

Cloud Services As An Enabler

The Strategic, Legal & Pragmatic Approach

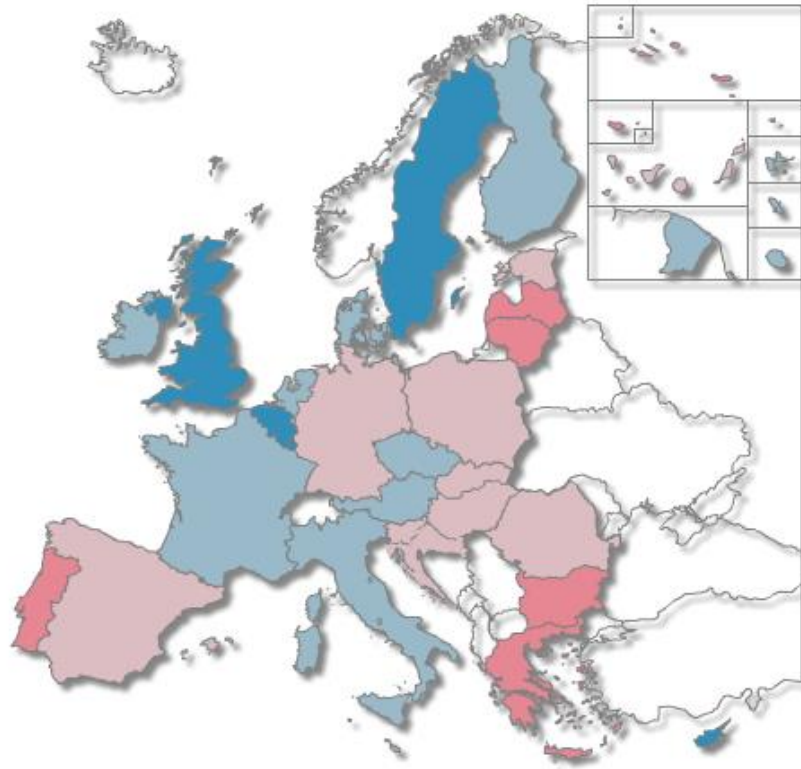
Arthur van der Wees

Managing Director international law firm Arthur's Legal



SLA-Ready

Massive Growth of Productivity Required: Digital is Key



‘Faced with rapidly ageing populations and slowing employment growth, **mature economies need to boost productivity sharply if they are to escape stagnating living standards.**

To compensate fully to slower employment growth over the coming 50 years, productivity growth would need to be **80% faster** than over the **past half-century**, according to calculations from McKinsey.’

Financial Times

Risks, Comfort & Trust in the Cloud

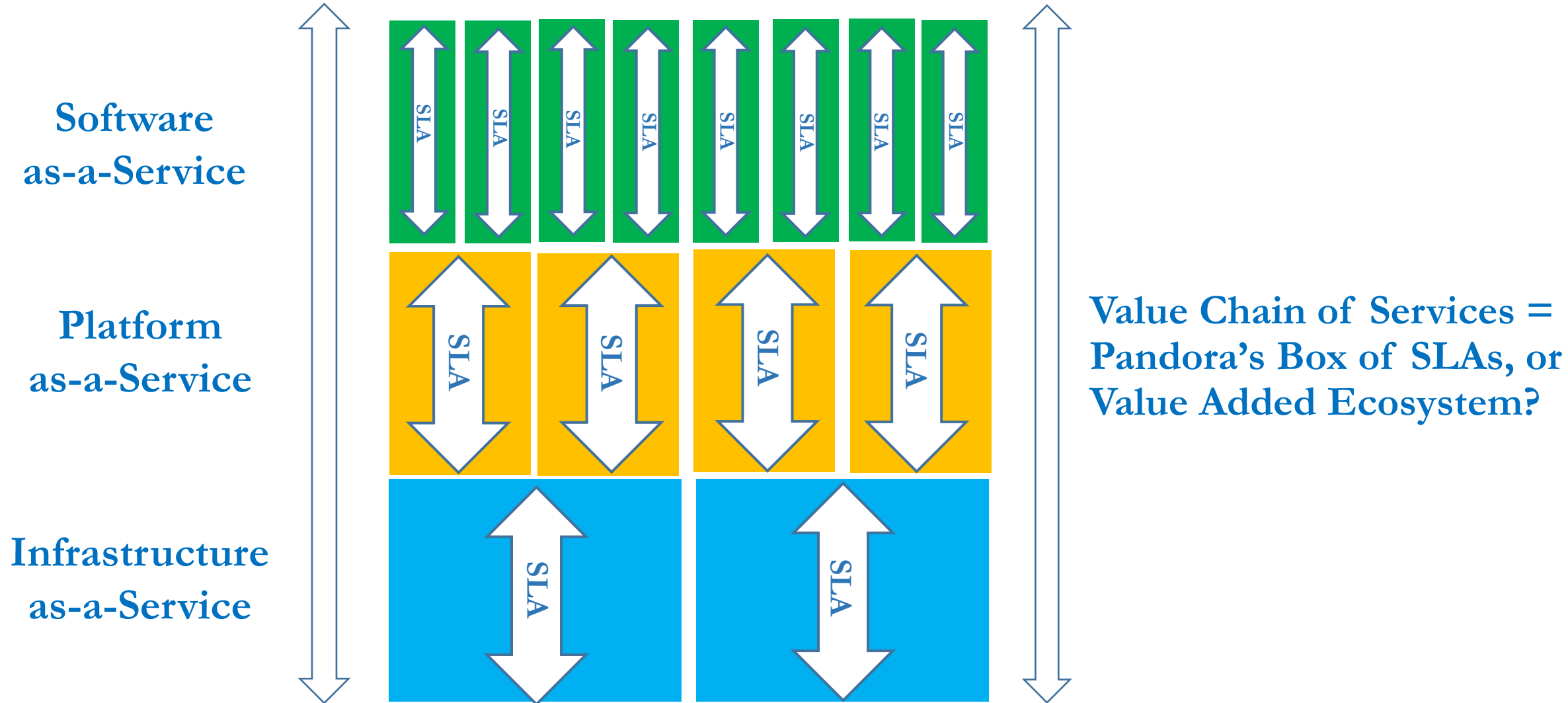
Major Digital Global Economy & Digital Single Market Challenge:

For the 80% not yet using paid cloud services, **insufficient knowledge** is the main blocking factors (42%).

For the 20% using paid cloud services, the risk of a **security breach** is the main limiting factor (39%).

Eurostat (EC)

Hyperconnected, accountable Value Chain: to serve B2x, G2x, C2x, Peer2Peer



How to make Informed Decisions?

Maturity Level of Cloud Terms & SLAs



Cloud Security Explained



Digital Society, Digital Economy & DSM

European Commission Priority: Digital Single Market

C-SIG Drafting Group DG CNECT: **EC Cloud SLA Standardisation Guidelines**, ISO/IEC 17788, ISO/IEC 19086, and other standards.

Improve transparency, bridging the disconnect between supply and demand, and increase the uptake of cloud computing by making it easier for and empower 20.000.000+ EU SMEs to understand SLAs.

International Standardisation & Best Practices

4 Main Categories Service Level Objectives (SLOs)

1. Performance
2. Security
3. Data Management
4. (Personal) Data Protection



Start with Common Understanding: Definitions

Cloud Computing

A paradigm for enabling network access to a scalable and elastic pool of shareable physical or virtual resources with self-service provisioning and administration on-demand.

Cloud computing can be composed of (A) five essential characteristics being (1) on-demand self-service, (2) broad network access, (3) resource pooling, (4) rapid elasticity, and (5) measured service, (B) four service models, being (i) SaaS, (ii) PaaS, (iii) IaaS, and (iv) other XaaS, and (C) four deployment models: (a) private cloud, (b) community cloud, (c) public cloud, (d) hybrid cloud.

Start with Common Understanding: Definitions

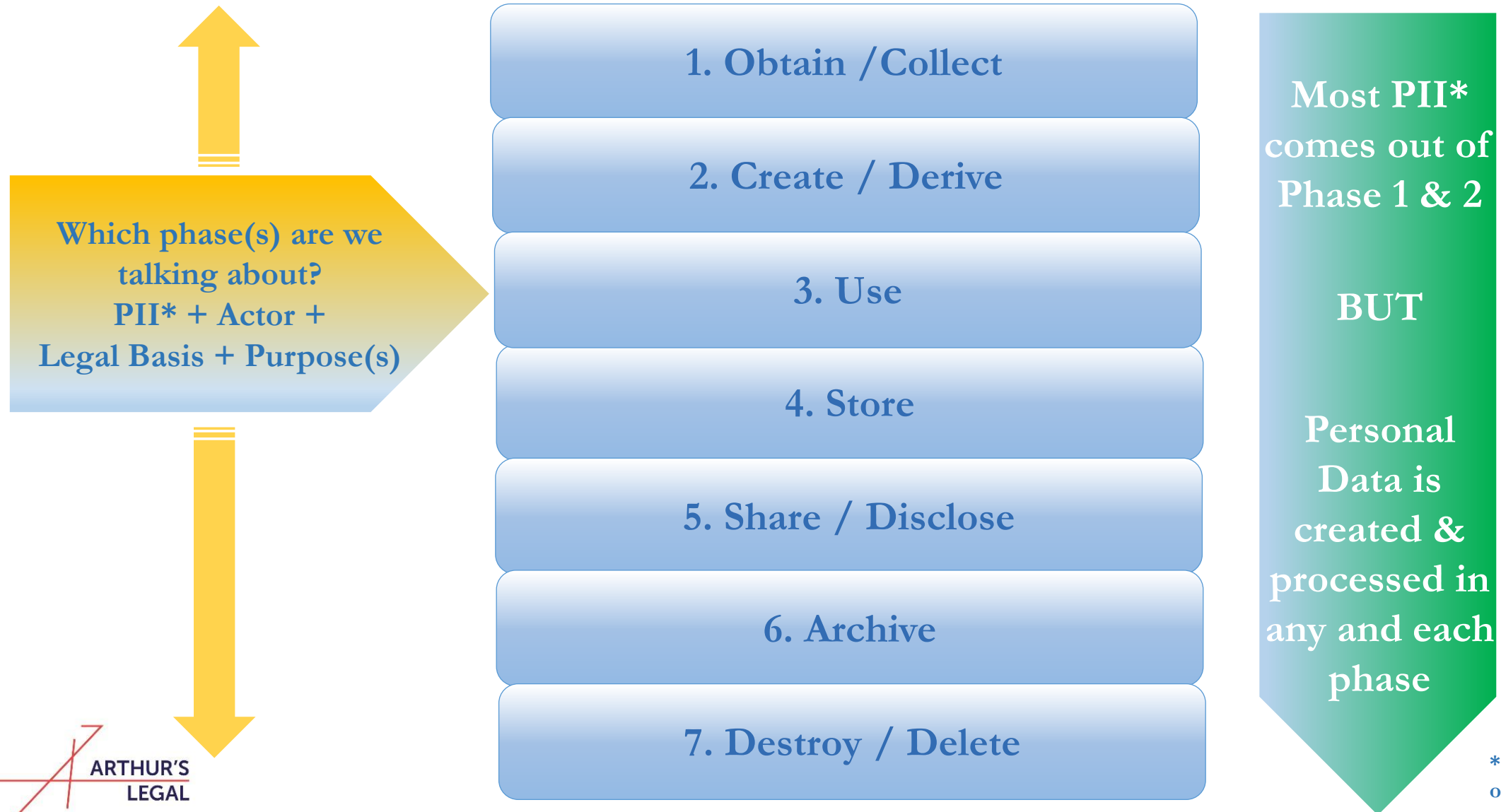
Data is not a four letter word

Data	Data of any form, nature or structure, that can be created, uploaded, inserted in, collected or derived from or with cloud services and/or cloud computing, including without limitation proprietary and non-proprietary data, confidential and non-confidential data, non-personal and personal data, as well as other human readable or machine readable data.
------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

EC Cloud Service Level Agreement Standardisation Guidelines (v20140828)

3D approach | Multi-story of connected data types | Classified data |
Sensitive data | Confidential data | Personal data | Non-Personal data
Meta data | Derived data | Know how | Proprietary data | IPR |
Encrypted data, with or without Tokenization | Distributed data |
Every kind of data needs to be addressed differently.

7 Phases of the Personal Data Life Cycle



* PII: personal identified
or identifiable information

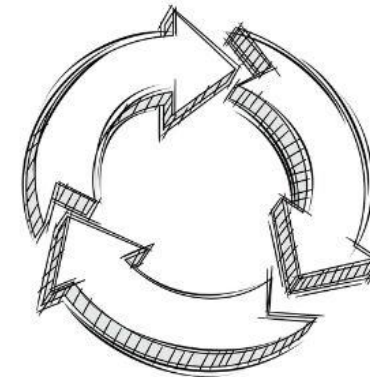
Ecosystem for Technology & The Rule of Law



Cloud SLA Life Cycle

When zooming in at one (1) SLA from a legal, negotiation and contract management perspective, the life cycle of a SLA can be split in seven (7) headline legal life cycle phases:

1. **Assessment**
2. **Preparation**
3. **Negotiation & Contracting**
4. **Execution & Operation**
5. **Updates & Amendments**
6. **Escalation, and;**
7. **Termination & Consequences of Termination**

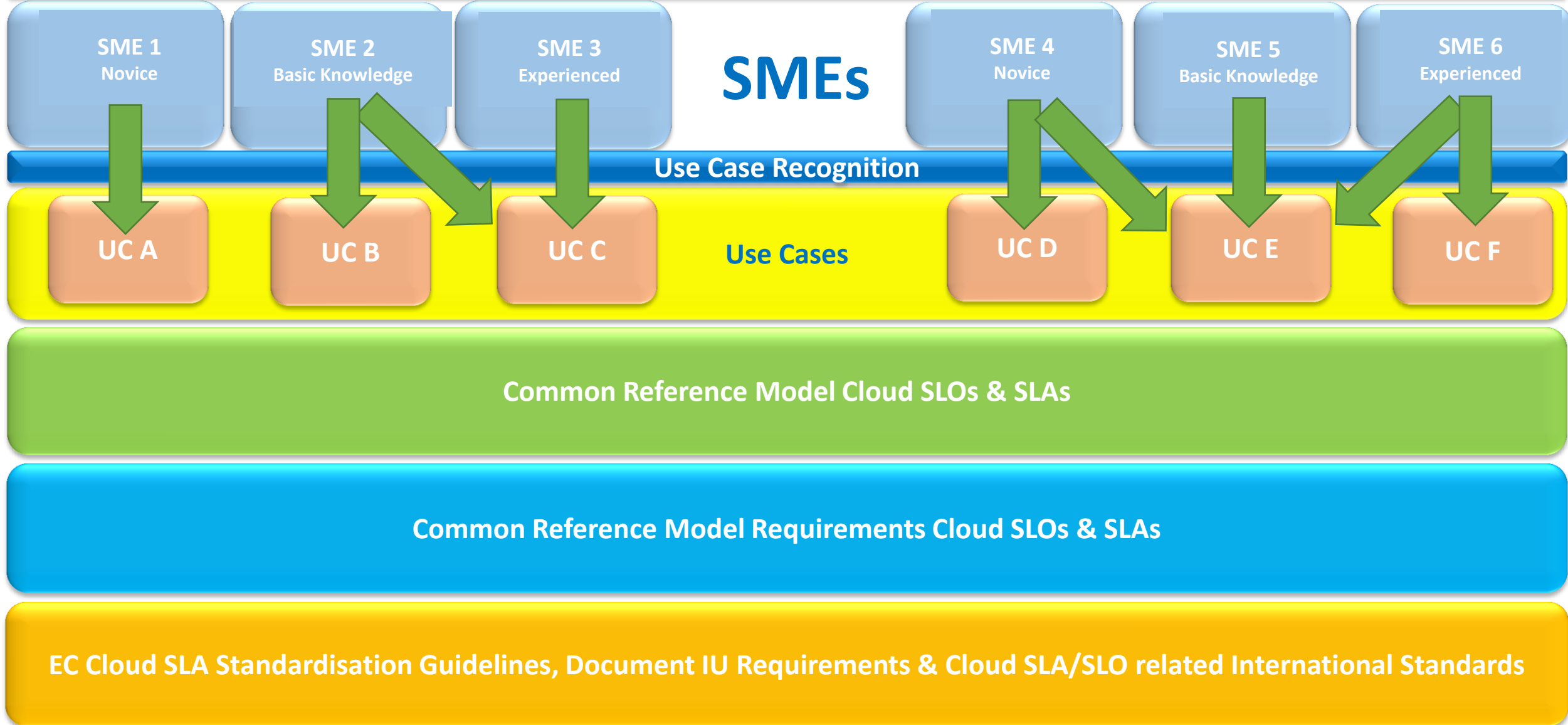


State of Practice vs State of Art

Current maturity level of Cloud SLAs of CSPs:

1. **Difficult to find, difficult to read & assess:** Lot's of push-back at CSPs
2. **Performance:** Availability, Uptime & Measurements
3. **Incident Management:** Response time per prioritised incident
4. **Carve-outs & other exclusions:** 'Planned' Maintenance, Force Majeure, customer, third parties.
5. **Less than 15% coverage out of the EC SLA Standardisation Guidelines**
6. **Difficult to monitor, manage & enforce**

SME MARKET TO SLA(RELATED) REQUIREMENTS & STANDARDS, AND VICE VERSA



I AM THE
LEFT BRAIN

Decisive!
011001011 LOGIC

Accurate
ANALYTIC

REASON
1 2 3 4 5 6 7 8 9

PRACTICAL
Strategic

CONTROL

SCIENCE

Realistic
Brilliant

WWW.CARTOONADAY.COM

I AM the
Right BRAIN!

Intuition
Love LOVE love
Poetry

FREEDOM

Passion
vivid

creative

YEARNING

PEACE

Arthur's Legal } Global Tech Law Firm by Design. Est. 2001

Arthur's Legal: Arthur's Legal a global tech law firm by design. Arthur's Legal is founded in 2001 and since its incorporation provides integrated full services, and mainly focuses on local and global private and public organizations that are active as customer, user, vendor, integrator, consultant, legislator or policy maker in the fields of IT, licensing, cloud computing, internet of things, data analytics, cybersecurity, robotics, distributed ledger (block chain) technology and artificial intelligence. Arthur's Legal is also a leading deal making expert; it has already structured and negotiated out more than 5.000 major technology and related deals with and for global Fortune companies as well as other major organizations in the public and private sector worldwide.

Global Digital Strategy: The counsels of Arthur's Legal are legal experts, strategists, technologists, standardization specialists and frequent speakers worldwide, with in-depth experience and are well-connected in the world of technology, innovation, data, digital, cybersecurity, (personal) data protection, innovation, standardization & global business. On these topics, its managing director Arthur van der Wees LLM is expert advisor to the European Commission, Dutch government as well as other public and private sector organizations and institutes worldwide.

Cloud Computing, CyberSecurity, Digital Data & Internet of Things: Arthur's Legal is Founding Member of European Commission's (EC) Alliance of IoT Innovation (AIOTT), Co-Chair of of AIOTT WG4 (Policy), Project Leader of AIOTT WG3 Privacy-by-Design working group, co-author of EC's Cloud SLA Standardisation Guidelines, co-author of Cloud Security Alliance's Privacy Level Agreement (PLA) 2.0, co-contributor to ISO standards such as ISO/IEC 19086 (Cloud Computing), and co-author of the IERC Handbook 2016: Digitising the Industry, Internet of Things Connecting the Physical, Digital and Virtual Worlds. Arthur's Legal is co-founder of CloudQuadrants on the maturity of cloud offerings, the Cyberchess Institute that landscapes the real-life cybersecurity arena, the Cyber Trust Institute that sets trust trajectories and orbital requirements and parameters for technology-as-a-service, the Institute for Next Generation Compliance that promotes the restructuring and automation of compliance and related procurement, and consortium partner of EC's H2020 SLA Ready. From 2017 to 2020, Arthur's Legal will lead strategic, trust, legal and compliance topics in IoT via EC H2020 project IoT CREATE.

Connected & Hyperconnected: Arthur's Legal has an unique 3D-angle & x-by-design approach, connecting vital topics such as usability, security, data management, (personal) data protection, compliance with technology, infrastructure, architecture and global standardization thereof, with the capability and ability to connect those components in hyperconnected ecosystems much earlier (read: pro-active, preventative) than the traditional policy-making, legal and compliance practice does. For upcoming events, key notes and other activities, please check out website, stay up to date via its social media channels, or contact us.

www.arthurslegal.com | vanderwees@arthurslegal

