



Getting to grips with a Service Level Agreement and how SLA-Ready can help

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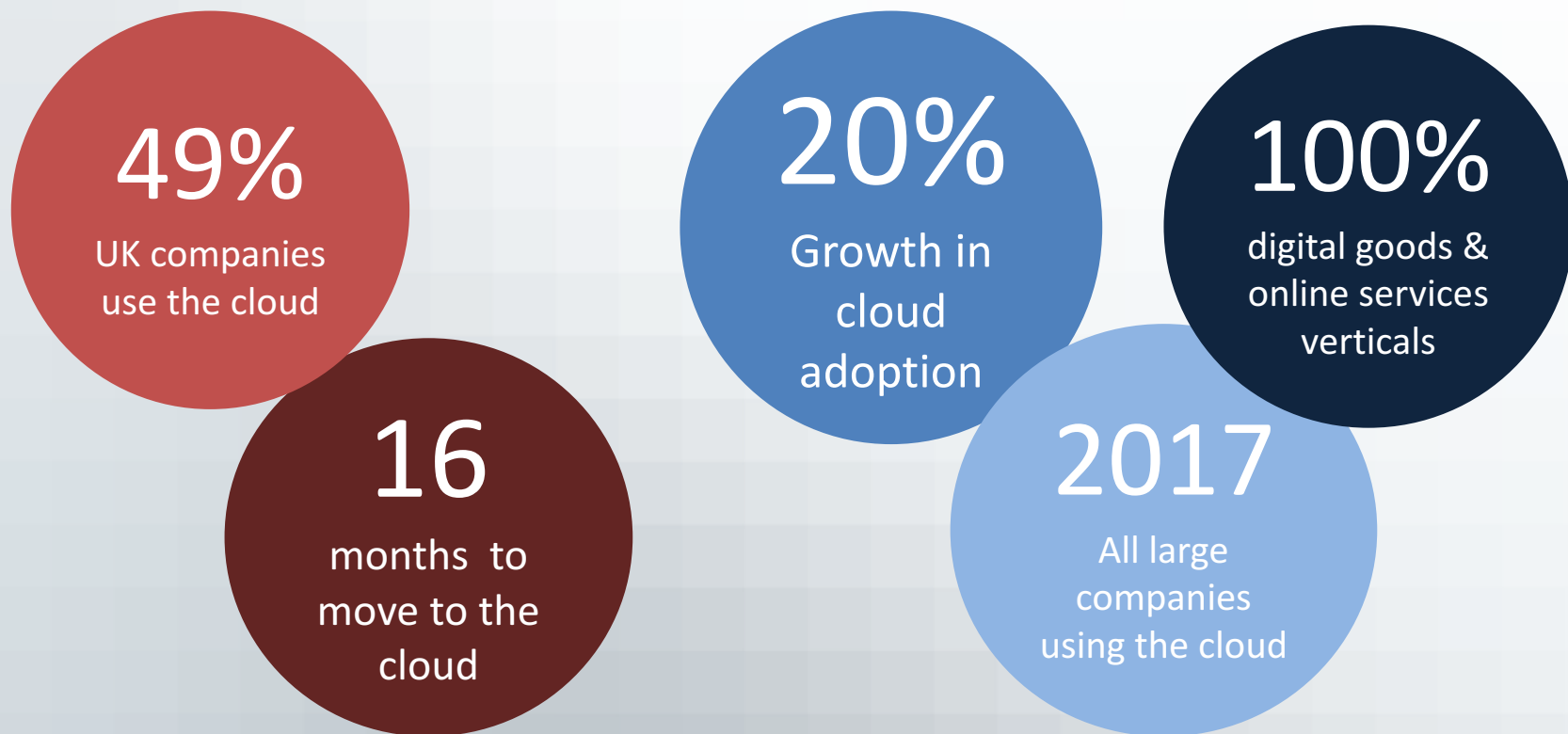
Trust-IT Services & SLA-Ready

SLA-Ready Workshop | Cluj-IT
03 November 2016 | Cluj-Napoca, Romania



Cloud as an enabler of IoT, BigData and innovation

The times they are a changin'



Source: *Blue Skies Ahead? The State of Cloud Adoption*, Intel Security 2016; *Cyber Security Breaches Survey*, UK Gov 2016
Romania still not on cloud number nine, *Business Review*, 28 May 2015

New opportunities need a change of mind-set

01

I'm an SME interested in the cloud but the contract terminology is too confusing

02

I'm confused about how to get the best deal for my cloud contract

03

I'm not sure which cloud delivery options are right for my specific needs

04

I'm worried about uptime and performance on the cloud



Can you trust the SLA?

- ☁ Contracts and Service Level Agreements (SLAs) are key components defining cloud services, but.....
- ☁ SLAs are **the least understood cloud attributes**
 - ☁ Complex language and terms of service (technical and legal)
- ☁ Lack of widely accepted standard frameworks, vocabularies
- ☁ Uncertainties as to what is regulated, who is responsible and which laws actually apply

Diminished trust in cloud services and uptake limited

Courtesy of Ruben Trapero, Technical University of Darmstadt & SLA-Ready

“You won’t need an IT guy. You’ll need a SLA expert!”

Raj Samani - CTO at INTEL Security @SecureCloud2016 Dublin Ireland



What is SLA-Ready?

Making SLAs readily usable in the EU private sector

- ☁ Contribute to creating greater transparency & trust in cloud SLAs
 - ☁ Provide a SLA Common Reference Model
 - ☁ Educate and empower (prospective) cloud customers
 - ☁ Encourage a culture of trust & transparency amongst providers
 - ☁ Contribute to standardisation in cloud SLAs.
- ☁ 1/1/2015 – 31/12/2016

Partners

The SLA Common Reference Model

How much? Who can I call?
 What law? Updates?
 Data protection? Performance metrics?
 My responsibilities? Unilateral change?
 Credit or money back? How long?
 Measured service? Security?

- ☁ State of Practice: Industry practices, Case studies, EU Research
- ☁ Standards: ISO 19086, EC C-SIG...
- ☁ User requirements: Technical, Security, Legal & governance, Socio-economic
- ☁ **30 essential elements** of an SLA were identified and divided into 8

General features	Freshness and validity	Readability and ease of understanding	Support to customers understanding
Credits including costs and billing	Change management	Reporting to customer	Technical Service Level Objectives & Metrics

www.sla-ready.eu/common-reference-model

The foundation for support to customers and providers

Common Reference Model hierarchy: elements

Groups (8)

CRM Elements (30)

General	→	SLA URL	Findable	Choice of Law	Roles and responsibilities	Cloud SLA Definitions		
Freshness	→	Revision date	Update Frequency	Previous versions and revisions		SLA Duration		
Readability	→	SLA Language	Machine-readable format		Number of pages			
Support	→	Contact support			Contact availability			
Credits	→	Service Credit	Service credit assignment		Max. Service credits provided			
Changes	→	SLA change notifications			Unilateral change			
Reporting	→	Service levels reporting	Service level continuous reporting	Feasibility of specials and customizations		General carve-outs		
SLO & Metrics	→	Specified SLO metrics	General SLOs	Performance	Reliability	Data Mgmnt.	Security	PDP

Courtesy of Ruben Trapero, Technical University of Darmstadt & SLA-Ready

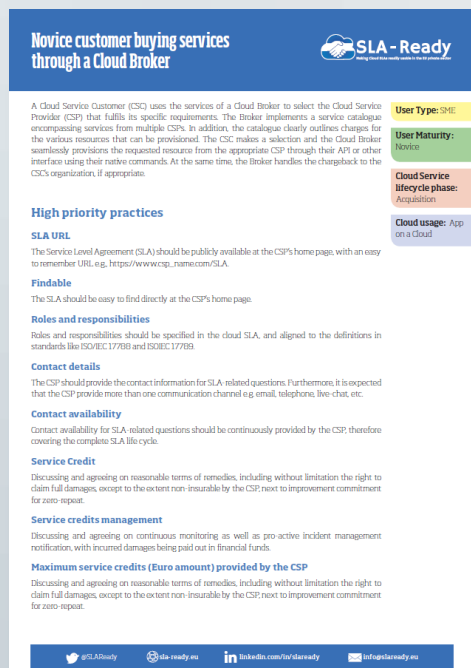
Services to educate & empower

SLA Common Reference Model



 Over 20 Use Cases

 Online Tool: SLA-AID



Novice customer buying services through a Cloud Broker

A Cloud Service Customer (CSC) uses the services of a Cloud Broker to select the Cloud Service Provider (CSP) that fulfills its specific requirements. The Broker implements a service catalogue encompassing services from multiple CSPs. In addition, the catalogue clearly outlines charges for the various resources that can be provisioned. The CSC makes a selection and the Cloud Broker seamlessly provisions the requested resource from the appropriate CSP through their API or other interface using their native commands. At the same time, the Broker handles the chargeback to the CSC's organisation, if appropriate.

High priority practices

SLA URL
The Service Level Agreement (SLA) should be publicly available at the CSP's home page, with an easy to remember URL, e.g. https://www.csp_name.com/SLA.

Findable
The SLA should be easy to find directly at the CSP's home page.

Roles and responsibilities
Roles and responsibilities should be specified in the cloud SLA, and aligned to the definitions in standards like ISO/IEC 17788 and ISO/IEC 17789.

Contact details
The CSP should provide the contact information for SLA related questions. Furthermore, it is expected that the CSP provide more than one communication channel e.g. email, telephone, live chat, etc.

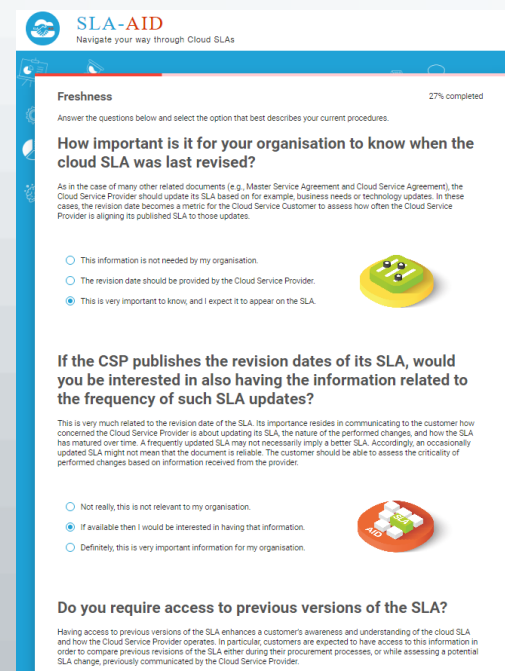
Contact availability
Contact availability for SLA related questions should be continuously provided by the CSP, therefore covering the complete SLA life cycle.

Service Credit
Discussing and agreeing on reasonable terms of remedies, including without limitation the right to claim full damages, except to the extent non-insurable by the CSP, next to improvement commitment for zero repeat.

Service credits management
Discussing and agreeing on continuous monitoring as well as pro-active incident management notification, with incurred damages being paid out in financial funds.

Maximum service credits (Euro amount) provided by the CSP
Discussing and agreeing on reasonable terms of remedies, including without limitation the right to claim full damages, except to the extent non-insurable by the CSP, next to improvement commitment for zero repeat.

User Type: SME
User Maturity: Novice
Cloud Service lifecycle phase: Acquisition
Cloud usage: App on a Cloud



SLA-AID
Navigate your way through Cloud SLAs

Freshness 27% completed

Answer the questions below and select the option that best describes your current procedures.

How important is it for your organisation to know when the cloud SLA was last revised?

As in the case of many other related documents (e.g., Master Service Agreement and Cloud Service Agreement), the Cloud Service Provider should update its SLA based on for example, business needs or technology updates. In these cases, the revision date becomes a metric for the Cloud Service Customer to assess how often the Cloud Service Provider is aligning its published SLA to those updates.

☐ This information is not needed by my organisation.

☐ The revision date should be provided by the Cloud Service Provider.

☒ This is very important to know, and I expect it to appear on the SLA.

If the CSP publishes the revision dates of its SLA, would you be interested in also having the information related to the frequency of such SLA updates?

This is very much related to the revision date of the SLA. Its importance resides in communicating to the customer how concerned the Cloud Service Provider is about updating its SLA, the nature of the performed changes, and how the SLA has matured over time. A frequently updated SLA may not necessarily imply a better SLA. Accordingly, an occasionally updated SLA might not mean that the document is reliable. The customer should be able to assess the criticality of performed changes based on information received from the provider.

☐ Not really, this is not relevant to my organisation.

☒ If available then I would be interested in having that information.

☐ Definitely, this is very important information for my organisation.

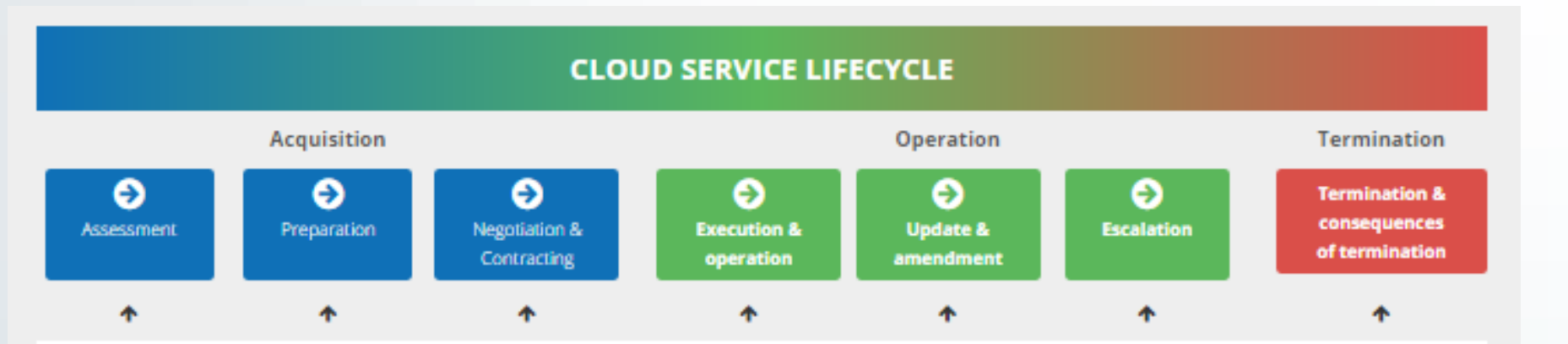
Do you require access to previous versions of the SLA?

Having access to previous versions of the SLA enhances a customer's awareness and understanding of the cloud SLA and how the Cloud Service Provider operates. In particular, customers are expected to have access to this information in order to compare previous revisions of the SLA either during their procurement processes, or while assessing a potential SLA change, previously communicated by the Cloud Service Provider.

Applying the Common Reference Model to support services

SLA-Ready Workshop @ ClujIT 2016, 03 November 2016

Best practices based on use cases



Basic knowledge customer using SaaS

Novice customer buying services through a Cloud Broker

Novice customer from Fintech

Novice customer moves data to the Cloud

Experienced government customer using Hybrid Cloud

Novice customer processes payroll in the Cloud

Video storage & streaming from the Cloud

Experienced customer provides Cloud-based environment

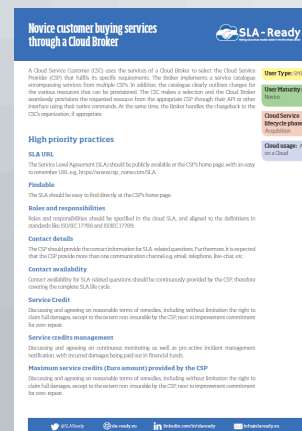
Experienced customer-vendor using IaaS & PaaS

Experienced customer migrating from one SaaS CSP to another

Experienced government customer

Customer distributing training material to mobile Employees

Helping customers see what others are doing



Novice customer buying services through a Cloud Broker

SLA URL
The Service Level Agreement (SLA) is available for download at the CSP's homepage, with an easy-to-remember URL, e.g. <https://www.example.com/SLA>.

Findable
The SLA should be easy to find directly at the CSP's homepage.

Rules and responsibilities
Rights and responsibilities should be specified in the cloud SLA, and aligned to the definitions in applicable EU, EFTA and EFTA.

Contact details
The CSP should provide the contact information for SLA-related questions. Furthermore, it is expected that the CSP provides more than one communication channel (e.g., email, telephone, live chat, etc.).

Contact availability
Contact availability for SLA-related questions should be continuously provided by the CSP, 24/7, covering the complete SLA lifecycle.

Service Credits
Discounts and credits are provided on a case-by-case basis, including without limitation the right to claim full damages, except to the extent not allowed by the CSP's own terms and conditions for service credits.

Service credits management
Discounting and credits are provided on a case-by-case basis, including without limitation the right to claim full damages, except to the extent not allowed by the CSP's own terms and conditions for service credits.

Maximum service credits (Euro amount) provided by the CSP
Discounting and credits are provided on a case-by-case basis, including without limitation the right to claim full damages, except to the extent not allowed by the CSP's own terms and conditions for service credits.

Use cases mapped & soon to be searchable by:

- User type
- User maturity
- Cloud lifecycle phase
- Cloud usage

<http://www.sla-ready.eu/sla-ready-new-use-cases>

SLA-AID

Identify YOUR priorities

Freshness 27% completed

Answer the questions below and select the option that best describes your current procedures.

How important is it for your organisation to know when the cloud SLA was last revised?

As in the case of many other related documents (e.g., Master Service Agreement and Cloud Service Agreement), the Cloud Service Provider should update its SLA based on for example, business needs or technology updates. In these cases, the revision date becomes a metric for the Cloud Service Customer to assess how often the Cloud Service Provider is aligning its published SLA to those updates.

☐ This information is not needed by my organisation.

☐ The revision date should be provided by the Cloud Service Provider.

☒ This is very important to know, and I expect it to appear on the SLA.

If the CSP publishes the revision you be interested in also having the frequency of such SLA update

This is very much related to the revision date of the SLA. Its importance concerned the Cloud Service Provider is about updating its SLA. It has matured over time. A frequently updated SLA may not necessarily mean that the document is reliable. The changes performed are based on information received from the provider.

☐ Not really, this is not relevant to my organisation.

☒ If available then I would be interested in having that information.

☐ Definitely, this is very important information for my organisation.

Do you require access to previous versions of the SLA?

Having access to previous versions of the SLA enhances a customer's understanding of how the Cloud Service Provider operates. In particular, custom order to compare previous versions of the SLA either during their SLA change, previously communicated by the Cloud Service Provider.

SLA-AID

How to navigate your way through Cloud SLAs

The tailored report you'll find below has been created based on your answers to SLA-Aid, a cloud service customers dedicated questionnaire. It contains a series of recommendations based on the importance you gave to the different SLA components (e.g., SLA definitions, notifications, reporting, monitoring and metrics).

SLA-Aid aims to help you make an informed decision when you are looking for cloud services and about to sign a cloud service contract.

The report has been compiled by the SLA-Ready consortium. It should not replace any professional or legal advice that you may seek. Please do not hesitate to contact us at info@sla-ready.eu if you require any further information or if you would like to provide us feedback to improve our tool.

Your Cloud SLA Priorities:

High Importance

Cloud SLA Definitions

Should relevant definitions for terms used in the SLA be provided?

The inclusion of terms and definitions being used in the cloud SLA will benefit Cloud Service Customers and help them to understand the provider's SLA, while also avoiding unnecessary ambiguities.

Yes, it is important for my organisation to have a clear understanding of the used SLA definitions.

Term and definitions should be specified in the cloud SLA, and aligned to EU guidelines and international standards.

Revision Date

How important is it for your organisation to know when the cloud SLA was last revised?

As in the case of many other related documents (e.g., Master Service Agreement and Cloud Service Agreement), the Cloud Service Provider should update its SLA based on for example, business needs or technology updates. In these cases, the revision date becomes a metric for the Cloud Service Customer to assess how often the Cloud Service Provider is aligning its published SLA to those updates.

This is very important to know, and I expect it to appear on the SLA.

The revision date, along with a log of changes, should be included in the SLA.

Number of Pages

To make the SLA easier to read, should the pages of the SLA be numbered?

Nevertheless, it is very common to find cloud SLAs in electronic formats where the number of pages cannot be counted (e.g., webpages, popup panels). However, our findings show that "long SLAs" do not necessarily mean "clearer SLAs".

On the contrary, if the SLA takes several screens to display or is very long, then the prospective Cloud Service Customer will most likely avoid reading it in full or will be unable to easily find key SLA information. Shorter, but concise and standardised SLAs are expected to greatly benefit Cloud Service Customers.

It is very important to have a short, but concise SLA with numbered pages.

30 Questions to navigate your way through cloud SLAs

- Questions cover Common Reference Model elements
- You decide on importance for each element for you
- Recommendations reflect good practice for each element
- Recommendations ordered by priority for end-user
- Customised downloadable report available

<http://sla-aid.sla-ready.eu/>

Leading customers in a step-wise approach to comparing SLAs

Supporting Cloud Service Providers provide transparent and trusted SLAs

SLA Common Reference Model questionnaire for CSPs



General: general purpose features of the SLA

Self-assessment of SLA using SLA Readiness index

<input checked="" type="checkbox"/> Credit	<input checked="" type="checkbox"/> Change	<input checked="" type="checkbox"/> Transparency	<input checked="" type="checkbox"/> Duration	<input checked="" type="checkbox"/> Reporting	<input checked="" type="checkbox"/> Performance SLOs	<input checked="" type="checkbox"/> Security SLOs
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Publish your SLA results in our SLA-Ready Repository



Readability: features related to the level of understanding of the



STAR Registrant Acer
CyberCenter Services
Inc.

Acer CyberCenter Services Inc. (ACCS) is 100% owned by Acer Inc. with about 250 employees. ACCS runs the data center related services and is also known as Acer e-Enabling Data Center (Acer eDC). Investment of the data center is over US\$100M to provide professional IT management services to businesses since 2001. Except data center hosting services, we also provide off-site backup services, system/network monitoring services and security services. We run the largest SOC (security operation center) in Taiwan now. Our data center and services are ISO 27001, ISO 20000 and BS10012 certified.

Submission Info

Date Listed: November 20, 2013
Last Modified: June 22, 2015.

Additional Info

What is this?
Service supports enterprise identity.
Service supports file sharing.
Service supports a mobile app.
Service performs penetration testing.

SLA Self-assessment service

- ☁ CSP SLA questionnaire based on Reference Model
- ☁ Repository of assessed SLAs
- ☁ SLA-Readiness Index ranks SLA on transparency
- ☁ Sustained beyond SLA-Ready through the CSA Star Watch

Encouraging a culture of transparent and trusted cloud SLAs

SME workshops for customers & providers

- ☁ Promoting SLA-Ready tools & services to European ICT Clusters and National Trade Associations



DIGITALEUROPE

Join us at our workshops

19 OCTOBER
AMETIC @ Cloud Forward 2016
Madrid, Spain

15 NOVEMBER
CONETIC
Madrid, Spain

3 NOVEMBER
ClujIT
Cluj-Napoca, Romania

15 DECEMBER
DIGITALEUROPE
Brussels, Belgium

Today's Agenda

Time	Session
09:30 – 09:40	Intro & Welcome from ClujIT – Andrei Kelemen, ClujIT
09:40 – 09:55	Are you SLA-Ready? – Nicholas Ferguson, Trust-IT Services
09:55 – 10:15	Strategic & pragmatic approach on Cloud Services and SLA Essentials - Janneke Breeuwsma, Arthur's Legal
10:15 -10:45	Panel discussion: Head in the cloud, boots on the ground
10:45 – 11:15	Coffee Break
11:15 – 11:45	Main Cloud Objectives and SLA Essentials - Janneke Breeuwsma, Arthur's Legal
11:45 – 12:15	Break-out session: It's Up to You!
12:15 - 12:30	Feedback and questions
12:30 – 13:00	Final Panel Discussion



Thank you!

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[@SLAReady](https://twitter.com/SLAReady)

www.sla-ready.eu

