The DECIDE project provides a new generation of multi-cloud service-based software framework, enabling techniques and mechanisms to design, develop, and dynamically deploy multi-cloud aware applications in an ecosystem of reliable, interoperable, and legal compliant cloud services.

www.decide-h2020.eu
KEY RESULTS

DECIDE DevOps Framework: The most effective environment for multi-cloud native application developers and operators to design, develop, deploy and operate multi-cloud applications following the DevOps philosophy on continuous integration, continuous quality and continuous delivery.

DECIDE ARCHITECT: A repository of architectural patterns to be applied in order to facilitate the design, development, optimization and deployment of a multi-cloud native application. A tool that provides pattern recommendations based on non-functional requirements, such as performance, availability or scalability.

DECIDE OPTIMUS: Will simulate the most adequate application topology based on a set of user driven NFR and provide the best options for the application deployment.

ACSml (Advanced Cloud Service meta-Intermediator) aims to provide an effective tool for the discovery, contracting, managing and monitoring of different cloud service offerings based on concrete NFRs. ACSml provides ways to assess continuously the fulfilment of non-functional properties of cloud service offerings while enforcing the legislation compliance. ACSml also enables the endorsement of service offerings from different CSPs.

DECIDE ADAPT: a tool that allows the automatic deployment, continuous monitoring of the working conditions against the established SLAs, and the (semi-) automatic adaptation of the application including the redeployment in another multi-cloud configuration when certain conditions are not met.

APPROACH

Tools and mechanisms covering SDLC & SOLC, extending the current DevOps concept, offering:

- **ARCHITECT**: Architectural patterns
- **OPTIMUS**: Simulation at pre-deployment and selection of the most adequate topology
- **ACSml**: Ecosystem of reliable, interoperable and legally – compliant services
- **ADAPT**: (semi-)automatic re-adaptation / monitoring of NFR of the app and of the MCSLA

Better Maintenance, Better Efficiency, Better Productivity

Multi-cloud application developers and operators
BENEFITS

The project will develop a DevOps framework that will support software development companies in:

1. **enhancing** their multi cloud applications development and operations processes,
2. **improving** the developers’ and operators’ productivity,
3. **while ensuring** the application maintainability, Quality of Experience (QoE) and Quality of Service (QoS) in its whole life,
4. **and decreasing** the time-to-market.

USE CASES

**Arsys. Change Tracking Center.** Application with strong performance, scalability, availability and location requirements.

**Aimes.** E-health. StreamLine is a robust Clinical Trial Governance Tool which is designed to ensure that health sector trial documentation and records are legally compliant.

**Experis IT.** Energy Trading Platform. Application with strong performance and availability requirements.