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**Information technology — Cloud  
computing — Service level agreement  
(SLA) framework —**

**Part 1:  
Overview and concepts**

*Technologies de l'information — Informatique en nuage — Cadre de  
travail de l'accord du niveau de service —*

*Partie 1: Aperçu général et concepts*

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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/IEC JTC 1, *Information technology*, Subcommittee SC 38, *Cloud computing and distributed platforms*.

A list of all parts in the ISO/IEC 19086 series can be found on the ISO website.

## Introduction

This document provides an overview, foundational concepts, and definitions for the cloud SLA framework. ISO/IEC 19086 builds on the cloud computing concepts defined in ISO/IEC 17788 and ISO/IEC 17789. This document establishes a common framework for helping organizations to understand the purpose of all the parts of ISO/IEC 19086 and the relationships between those parts. It also identifies other documents that have relationships with ISO/IEC 19086 and which are useful in understanding cloud SLAs.

This document can be used by any organization or individual involved in the creation, modification or understanding of a cloud service level agreement which conforms to ISO/IEC 19086. The cloud SLA should account for the key characteristics of a cloud computing service and needs to facilitate a common understanding between cloud service providers and cloud service customers.

In particular, it defines the following fundamental concepts of the cloud SLA framework:

- Cloud Service Agreement (CSA)
- Cloud Service Level Agreement (SLA)
- Cloud Service Level Objectives (SLO)
- Cloud Service Qualitative Objectives (SQO)

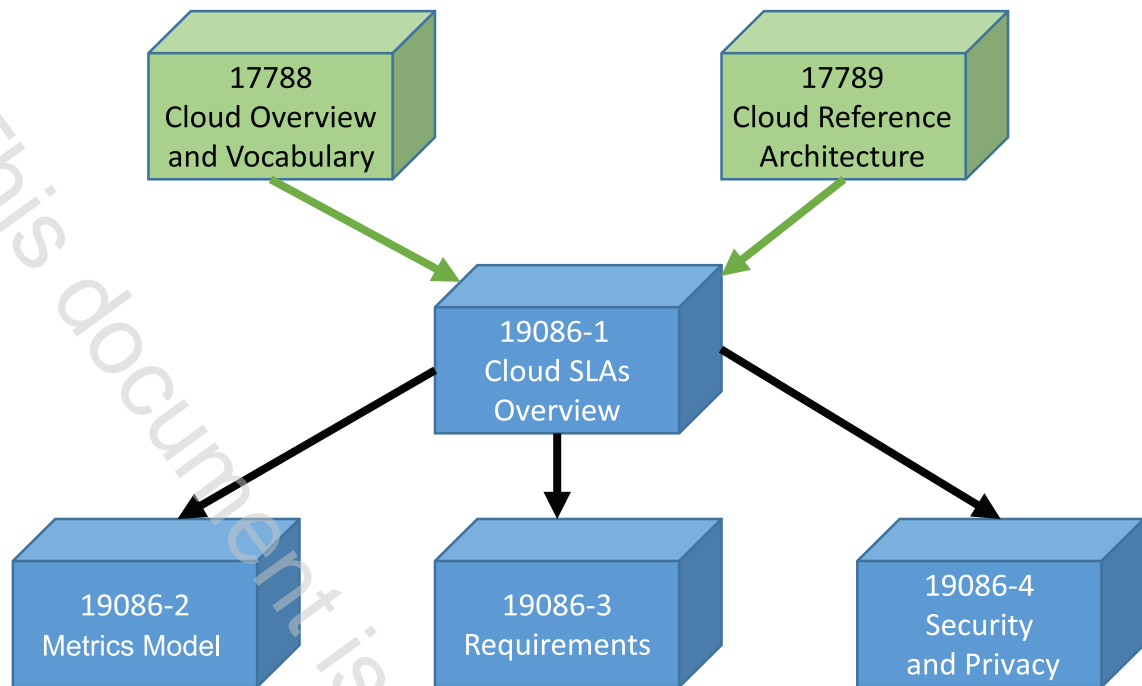
This document also describes the content areas and components that consist of a list of SLOs and SQOs.

- ISO/IEC 19086-2 provides the metrics model to be used for creating metrics used in SLOs and SQOs.
- ISO/IEC 19086-3 provides the core conformance requirements derived from the SLOs and SQOs defined in this document.
- ISO/IEC 19086-4 builds upon the foundational concepts and definitions described by this document by describing specific components and the conformance requirements for SLOs and SQOs in the area of Security and Privacy.

More specifically, this document

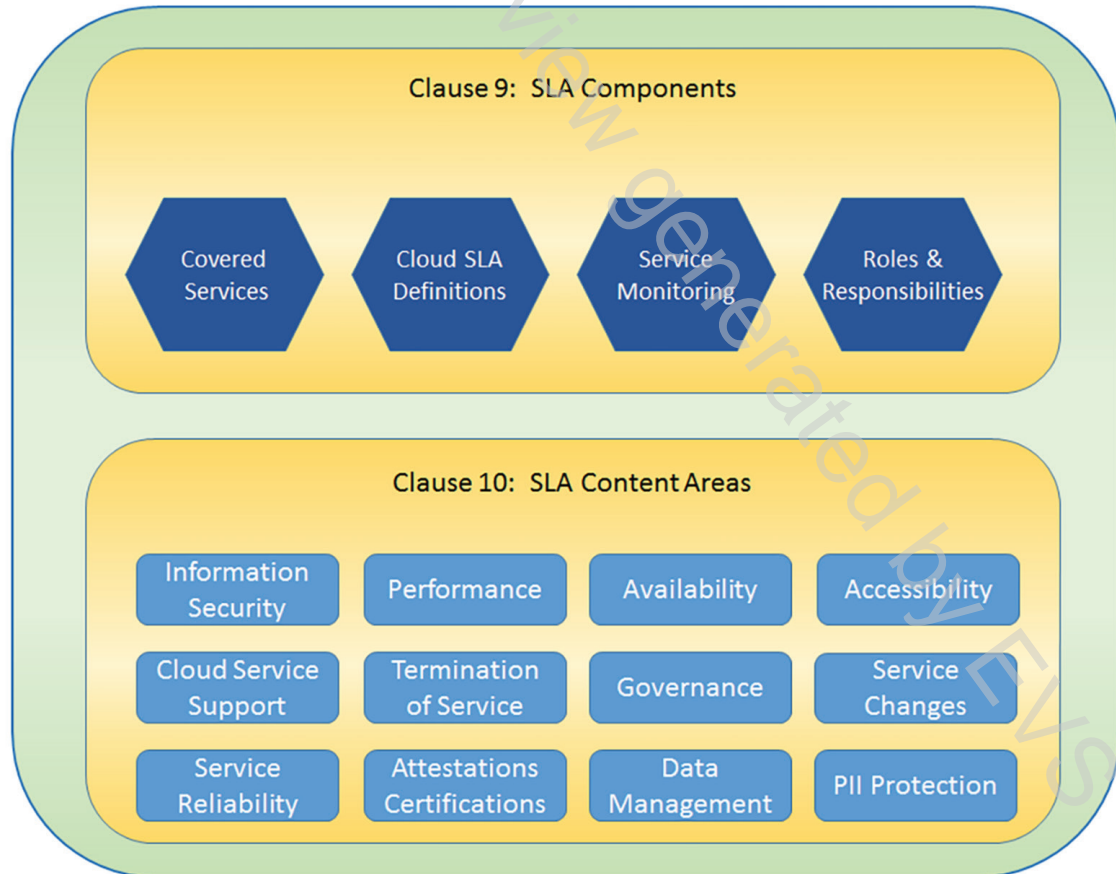
- a) promotes cohesion between the parts of ISO/IEC 19086 by explaining the concepts and terminology used across all parts,
- b) contributes to the understanding of ISO/IEC 19086 by clarifying the relationships between all the parts, and
- c) provides an overview of other International Standards which can be used in combination with ISO/IEC 19086.

[Figure 1](#) represents an overview of the content of ISO/IEC 19086 and the relationships between the parts of ISO/IEC 19086 and other key International Standards relating to cloud computing.



**Figure 1 — Relationship of parts of ISO/IEC 19086 and other cloud computing standards**

This document addresses the contents of a cloud SLA in two main groupings: SLA Components, addressed in [Clause 9](#), and SLA Content Areas, addressed in [Clause 10](#), as shown in [Figure 2](#).



**Figure 2 — SLA components and SLA content areas**





# Information technology — Cloud computing — Service level agreement (SLA) framework —

## Part 1: Overview and concepts

### 1 Scope

This document seeks to establish a set of common cloud SLA building blocks (concepts, terms, definitions, contexts) that can be used to create cloud Service Level Agreements (SLAs).

This document specifies

- a) an overview of cloud SLAs,
- b) identification of the relationship between the cloud service agreement and the cloud SLA,
- c) concepts that can be used to build cloud SLAs, and
- d) terms commonly used in cloud SLAs.

This document is for the benefit and use of both cloud service providers and cloud service customers. The aim is to avoid confusion and facilitate a common understanding between cloud service providers and cloud service customers. Cloud service agreements and their associated cloud SLAs vary between cloud service providers, and in some cases different cloud service customers can negotiate different contract terms with the same cloud service provider for the same cloud service. This document aims to assist cloud service customers when they compare cloud services from different cloud service providers.

This document does not provide a standard structure that can be used for a cloud SLA or a standard set of cloud service level objectives (SLOs) and cloud service qualitative objectives (SQOs) that will apply to all cloud services or all cloud service providers. This approach provides flexibility for cloud service providers in tailoring their cloud SLAs to the particular characteristics of the offered cloud services.

This document does not supersede any legal requirement.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 17788:2014, *Information technology — Cloud computing — Overview and vocabulary*

ISO/IEC 17789, *Information technology — Cloud computing — Reference architecture*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 17788 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at <http://www.electropedia.org/>