



# **MEDINA: Standardization to enable continuous cloud cybersecurity certification**

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**Leveraging automation, ensuring compliance,  
enhancing trust**

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MEDINA Project - Continuous  
cloud security certification



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# Motivation



## European Cloud Services Certification Scheme (EUCS)



### ‘basic’ level

Minimise the **known basic** risks of incidents and cyberattacks (**low risk profile**)

- Limited assurance
- Self-assessment reviewed by a third-party
- Focus on the definition and existence of procedures and mechanisms



### ‘substantial’ level

Minimise **known** cybersecurity risks, and the risk of incidents and cyberattacks carried out by actors with **limited skills and resources** (**medium risk profile**)

- Reasonable assurance
- Design and operating effectiveness
- Functional testing



### ‘high’ level

Minimise the risk of **state-of-the-art** cyberattacks carried out by actors with **significant skills and resources** (**elevated risk profile**)

- Reasonable assurance
- Design and operating effectiveness
- **Continuous (automated) monitoring of compliance**

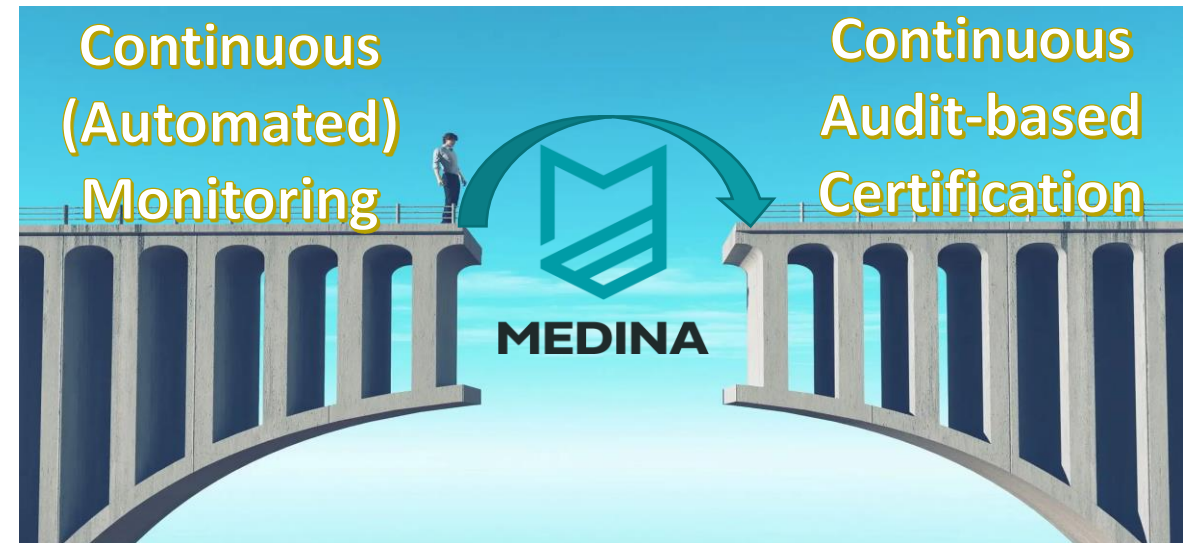
Adapted from ENISA

# 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 EU/International standards.**



# MEDINA At a Glance



1st November 2020 – 30th October 2023

EU Budget 4,480,308.75€

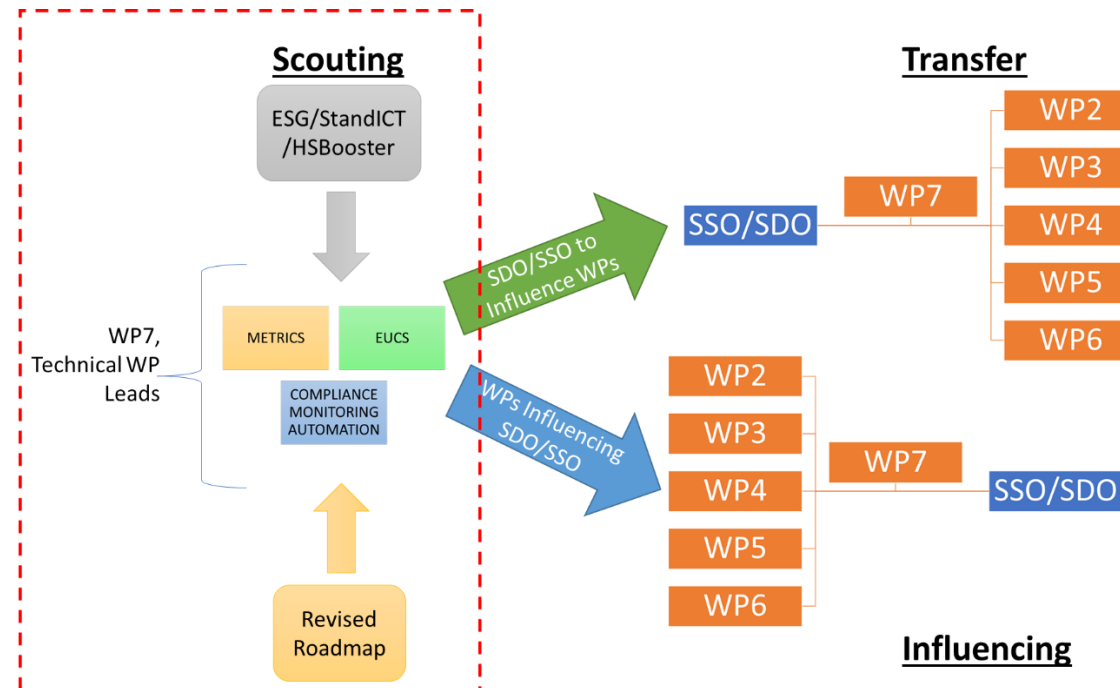


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# Standardization Approach (Final)

- Goal: to ensure that the **relevant SDO communities** will be reached out to in an **interactive way**.
- Strong support from nominated HSBooster's expert.



# Standardization Roadmap (Final)



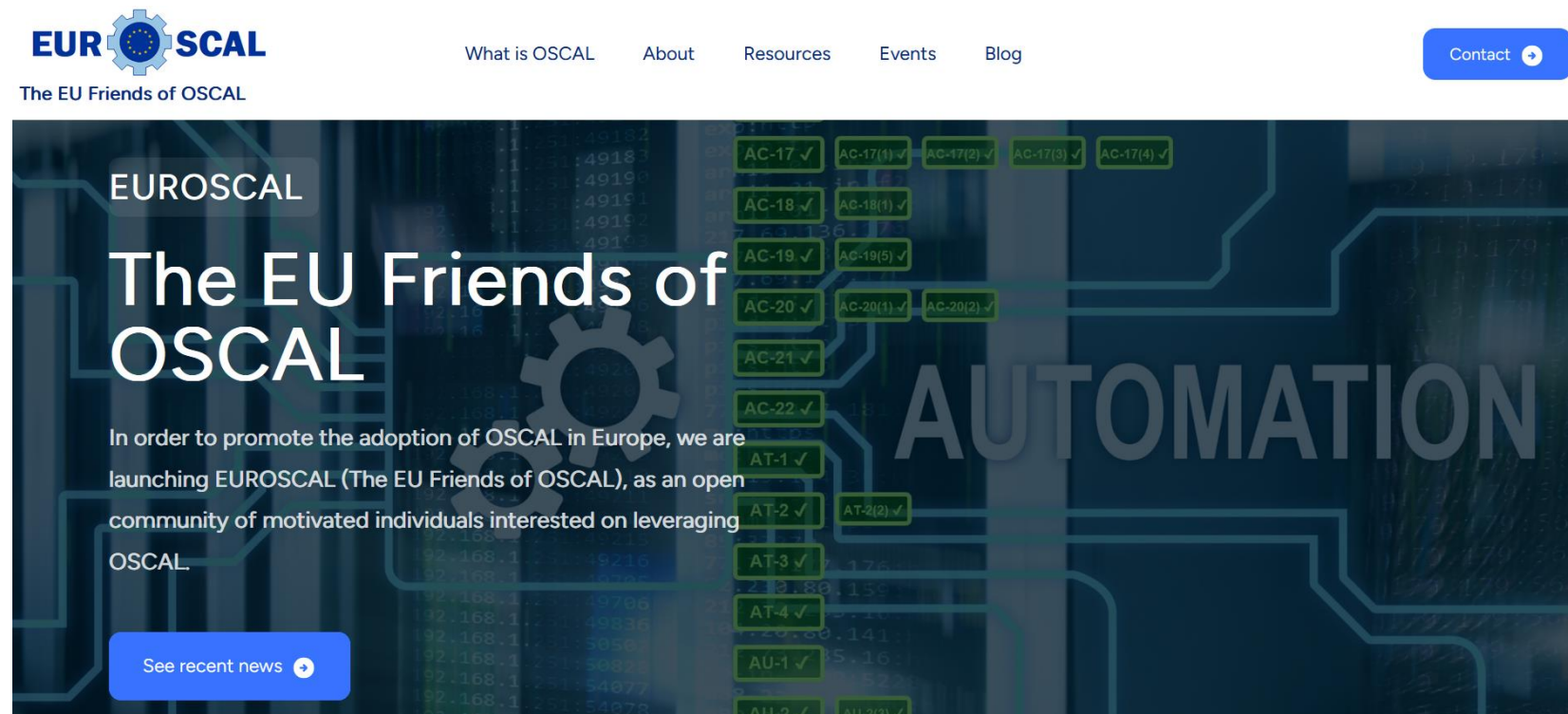
Roadmap Topic (Revised)	Rationale	Contributed MEDINA Standards	Summary of MEDINA Contributions / Benefit	Mapping to Roadmap v1 (see Appendix A)
<b>EU Cybersecurity Certification Scheme for Cloud Services</b>	EUCS is central notion in MEDINA, around which the overall framework has been built (even though it can be extended to other cybersecurity certification schemes). EUCS natively integrated the notion of continuous (automated) monitoring.	ENISA AHWG thematic groups on assurance levels, security controls, assessment methods, guidance, and self-assessment questionnaire.  CEN CENELEC JTC13 WG2 – EUCS1  Cisco CCF	Notion of continuous compliance monitoring maintained in EUCS and the corresponding CEN CENELEC specification.  MEDINA framework widely disseminated in the ENISA AHWG and related certification community.  Feedback compiled from relevant industrial stakeholders and Regulators was used to improve the framework.	<i>Provide implementation guidance about EUCS requirements where some degree of automated monitoring is needed.</i>  <i>Provide audit/assessment guidance related to EUCS requirements needing some degree of automated monitoring.</i>
<b>Cybersecurity Compliance Metrics</b>	Metrics are an essential enabler in the MEDINA framework for implementing continuous compliance monitoring and (EUCS) certification	NIST 800-55  ISO/IEC 27004	MEDINA catalogue of Metrics contributed to NIST as a proof of concept that compliance can be achieved with metrics. This notion will be extended on the planned contribution to ISO/IEC.	<i>Provide a catalogue of metrics as part of the implementation guidance for EUCS.</i>
<b>Automation of Cybersecurity</b>	Automation is the third identified standardization pillar as required to support uptake of MEDINA's	ISO/IEC 27017  NIST OSCAL	MEDINA's framework as a proof of concept that automation for purposes of compliance is possible. This eased successful	<i>Support the notion of continuous (automated) assessments.</i>



# From Standardization to Sustainability



✧ EUROSCAL initiative created by MEDINA to support automation in the EU even after the project's finalization.

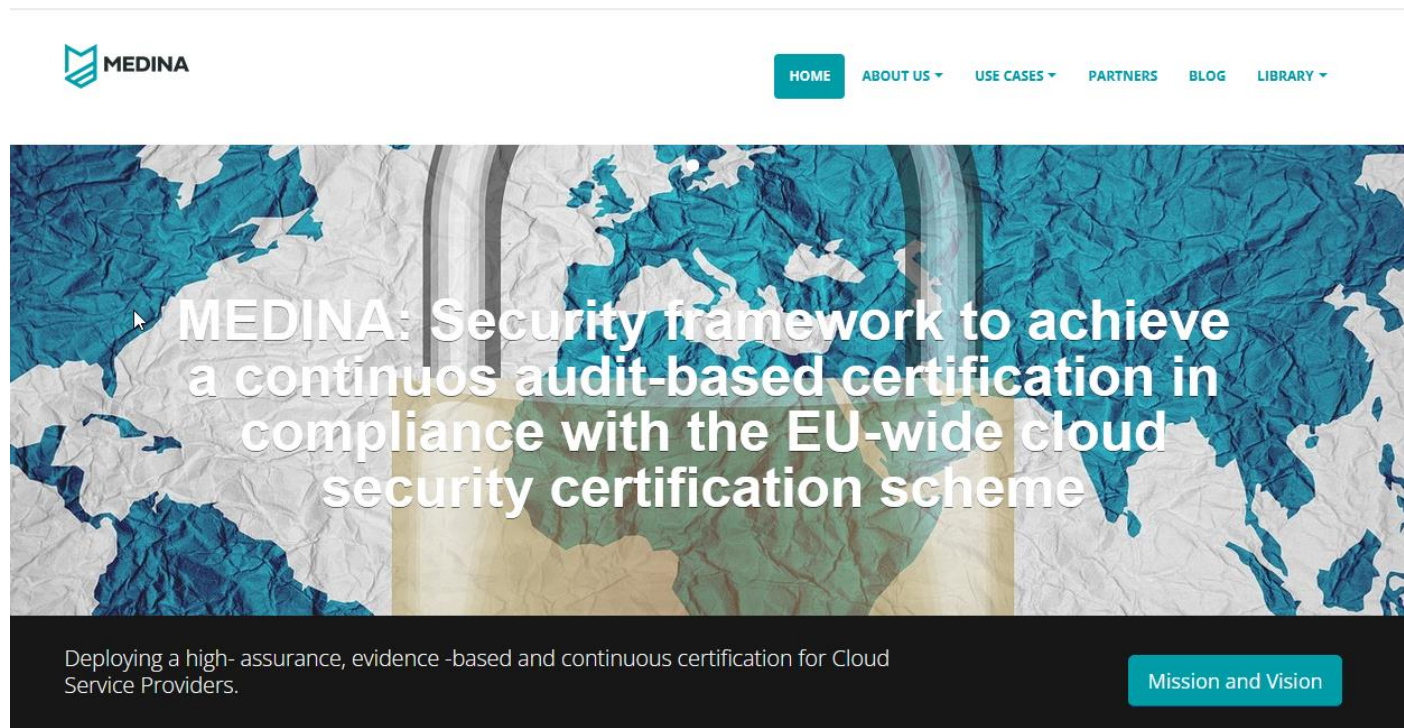




# MEDINA – Further Reading



- Further details are available in our public reporting (deliverables) at <https://medina-project.eu/public-deliverables>
- Communication materials are available at <https://medina-project.eu/communication-materials>
- Framework demonstrator <https://www.youtube.com/watch?v=fRFE61GZ3ZY>
- Public GitLab <https://git.code.tecnalia.com/medina/public>



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.



**Thank you!**

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