, store or transmit cardholder data, formal validation of PCI DSS compliance is not mandatory for all entities. <sup>7</sup>	الامتثال لصناعة بطاقات الدفع	Conformité à l'Industrie des Cartes de Paiement
Payment Gateway	The front-end technology that reads payment cards and sends customer information to the merchant acquiring bank for processing. <sup>10</sup>	بوابة الدفع	Passerelle de Paiement

<b>Payment Initiation Services</b> <b>Provider (PISP)</b>	A Payment Initiation Services Provider provides an online service to initiate a payment order at the request of the payment service user with respect to a payment account held at another payment service provider. <sup>37</sup>	مزود خدمات بدء الدفع	Fournisseur de Services d'Initiation de Paiement
Payment Instruction	Means an instruction initiated by a User to his / her respective PSP requesting the execution of a payment transaction. <sup>12</sup>	تعليمات الدفع	Instructions de Paiement
Payments Instrument	The product (service) used by the consumer at the point of payment (e.g., cash, debit card, mobile wallet). Often used interchangeably with payment product and payment channel.	أداة المدفوعات	Instruments de Paiements Moyens de paiement
Payment Leg	One of two legs of a securities trade: the transferring of cash corresponding to the securities' price from the buyer to the seller. See also "delivery leg". <sup>7</sup>	طرف الدفع	Jambe de paiement Étape de paiement
Payments Processors	Third-party services providers that handle the details of processing card transactions between merchants, issuing banks, and the merchants' bank (also called acquiring bank).	معالجات المدفوعات	Processeurs de Paiements
Second Payment Services Directive (PSD2)	Europe's revised payments services directive has opened a wealth of opportunity for fintech's in establishing relationships with banks, and wholly changed the payments landscape. The directive was established to create competition from non-banks in the payments sector, as well as focusing on consumer protection, and creating a harmonization rule set for payments providers. <sup>10</sup>	توجيه خدمات الدفع الثاني	Deuxième Directive sur les Services de Paiement
Payment Service Provider (PSP)	Entity that provides payment services, including remittances. Payment service providers include banks and other deposit-	مزود خدمة الدفع	Prestataire de Services de Paiement

	taking institutions, as well as specialised entities such as money transfer operators and e-money issuers. <sup>7</sup>		
Payment Services Regulations (PSR)	The Payment Services Regulations 2017, the UK's implementation of PSD2, as amended or updated from time to time and including the associated Regulatory Technical Standards as developed by the EBA. <sup>37</sup>	لوائح خدمات الدفع	<b>Règlement des Services de Paiement</b>
Payment Services User (PSU)	A Payment Services User is a natural or legal person making use of a payment service as a payee, payer or both. <sup>37</sup>	مستخدم خدمات الدفع	Utilisateur des Services de Paiement
Payment System	Set of instruments, procedures and rules for the transfer of funds between or among participants. The system encompasses both the participants and the entity operating the arrangement. <sup>7</sup>	نظام الدفع	Système de Paiement
Payment Versus Payment (PVP)	Settlement mechanism that ensures that the final transfer of a payment in one currency occurs if and only if the final transfer of a payment in another currency or currencies takes place. PVP transfers can occur within a jurisdiction or across borders. <sup>7</sup>	الدفع مقابل الدفع	Paiement contre Paiement
Peer-to-Peer Arrangement	Arrangement that cuts out the financial intermediary payment service providers between the payer and payee. <sup>7</sup>	ترتيب الند للند	Arrangement entre Pairs Entente entre Pairs
Permissioned DL	Distributed ledger that allows only trusted third parties to be involved in the updating process. Because validators are trusted, less computationally intensive mechanisms can be used to validate transactions. <sup>7</sup>	السجلات اللامركزية المسموح بها	Registres Distribués Autorisés

Person-to-Business (P2B) Payment	Payment where the payer is an individual and the payee is a business (eg bill payments). The reverse transaction is known as a business-to-person (B2P) payment (e.g. salary payments). <sup>7</sup>	الدفع من شخص للشركة	Paiement de Personne à Entreprise
Person-to-Government (P2G) Payment	Payment where the payer is an individual and the payee is a government (e.g. payment of taxes). The reverse transaction is known as a government-to-person (G2P) payment (eg welfare payments). <sup>7</sup>	الدفع من شخص للحكومة	Paiement de Personne à Gouvernement
Person-to-Person (P2P) Payment	Payment where both the payer and the payee are individuals (e.g. remittances). Also known as a peer-to- peer payment. <sup>7</sup>	الدفع من شخص للشخص	Paiement de Personne à Personne
Prepaid Card	A payment card in which money can be preloaded and Stored. <sup>3</sup>	بطاقة مسبقة الدفع	Carte Prépayée
<b>Primary Technical Contact</b> (PTC)	A Primary Technical Contact is an individual nominated by the entity to have access to the Directory and will be able to nominate other Directory technical users. This should be a main point of contact on technical configuration and a senior member of staff with responsibility for the management of the Open Banking digital identity. <sup>37</sup>	جهة الاتصال الفنية الأساسية	Contact technique principal
Principles for Financial Market Infrastructures (PFMI)	Means the 'Principles for Financial Market Infrastructure standards report by the Bank for International Settlements ('BIS'). <sup>12</sup>	مبادئ البنى التحتية للأسواق المالية	Principes pour les Infrastructures des Marchés Financiers
Principal Risk	Risk that a counterparty will lose the full value involved in a transaction – for example, the risk that a seller of a financial asset will irrevocably deliver the asset but not receive payment. <sup>7</sup>	المخاطر الرئيسية	Risque Principal

Private DL	Distributed ledger that restricts who can initiate transactions. This is similar to an account-based system, where users must apply to open an account before they can use the system (or at least open an account at an intermediary that has access). <sup>7</sup>	السجلات المركزية الخاصة	Privé de Registre Distribué
<b>Real-Time Gross Settlement</b> ( <b>RTGS</b> )	The continuous settlement of interbank payments on a real- time (instant) basis. Usually through accounts held in central banks and used for large-value interbank funds transfers. <sup>3</sup>	التسوية الإجمالية في الوقت الفعلي	Règlement Brut en Temps Réel
Remittances	A person-to-person international payment of relatively low Value. <sup>3</sup>	الحوالات	Virements
Replacement Cost Risk	Risk of a trade failing to settle and having to be replaced at an unfavorable price. <sup>7</sup>	مخاطر تكلفة الاستبدال	Risque de Coût de Remplacement
<b>Remittance Service Provider</b> (RSP)	An entity, operating as a business, that provides a remittance service for a price to end users, either directly or through agents. <sup>3</sup>	مقدم خدمة التحويلات	Fournisseur de Services de Virements
Retail Payment	Payment associated with the purchase of goods and services by consumers and businesses. Each such payment tends to be for a relatively low value, but the volumes are large. <sup>7</sup>	دفع التجزئة	Paiement de Détail
Risk Monitoring Technology	Technology that allows an always-on, noninvasive surveillance of transactions, behaviour and communications in financial services firms. <sup>26</sup>	تكنولوجيا مراقبة المخاطر	Technologie de Surveillance du Risque
Scheme (or Payment Scheme)	A body that sets the rules and technical standards for the execution of payment transactions using the underlying payment infrastructure. <sup>3</sup>	نظام الدفع	Régime de Paiement

Securities Settlement	Transfer of ownership of securities in accordance with the terms of an underlying agreement. <sup>7</sup>	تسوية الأوراق المالية	Règlement des Titres
Securities Settlement System (SSS)	Entity that enables securities to be transferred and settled by book entry according to a set of predetermined multilateral rules. Such a system allows transfers of securities either free of payment or against payment. <sup>7</sup>	نظام تسوية الأوراق المالية	Système de Règlement des Titres Système de règlement- livraison
Settlement	Discharge of an obligation in accordance with the terms of the underlying contract. <sup>7</sup>	التسوية	Règlement
Settlement Institution	Means an institution that provides facilities for Participants of a Payment System to hold funds and/ or for settlement of payment transactions between the Participants. <sup>12</sup>	مؤسسة التسوية	Institution de Règlement
Smart Loan Repayment	A debt repayment plan that accounts for fluctuations in a customer's income during the repayment period, allowing the customer to pay more (or less) based on their available liquidity—without triggering default provisions. <sup>38</sup>	سداد القرض الذكي	Remboursement d'Intelligent prêt
Society for the Worldwide Interbank Financial Telecommunication (SWIFT)	A messaging service for financial messages, such as letters of credit, payments, and securities transactions, between member banks worldwide. SWIFT remains the primary means for interbank communications cross-border. Note that SWIFT does not provide settlement and clearing for bank transfers. <sup>3</sup>	جمعية الاتصالات المالية العالمية بين البنوك (سويفت)	Société Mondiale des Télécommunications Financières Interbancaires
Stored Value Facility	Means a non-cash facility, (in electronic or magnetic form), purchased by a user (and used) to make payment for goods and services. <sup>12</sup>	تسهيل القيمة المخزنة	Facilité de Valeur Stockée

Strong Customer Authentication (SCA)	Strong Customer Authentication as defined by EBA Regulatory Technical Standards is an authentication based on the use of two or more elements categorized as knowledge (something only the user knows [for example, a password]), possession (something only the user possesses [for example, a particular cell phone and number]) and inherence (something the user is [or has, for example, a finger print or iris pattern]) that are independent, [so] the breach of one does not compromise the others, and is designed in such a way as to protect the confidentiality of the authentication data. <sup>37</sup>	المصادقة القوية للعميل	Authentification Forte du Client
Unified Payment Interface (UPI)	A smartphone application which allows users to transfer money between bank accounts. It is a single-window mobile payment system developed by the National Payments Corporation of India (NPCI). It eliminates the need to enter bank details or other sensitive information each time a customer initiates a transaction. <sup>10</sup>	واجهة الدفع الموحدة	Interface de Paiement Unifiée
Transaction account	Account (including e-money and prepaid accounts) held with a bank or other authorised payment service provider, which can be used to make and receive payments and to store value.	حساب المعاملات	Compte de Transaction
Technical Service Providers	Means entities facilitating the provision of payment services to PSPs, whilst excluded at all times from possession of funds (and transference thereof). Services offered include processing /storage of data, trust and privacy protection services, data and entity authentication, information technology (IT) and communication network provision, provision and maintenance of terminals and devices used for payment services. <sup>12</sup>	مقدمو الخدمات الفنية	Fournisseurs de Services Techniques

Wholesale Banking	Banking services between merchant banks and other financial institutions. This type of banking deals with larger clients, such as large corporations and other banks, whereas retail banking focuses more on the individual or small business. Wholesale banking services include currency conversion, working capital financing, large trade transactions and other types of services. <sup>10</sup>	الخدمات المصرفية التجارية	Services Bancaires de Gros
Wholesale Payment	Payment between financial institutions – for example, payment to settle securities and foreign exchange trades, payment to and from central counterparties, and other interbank funding transactions. These are typically large value payments that often need to settle on a particular day and sometimes by a particular time. <sup>7</sup>	دفع بالجملة (مجمل الدفع)	Services de Paiement en Gros
Unsupervised Learning	A type of machine learning method that helps find previously unknown patterns in a data set without pre-existing labels. <sup>13</sup>	تعلم الآلة بدون إشراف / التعلم الغير مراقب	
User Funds	Means the net value of unutilized funds held on account of the customer by the Payment Service Provider. <sup>12</sup>	صناديق المستخدم أموال المستخدم	Fonds de l'Utilisateur

## Smart Contracts العقود الذكية

Terms	Definition	المصطلحات	Les Termes
<b>Decentralized Autonomous</b>	An entity in a digital system facilitated by smart contracts.	المنظمة اللامركزية	<b>Organisation Autonome</b>
Organization (DAO)	Smart contracts involve digital tools and protocols that help support specific transactions or other contract elements. The decentralized autonomous organization works with popular cryptocurrency and digital ledger operations that many world governments and businesses are moving toward for more transparency and for evolving anti-corruption innovations. <sup>10</sup>	(DAO) المستقلة	Décentralisée
Smart contracts	Custom software logic that executes automated events when data is written to the blockchain according to rules specified in the contract. <sup>31</sup>	العقود الذكية	Contrats Intelligents

## الترميز Tokenisation

Terms	Definition	المصطلحات	Les Termes
Digital token	Digital representation of value that is not recorded in an account. <sup>7</sup>	الرمز الرقمي	Jeton Numérique
Initial Coin Offering (ICO)	An operation through which companies, entrepreneurs, developers or other promoters raise capital for their projects in exchange for digital tokens (or 'coins'), that they create. <sup>17</sup>	طرح العملة الأولي	Offre Initiale de Pièces Initial Coin Offering
Investment Tokens	Provide rights (e.g. in the form of ownership rights and/or entitlements similar to dividends). For example, in the context of capital raising, asset tokens may be issued in the context of an ICO which allows businesses to raise capital for their projects by issuing digital tokens in exchange for fiat money or other crypto assets.	رموز الاستثمار	Jetons d'Investissement
Token	The means of exchange to give value to a transaction, typically a native cryptocurrency. Some non-currency blockchain architectures can be tokenless. <sup>31</sup>	الرمز	Jeton
Tokenisation	Process of converting assets into digital tokens. <sup>7</sup>	الترميز	Tokénisation
Utility Tokens	Enable access to a specific product or service often provided using a DLT platform but are not accepted as a means of payment for other products or services. For example, in the context of cloud services, a token may be issued to facilitate access.	رموز المنفعة	Jetons Utilitaires
Virtual Currencies	Means any type of digital unit used as a medium of exchange, a unit of account, or a form of stored value. Virtual Currency (s) is not recognised by this REGULATION. Exceptions are	العملات الافتراضية	Monnaies Virtuelles Devises Virtuelles

	made to a digital unit that: a) can be redeemed for goods, services, and discounts as part of a user loyalty or rewards program with the Issuer and; b) cannot be converted into a fiat /virtual currency. <sup>12</sup>		
XBRL	A type of XML (extensible mark-up language) used for organizing and defining data. It uses tags to identify each piece of financial data. <sup>26</sup>	لغة ترميز موسعة (لتنظيم البيانات المالية)	XBRL

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