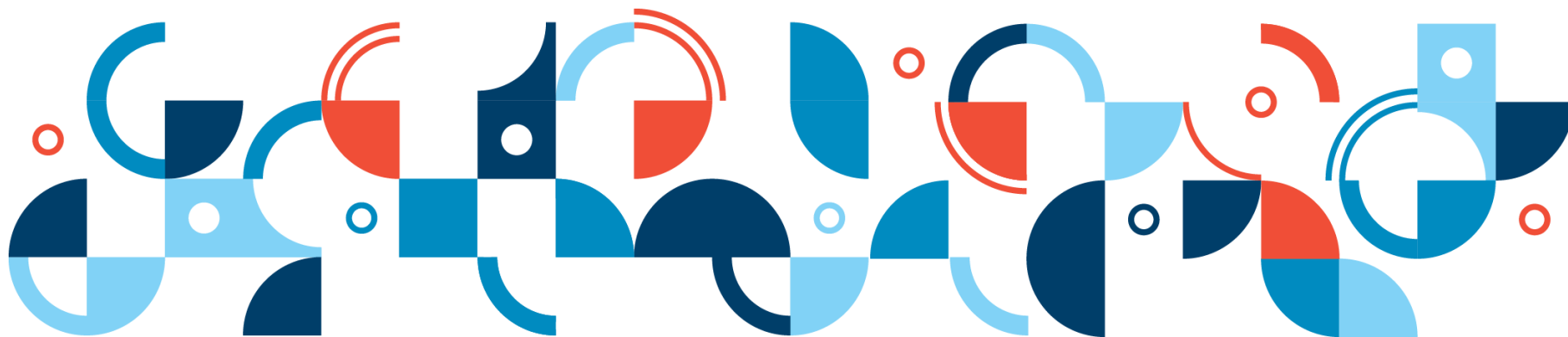


Cloud as a Growth Engine for Business

Shaping policy that affects Cloud Computing

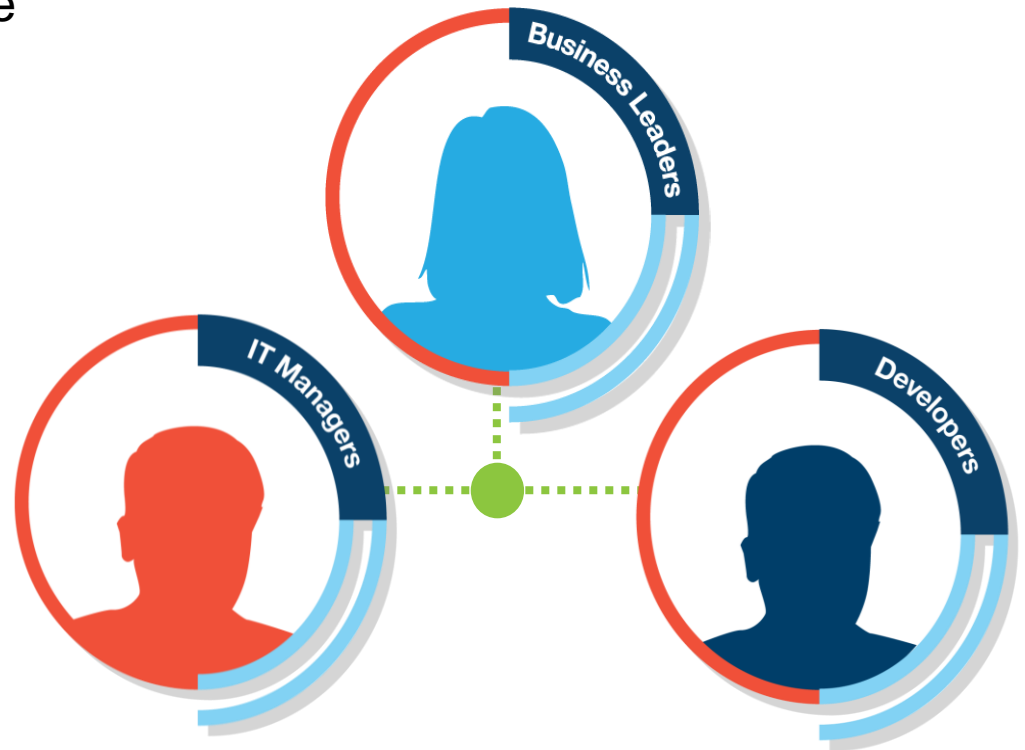
Jonathan Sage

CloudWatch concertation meeting, September 11th 2014



The Future is a Composable Business

- Restlessly reinvent and innovate your processes
- Make better decisions with real-time actionable Insights
- Accelerate your time to market
- Integrate across the enterprise



The Path to Composable Business

IS

Dynamic Cloud

Seamlessly extends enterprise
IT with Cloud for changing
business needs:

- Acts as one dynamically managed, secure environment
 - Flexible choice of delivery models
 - Interoperable through open standards



Not Just Public or Just Private, Hybrid Cloud is the future

On-Premises Cloud & IT



- Fully customizable
- Robust management
- Secure by design

Off-Premises Cloud



- Low entry cost
- Pay-per-use
- Highly elastic

Hybrid Cloud

**Best of both worlds.
Better outcomes.**



- Maximize return on existing IT investments
- Match workloads to best-fit infrastructure
- Move workloads as business needs change
- Hit the right balance of risk to speed
- Meet seasonal capacity without CapEx
- Add new capabilities quickly

The Cloud Computing Strategy

The European Commission's strategy 'Unleashing the potential of cloud computing in Europe'

Adopted on 27 September 2012, it is designed to speed up and increase the use of cloud computing across the economy

Cloud strategy's key actions

Cutting through the jungle of **technical standards**

Development of model 'safe and fair' contract terms and conditions

A European Cloud Partnership to drive innovation and growth from the public sector.

Groups working on implementing the strategy

ETSI: Cloud Standards Coordination Delivered 12/2012

The Cloud Select Industry Group on Certification Schemes Delivered 02/2014

The Cloud Select Industry Group on Code of Conduct To be delivered end 2014

The Cloud Select Industry Group on Service Level Agreements Delivered on 06/2013

The Cloud Computing Contract Group Launched on 19/11/2013

Steering Board Report Delivered 03/2014

The European Cloud Partnership Tender Specs to be launched 10/2014

Cloud Strategy – Where are we?


- 1) Cloud Standards Coordination –
ETSI (Ver 1 Dec 2013, Ver 2 early 2015)
- 2) Security Certification Schemes – Cloud SIG
ENISA - list (Feb 2013) and
ENISA - metaframework (Mid 2014)
- 3) Service Level Agreements – Cloud SIG
Guidelines (June 2014)
- 4) Code of Conduct for Cloud SPs - Cloud SIG
To Article 29 Working Party (Mar 2014)
Operational (end of 2014)



ETSI CSC - Main conclusions



NO
Jungle of
Standards



Enough
Standards
to start with



Despite new
standards
coming,
some gaps
identified



Foster
collaboration
to ensure no
fragmentation
happens

Cloud Computing Certification

Cloud Certification Schemes List - CCSL

Welcome to the Cloud Certification Schemes List (CCSL) - a listing of different certification schemes for cloud computing customers, developed and maintained by ENISA in tight collaboration with the European Commission and the private sector (see below).

What is a cloud certification scheme?

Before buying a cloud service, customers want to know if the service is secure and reliable. But cloud computing services are complex and built up from many different ICT components (cables, large data centers, software, et cetera), so it is not really feasible for customers to check all the technical details by themselves. In a cloud certification scheme one fixed set of security requirements is checked, once for all customers. In this way a certification can simplify the procurement of cloud services by customers.

How to use this list?

CCSL gives an overview of the different existing certification schemes which could be relevant for cloud computing customers. CCSL also shows which are the main characteristics of each certification scheme. For example, which are the underlying standards, who can perform the certifications, who audits the cloud services. CCSL also provides links and references to each certification schemes for further reading.



Background Work	Tool Manual	Cloud Certification List	Login (for partners)
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Click on the icons of each certification scheme below, to view the characteristics of each scheme. Note that in the future more schemes may get listed here.



ISO 27001 Certification



Open Certification Framework



EuroCloud Star audit



TUV Certified Cloud Service



Security Rating Guide

Cloud SLA Standardisation Guidelines

*The **Cloud SLA Standardisation Guidelines** will help professional cloud users to ensure essential elements are included in plain language in contracts they make with cloud providers. Relevant items include:*

- *The availability and reliability of the cloud service,*
- *The quality of support services they will receive from their cloud provider*
- *Security levels*
- *How to better manage the data they keep in the cloud.*

Input to ISO Cloud Computing Working Group

- *This initiative will have deeper impact if standardisation of SLAs is done at international level, e.g. through international standards, such as ISO/IEC 19086.*
- *To this end, the C-SIG on SLAs is also working with the ISO Cloud Computing Working Group, to present a European position on SLA Standardisation (ISO meeting in October 2014)*
- *The Cloud SLA Standardisation Guidelines will thus feed into ISO's effort to establish international standards on SLAs for cloud computing.*

Code of Conduct on DP: Background

- *Directive 95/46/EC art 27 encourages adoption of codes of conduct and their endorsement by art 29 Working Party*

- *EC Cloud Computing Strategy of 29-09-2012*
 - “Work with industry to agree a code of conduct for cloud computing providers to support a uniform application of data protection rules which may be submitted to the Article 29 Working Party for endorsement in order to ensure legal certainty and coherence between the code of conduct and EU law.”

Data Protection Code of Conduct

Code of Conduct Working Group

- 1st meeting 10 April 2013
- Under DG Connect's Cloud Select Industry Group
- Continuous drafting until end of August

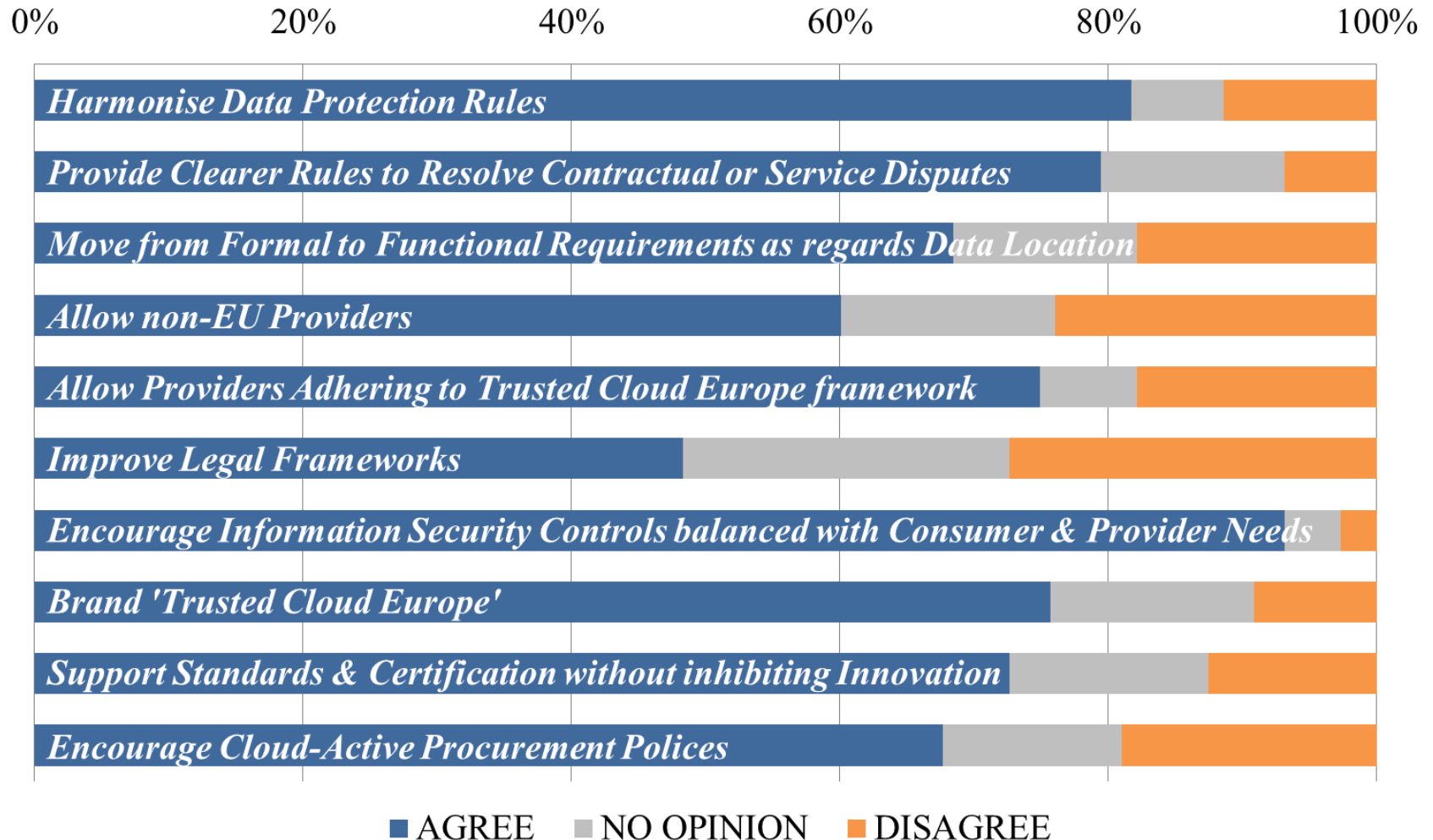
Work progress

- **Second version of the Code of conduct was submitted to the Article of 29 Working Party ("29WP").**
- **Comments from the WP29 TS received in May 2014**
- **Revised version of the Code and submission to the 29 WP planned for end of August 2014**
- **Aim for endorsement before end of 2014**

Public sector & policy barriers

- ***Privacy and security*** are common barriers –addressed but stressed at different levels
- *Other:*
 - Regulatory issues (e.g. requirements for sharing data between administration in Italy - rigidity in EU procurement law (G-cloud))
 - Technical issues (e.g. lack of maturity of technologies)
 - Financial issues (e.g. assessing real costs of cloud deployment)
 - Adapting SLAs to cloud and public sector
- ***Changes in process and ways of working*** are, if not a barrier, a main challenge in implementing cloud initiative in the public sector:
 - Cloud requires adjustment in ICT management processes, automation of tasks and changes in skills requirements for staff, pulling resources together between administrations used to manage their own bespoke ICT solutions, etc.

Trusted Cloud Europe Questionnaire



Trusted Cloud Europe Survey Priorities to Consider

GREEN PAPER Formal
Consultation of these
Policy Options



*Support Standards and
Certification without
inhibiting Innovation*



*Brand Trusted Cloud
Europe*



*Encourage Information
Security Controls balanced
with Consumer & Provider
Needs*



*Encourage Cloud-Active
Procurement Policies*

*Harmonise Data Protection
Rules*



*Provide Clearer Rules to
Resolve Contractual or
Services Disputes*



*Move from Formal to
Functional Requirements
as regards Data Location*



*Permit Equal Data
Sovereignty for Providers
both inside and outside
Europe*

Improve Legal Frameworks

