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MEDINA: Standardization to enable continuous cloud cybersecurity certification

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Background

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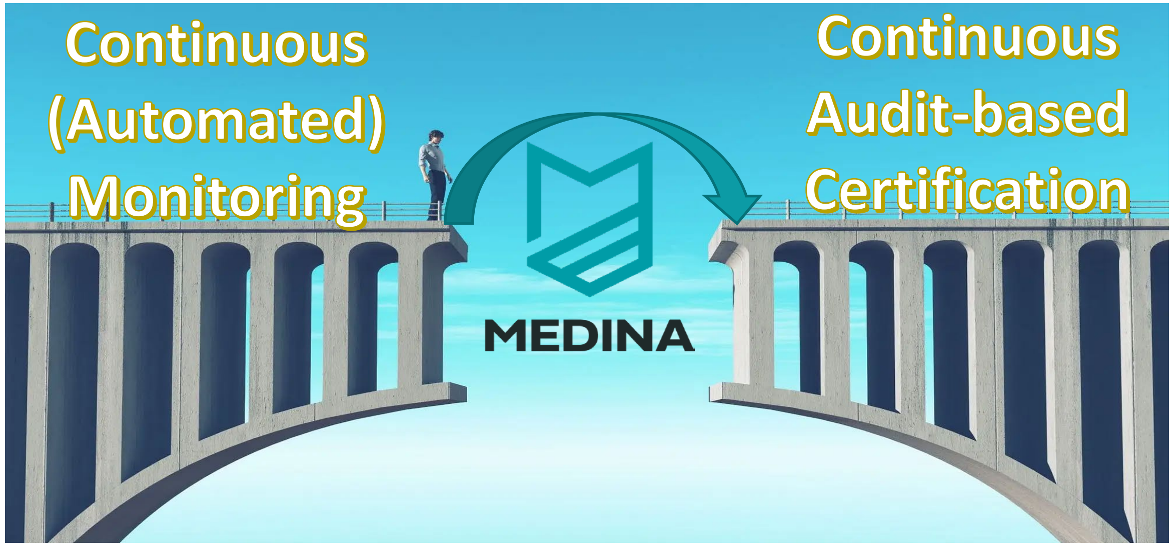
- The EU Cybersecurity Act (EUCSA, April-2019), proposes the creation **EU-wide cybersecurity certification schemes** in order to:
  - provide an ***standards-based*** cybersecurity baseline (requirements, audit methods)
  - ***enable continuous cybersecurity compliance***
- ENISA (EU Cybersecurity Agency) nominated as responsible for developing the new EU-certification schemes:
  - ***EUCS – EU Cybersecurity Certification Scheme for Cloud Services***

MEDINA Mission

Provision of a **security framework and tools** for achieving **continuous audit-based certification** aligned to EUCS.

- MEDINA primarily focuses on the **EUCS requirements**, where some degree of automation is needed.
- **Strong synergies with relevant standards.**


Continuous (Automated) Monitoring
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Continuous Audit-based Certification

MEDINA At a Glance

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- 1st November 2020 – 30th October 2023
- EU Budget 4,480,308.75€

tecnalia
MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

BOSCH

Fraunhofer AISEC

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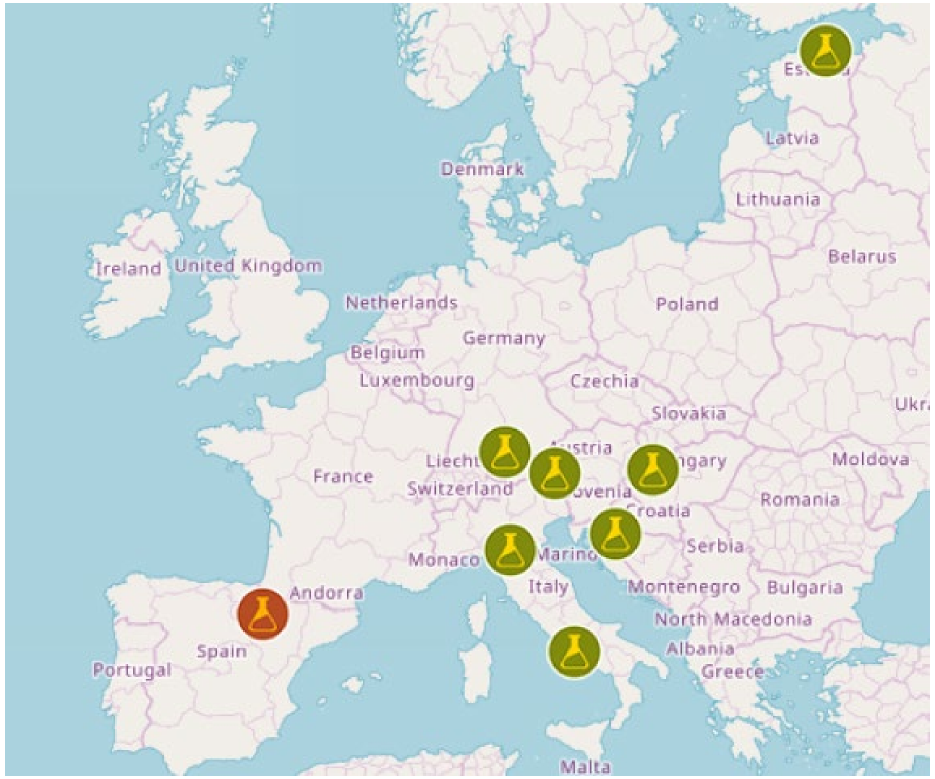
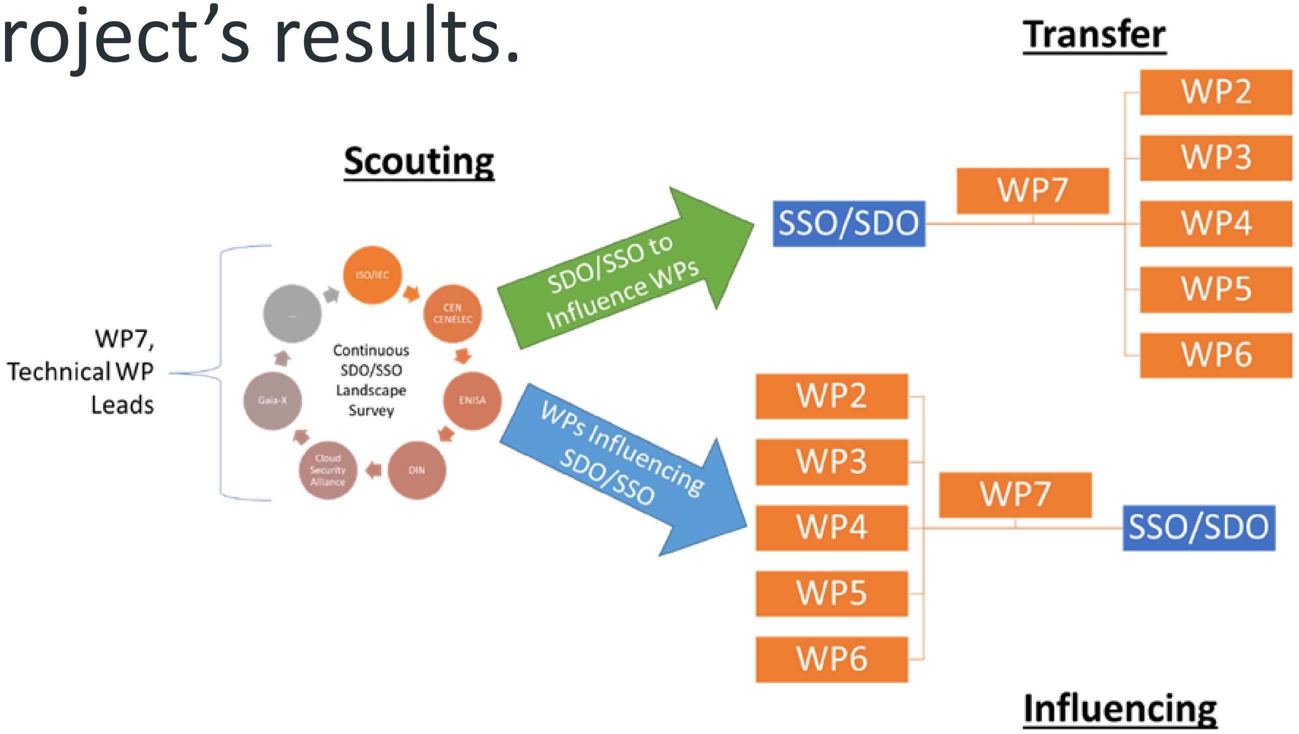


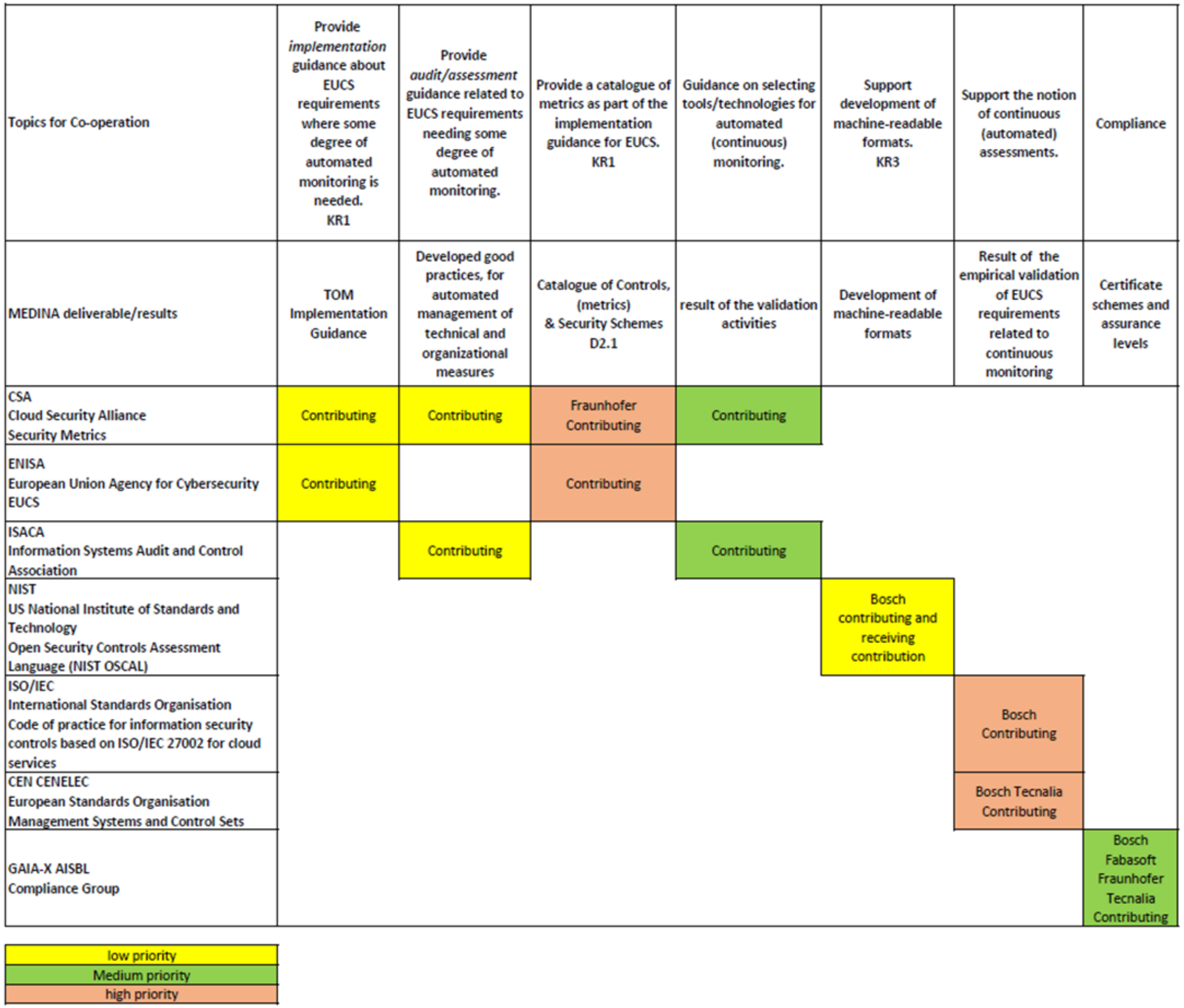
Standardization Objectives in MEDINA

- To ensure that the **relevant SDO communities** will be reached out to in an **interactive way**.
- To address the **future adoption** and ensure the **sustainability** of the project's results.



Standardization Roadmap (M18)

- Prioritizes adoption of **EUCS, metrics, and automation** in compliance assessments.
- **Continuously revised** to integrate new/relevant activities e.g., ETSI CYBER OSCAL.



Topics for Co-operation	Provide *implementation* guidance about EUCS requirements where some degree of automated monitoring is needed. KR1	Provide *audit/assessment* guidance related to EUCS requirements needing some degree of automated monitoring.	Provide a catalogue of metrics as part of the implementation guidance for EUCS. KR1	Guidance on selecting tools/technologies for automated (continuous) monitoring.	Support development of machine-readable formats. KR3	Support the notion of continuous (automated) assessments.	Compliance
MEDINA deliverable/results	TOM Implementation Guidance	Developed good practices, for automated management of technical and organizational measures	Catalogue of Controls, (metrics) & Security Schemes D2.1	result of the validation activities	Development of machine-readable formats	Result of the empirical validation of EUCS requirements related to continuous monitoring	Certificate schemes and assurance levels
CSA Cloud Security Alliance Security Metrics	🟨 Contributing	🟨 Contributing	🟧 Fraunhofer Contributing	🟩 Contributing			
ENISA European Union Agency for Cybersecurity EUCS	🟨 Contributing		🟧 Contributing				
ISACA Information Systems Audit and Control Association		🟨 Contributing		🟩 Contributing			
NIST US National Institute of Standards and Technology Open Security Controls Assessment Language (NIST OSCAL)					🟨 Bosch contributing and receiving contribution		
ISO/IEC International Standards Organisation Code of practice for information security controls based on ISO/IEC 27002 for cloud services						🟧 Bosch Contributing	
CEN CENELEC European Standards Organisation Management Systems and Control Sets						🟧 Bosch Tecnalia Contributing	
GAIA-X AISBL Compliance Group							🟩 Bosch Fabasoft Fraunhofer Tecnalia Contributing

🟨 low priority
🟩 Medium priority
🟧 high priority

D7.8 Standardization Roadmap-v1 (**M18**)

Standardization: (Selected) Achievements and Next Steps

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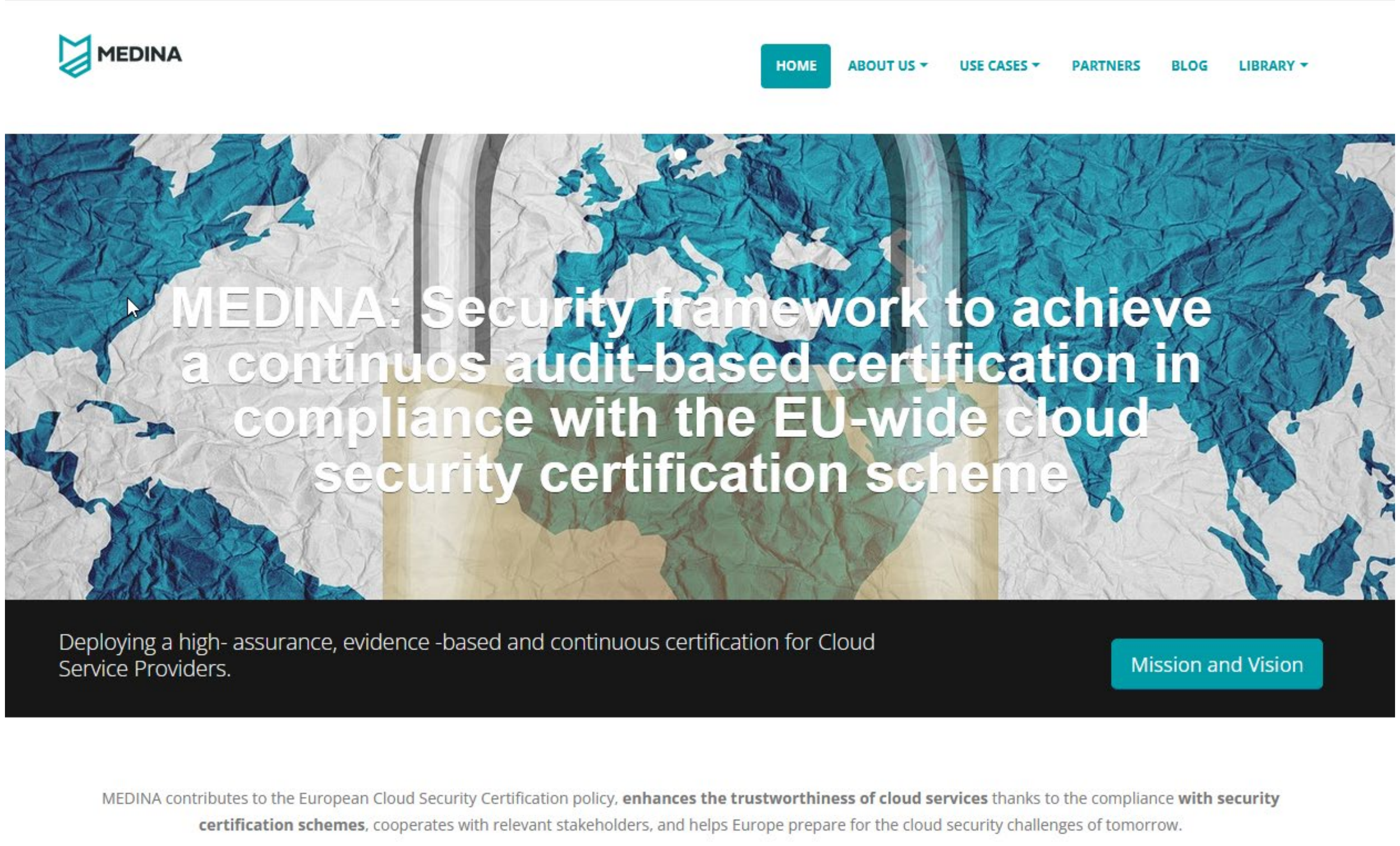
MEDINA Achievements (Feb-2023)	Next Steps (Feb / Oct-2023)
Major support to ENISA on development/uptake of EUCS	Continuous EUCS1 support (CEN CENELEC), contribution to ENISA guidelines for automation
Proof-of-concept NIST OSCAL for EUCS catalogue Feedback to NIST SP 800-55	Representation of metrics/assessments, document experiences in whitepaper.
Adoption of “continuous” for Configuration Management in ISO/IEC 27017	Maintain contribution during upcoming review cycle

MEDINA – Further Reading

- Further details are available in our public reporting (deliverables) at https://medina-project.eu/public-delivera
- Communication materials are available at https://medina-project.eu/communication-materials



MEDINA: Security framework to achieve a continuos audit-based certification in compliance with the EU-wide cloud security certification scheme

Deploying a high- assurance, evidence -based and continuous certification for Cloud Service Providers.

MEDINA contributes to the European Cloud Security Certification policy, **enhances the trustworthiness of cloud services** thanks to the compliance **with security certification schemes**, cooperates with relevant stakeholders, and helps Europe prepare for the cloud security challenges of tomorrow.

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Thank you!

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