



DOs and DON'Ts of SLA research

Lessons learned from bridging research, EC initiatives, industry and ISO in SLA standardisation.

ready to use
#CloudSLAs



@CloudSLALOM



DOs

- 1** DO target metrics that are directly comparable between providers. This is a major user issue.
- 2** DO consider directly machine understandable descriptions through standardized templates.
- 3** DO look into the ISO 19086- series of standards (under development) and adopt if applicable.
- 4** DO think outside the narrow Cloud box. With the advent of *aaS and the emergence of IoT, SLAs may refer to services external to the data center or to specific metrics needed by Cloud Services based on each Cloud service Use Case.
- 5** DO consider composite services that may create chains of SLAs and their interdependencies. This is critical for guaranteeing response time to service support services: consider downstream (reseller) and upstream (e.g. provider's subcontractors) actors, their requirements and the need to 'float' SLA clauses down the chain.
- 6** DO consider resource management as a key part of the SLA upkeep and analysis process.
- 7** DO consider complementary mechanisms that would allow providers, resellers (e.g., offering a service over a cloud infrastructure that is not theirs) and users to easily monitor the SLA in a common and understandable way (for non-experts as well).



DON'Ts

- 1** **DON'T** consider that offered SLA terms are equivalent, even if they seem to refer to the same SLO. Always check the fine print for differences in how metrics are actually calculated.
- 2** **DON'T** consider that SLAs are monitored by providers.
- 3** **DON'T** leave end users out of the loop. Understandability and clarity of an SLA (or its relevant metric) for non-experts should be a key target. Translate your metrics into plain English if necessary.
- 4** **DON'T** limit yourself to popular metrics (e.g. availability) in SLAs. Users are also interested in more generic QoE indexes such as stability.
- 5** **DON'T** expect the market to bend for you: fit in to current practice to the maximum extent and if not possible, hone your value proposition.

This work represents the authors' view and does not necessarily reflect the opinions of the European Commission.

About



These **DOs** and **DON'Ts** were formulated by the **SLALOM** consortium based on their experience working with research projects, industry organizations, ISO and EC initiatives in the course of the H2020 SLALOM project.



aligned with

ISO

ISO will tell you **WHAT**

SLALOM will help you with **HOW**

SLALOM is a liaison body to **SC38** of **ISO /IEC JTC 1** and is contributing to the emerging ISO 19086- series.

19086-1

http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=67545

19086-2

http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=67546

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http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=67547

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http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=68242



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