A SPECIAL vision for enabling privacy through Linked Data

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SPECIAL

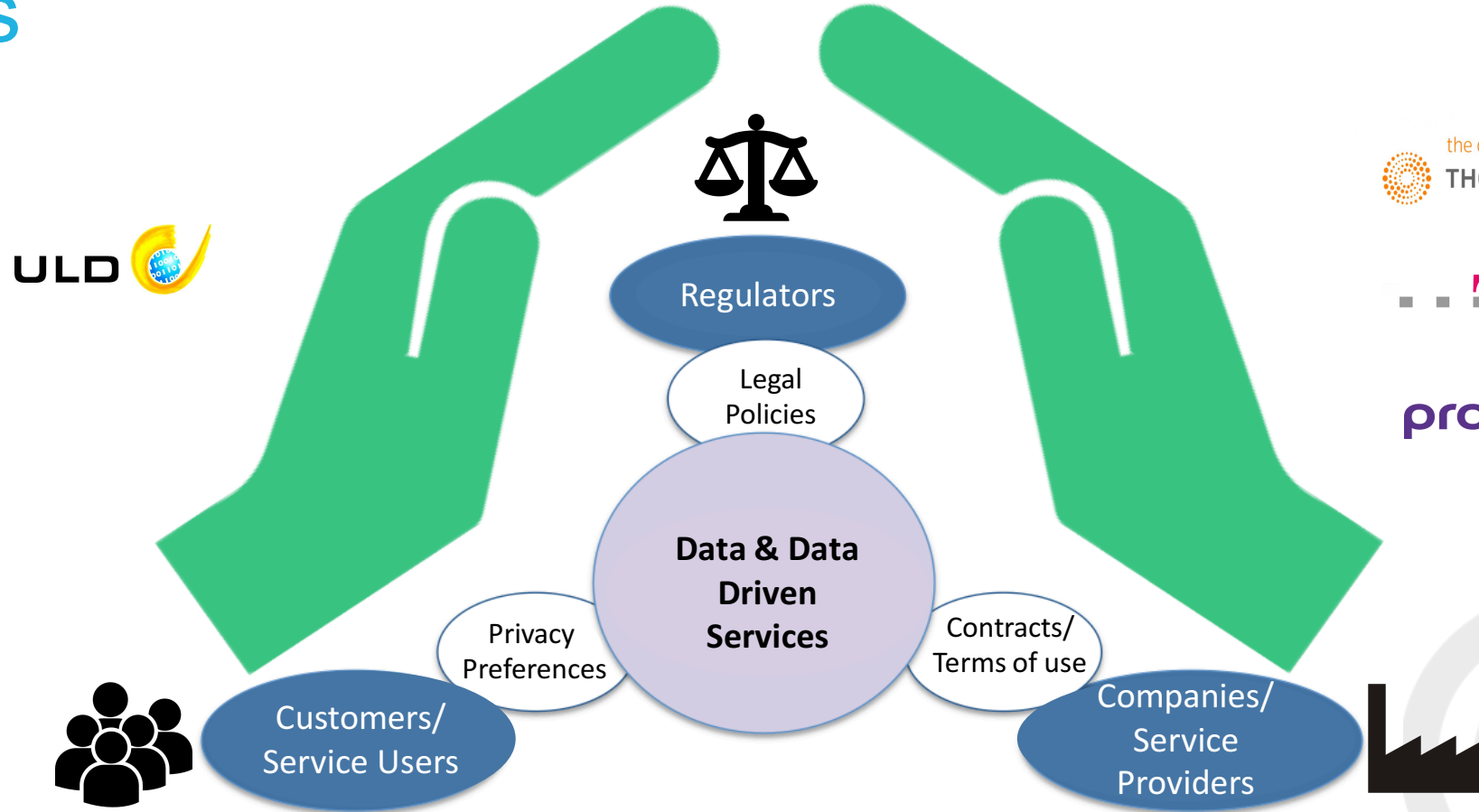Horizon 2020
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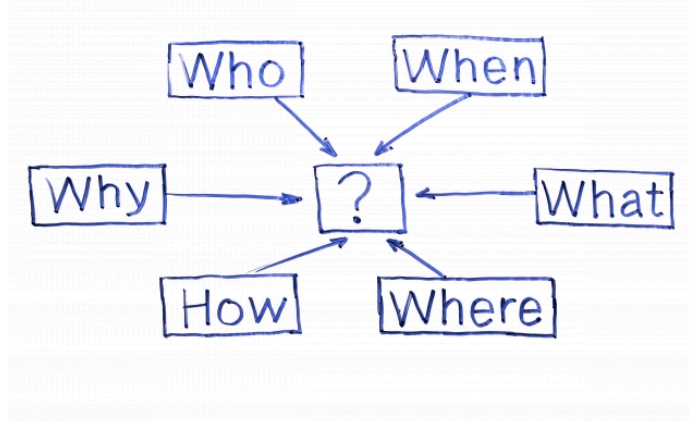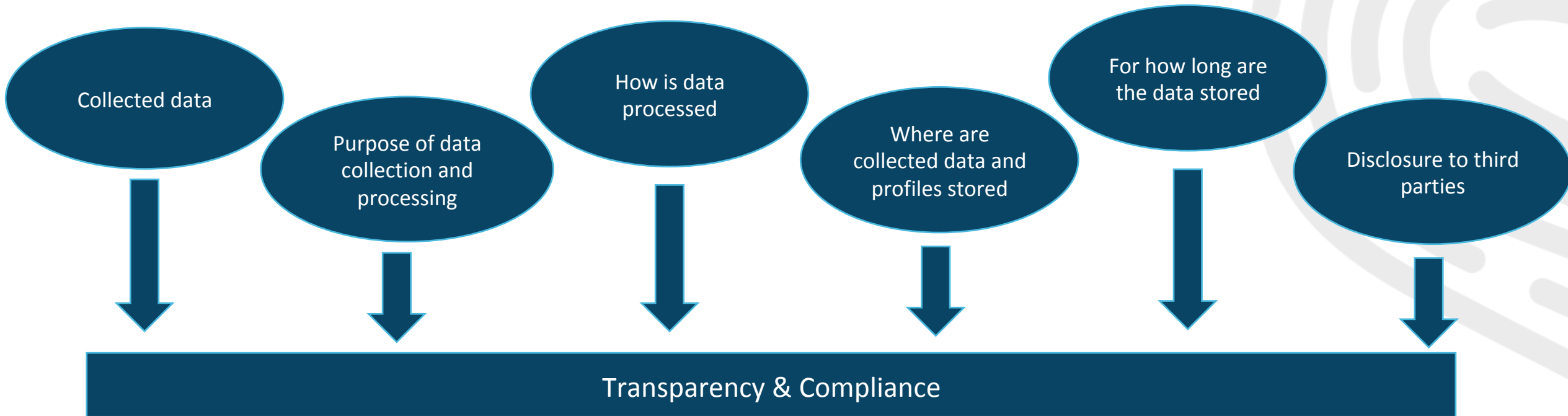UNIVERSITY OF
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AND BUSINESS

SPECIAL Overview
Objectives

- Policy management framework
  - ❖ Gives **users control** of their personal data
  - ❖ Represents **access/usage policies** and **legislative requirements** in a **machine readable format**

- Transparency and compliance framework
  - ❖ Provides information on how data is **processed** and with whom it is **shared**
  - ❖ Allows data subjects to take **corrective action**

- Scalable policy-aware Linked Data architecture
  - ❖ Build on top of the Big Data Europe (BDE) platform **scalability and elasticity mechanisms**
  - ❖ Extended BDE with **robust policy, transparency** and **compliance protocols**

The SPECIAL Policy Language
Starting Points

Collected data

Purpose of data collection and processing

How is data processed

Where are collected data and profiles stored

For how long are the data stored

Disclosure to third parties

Transparency & Compliance

PERSONAL DATA

Who   When

Why   ?   What

How   Where

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vmware®   amazon

Microsoft®

SAP salesforce.com®   Adobe®

The SPECIAL Policy Language
Exising Vocabularies

- **FOAF**, **vCard** and **schema.org** offer vocabularies for modeling static personal data to describe persons, agents

- **DICOM** for healthcare metadata has dynamic attributes relevant to fitness and health, such as heart rate

- **NeoGeo** vocabulary, the **GeoSPARQL** vocabulary or the **WGS84 Geo Positioning** vocabulary can be used for location data

- **P3P** working group published an RDF vocabulary for expressing the concepts of **P3P** including a categorization of personal data and purposes

- **ODRL** provides means to model actions, prohibitions, and obligation to describe policies and consent

- **OWL Time** provides means to describe the time and duration of processing, duration of consent, logging events

- **PROV** provides an excellent starting point for modeling the provenance of consent and data processing actions

The SPECIAL Policy Language
More Details

Unofficial Draft

ReSpec

The SPECIAL Usage Policy Language

version 0.1

Unofficial Draft 06 April 2018

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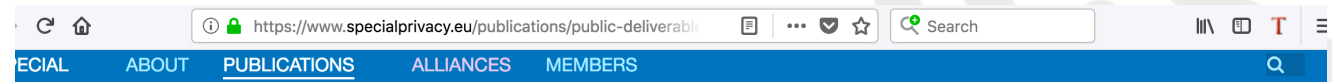Eva Schlehahn (Unabhängies Landeszentrum für Datenschutz (ULD))

Abstract

This document specifies usage policy language of SPECIAL. The usage policy language is meant to express both the data subjects' consent and the data usage policies of data controllers in formal terms, understandable by a computer, so as to automatically verify that the usage of personal data complies with data subjects' consent.

The ontology defined in this document is publicly available at http://www.specialprivacy.eu/langs/usage-policy.

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Project deliverables

Linh Nguyen   Last Updated: 26 March 2018

Project deliverables

Papers & presentations

Press releases and newsletters

Studies & essays

Dissemination material

Deliverable 6.1 - SPECIAL website set up (M3)

Deliverable 6.1

This document provides an overview of the initial SPECIAL project website as it stands at Project Month 3.

Deliverable 1.2 - Legal requirements for a privacy enhancing Big Data V1 (M6)

Deliverable 1.2

This is the report providing details of all legal and ethical considerations, as a main input for the SPECIAL privacyaware platform.

Deliverable 3.1 - Initial setup of policy aware Linked Data architecture and engine (M6)

SPECIAL

Scalable Policy-awarE Linked Data arChitecture for privacy, trAnsparency and compLiance

Deliverable 1.4
Technical Requirements V1