REALIZATION OF A RESEARCH AND DEVELOPMENT PROJECT (PRE-COMMERCIAL PROCUREMENT) ON "CLOUD FOR EUROPE"

TECHNICAL SPECIFICATION: ABBREVIATIONS AND GLOSSARY

ANNEX IV (E)
TO THE CONTRACT NOTICE

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CLOUD FOR EUROPE

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ABBREVIATIONS

ACL	Access Control List
API	Application Programming Interface
CBS	Cloud Broker Service
CDN	Content Delivery Network
CRUD	Create, Read, Update, Delete
CSB	Cloud Services Brokerage
CSP	Cloud Service Provider
EC	European Commission
eIDAS	Regulation of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC
EU	European Union
FCSB	Federated Certified Service Brokerage
G2B	Government to Businesses
G2C	Government to Citizens
G2G	Government to Governments
IPR	Intellectual Property Rights
LDAP	Lightweight Directory Access Protocol
LE	Legislation Executing
NFS	Network File System
PA	Public Administration

PDA	Personal Digital Asset
RDF	Resource Description Framework
SaaS	Software-as-a-Service
SLA	Service-level Agreement
SLAS	Secure Legislation-aware Storage
SLM	Service-level Management
SME	Small and Medium Enterprises
SNIA	Storage Networking Industry Association
STORK	Secure idenTity acrOss boRders linKed
SOX	Sarbanes-Oxley Act
WP	Work Package

GLOSSARY

Business process	A business process describes the tasks, participants' roles and information needed to achieve a business objective. **[1]**
Business process layer	On the business process layer loosely-coupled services are aggregated and represented as sequencing processes with target-oriented business goals. In order to interact between business processes and services, the data flow and control flow are consolidated. [1]
Cloud broker	Cloud services might be retrieved from cloud brokers who act as an intermediary between the consumer and the cloud provider. A cloud broker gives a single point of entry to different cloud services. At a technical level, he provides a clean interface to a variety of cloud services. [2]
Cloud consumer	"The cloud consumer is the principal stakeholder for the cloud computing service. A cloud consumer represents a person or organization that maintains a business relationship with, and uses the service from a cloud provider. A cloud consumer browses the service catalog from a cloud provider, requests the appropriate service, sets up service contracts with the cloud provider, and uses the service. The cloud consumer may be billed for the service provisioned, and needs to arrange payments accordingly."[2]
Cloud provider	"A cloud provider is a person, an organization; it is the entity responsible for making a service available to interested parties. A Cloud Provider acquires and manages the computing infrastructure required for providing the services, runs the cloud software that provides the services, and makes arrangement to deliver the cloud services to the Cloud Consumers through network access."[2]
Cloud services brokerage	Synonymously used with "Cloud broker".
Data consumer	The data consumer is an organization or person that is accessing stored data in order to process it, which is related to

	the definition of *recipients* in the data protection rule (cf. 95/46/EC).
Data controller	The data controller is the person or administrative entity that determines the purposes and means of the processing of personal data on behalf of an institution or body. He is also responsible for the security measures protecting the data.[1]
Data producer	The data producer is an organization or person that is publishing/saving data in the data consumer storage space.
Elasticity	In the context of cloud computing, elasticity is defined as the extent to which a system is able to react to workload changes. By provisioning and releasing resources rapidly on demand, cost and quality of a service can be scaled to de facto requirements. [3] [4]
Geo-replication	Using geo-replication, data is distributed redundantly on geographically distant wide area networks. It is suited to mitigate network bandwidth and latency problems and, thus, improves the end-user experience when accessing globally stored data.
Hybrid cloud	"The cloud infrastructure is a composition of two or more distinct cloud infrastructures (private, community, or public) that remain unique entities, but are bound together by standardized or proprietary technology that enables data and application portability (e.g., cloud bursting for load balancing between clouds)." [3]
Legislation execution	Legislation Execution is functionality that accomplishes certain requirements imposed upon cloud actors by national or international legislation during operation.
Litigation Hold	Litigation hold denominates an agreement which requires companies to retain data which may relate to a legal action. The main purpose is to prevent the destruction or falsification of evidence.
Metering	"Cloud systems automatically control and optimize resource use by leveraging a metering capability at some level of

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[1] https://secure.edps.europa.eu/EDPSWEB/edps/lang/en/EDPS/Dataprotection/Glossary/pid/74   retrieved on 24.07.2014

	abstraction appropriate to the type of service (e.g., storage, processing, bandwidth, and active user accounts). Resource usage can be monitored, controlled, and reported, providing transparency for both the provider and consumer of the utilized service." [3]
Permanent deletion	Permanent deletion of data signifies the irrecoverable removal of information. It further implies the physical destruction of data.
Private cloud	"The cloud infrastructure is provisioned for exclusive use by a single organization comprising multiple consumers (e.g., business units). It may be owned, managed, and operated by the organization, a third party, or some combination of them, and it may exist on or off premises." [3]
Public cloud	"The cloud infrastructure is provisioned for open use by the general public. It may be owned, managed, and operated by a business, academic, or government organization, or some combination of them. It exists on the premises of the cloud provider." [3]
SaaS	"The capability provided to the consumer is to use the provider's applications running on a cloud infrastructure2. The applications are accessible from various client devices through either a thin client interface, such as a web browser (e.g., web-based email), or a program interface. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, storage, or even individual application capabilities, with the possible exception of limited user-specific application configuration settings." [3]

REFERENCES

[1] OASIS, "OASIS Reference Architecture Foundation for Service Oriented Architecture Version 1.0," 2012.

[2] NIST, NIST Cloud Computing Reference Architecture, Special Publication 500-292, 2011

[3] NIST, "The NIST Definition of Cloud Computing," 2011.

[4] N. R. Herbst, S. Kounev and R. Reussner, "Elasticity in Cloud Computing: What It Is, and What It Is Not," *Proceedings of the 10th International Conference on Autonomic Computing (ICAC 2013),* 2013.