Resilmesh
securing cyber infrastructures

Open Call 2

Webinar 1 | 08/10/2025

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CALL & TOPIC

HORIZON-CL3-2022-CS-01-01:
HORIZON Innovation Actions

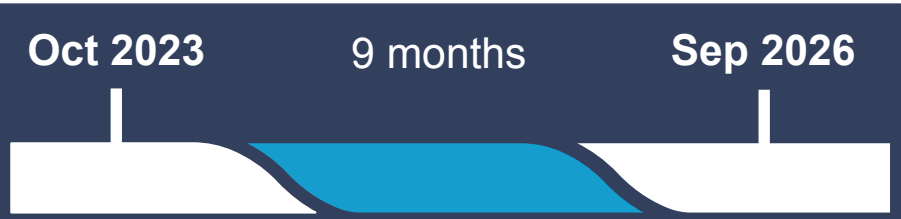
Horizon Europe

BUDGET

€5.6 million project budget

From which up to €360K will be granted to innovators in the Open Call #2

PROJECT DURATION



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WHO WE ARE?

13 Partners **7 Countries**

- **TUS**, Ireland [Coordinators]
- **GMV**, Spain
- **MUNI**, Czechia
- **SLP**, Ireland
- **F6S**, Ireland
- **JR**, Austria
- **UMU**, Spain
- **JAMK**, Finland
- **ALIAS**, Spain
- **Inforcert**, Italy
- **MURC**, Spain
- **KEMEA**, Greece
- **MONT**, France

*Royal Holloway And Bedford New College [associated partner]

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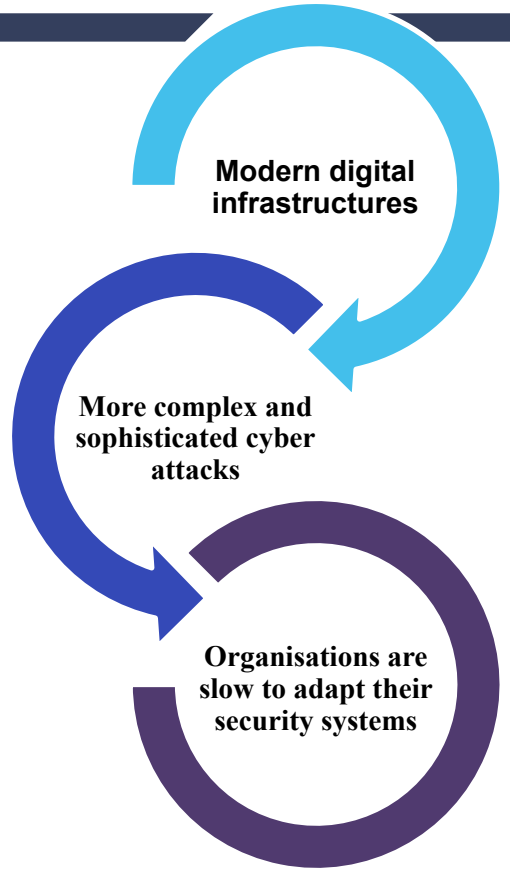
Challenges

Modern digital infrastructures are complex and dispersed, leading to numerous attack vectors. Advanced persistent threats (APTs) target organizations with sophisticated, multi-vector attacks.

Many organizations are slow to adapt, needing modern security models like Zero Trust (ZT) and Secure Systems Edge (SSE) to manage these evolving threats.



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Resilmesh project aims to deliver an open and extensible security operations platform with advanced cyber situational awareness and detection/response capabilities to manage security and resilience in complex and dispersed digital services and infrastructures

FOCUS ON THREE STRATEGIC INFRASTRUCTURE CATEGORIES

>> **+ 5 Open Call** use cases

>> **8** pilots in total

>> **2** Open Calls

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Project Specific Objectives

- Improving end-to-end data aggregation and security control interoperability in dispersed digital infrastructures
- Giving CSIRTs better awareness of the service and asset dependencies of their network
- Helping CSIRTs to build cyber resilience capacity
- Developing AI based algorithms and tools for early and ongoing attack detection and prediction
- Developing a situation assessment system to view and forecast network level risk

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Open Call #2

Applications until Nov 5th 5PM CET

Evaluation until Nov 15th

Onboarding in December

Challenges

Extensions to Resilmesh via the collaboration mesh IRP's

New Analytic Algorithms and Architectures

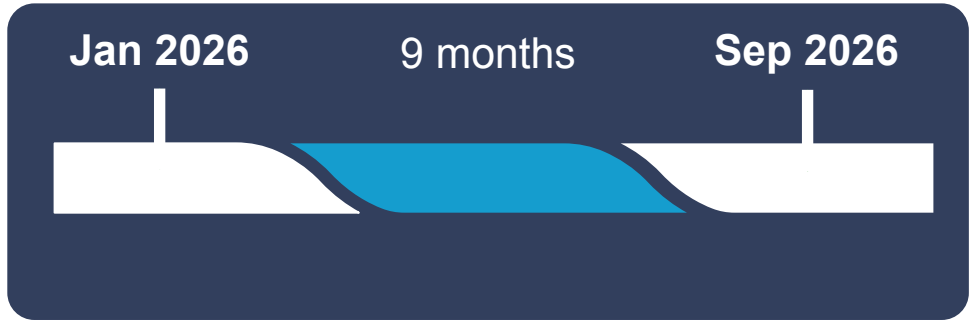
BUDGET

Open Call 1 budget: €360K

5 projects

Up to 72K per project

Projects' participation



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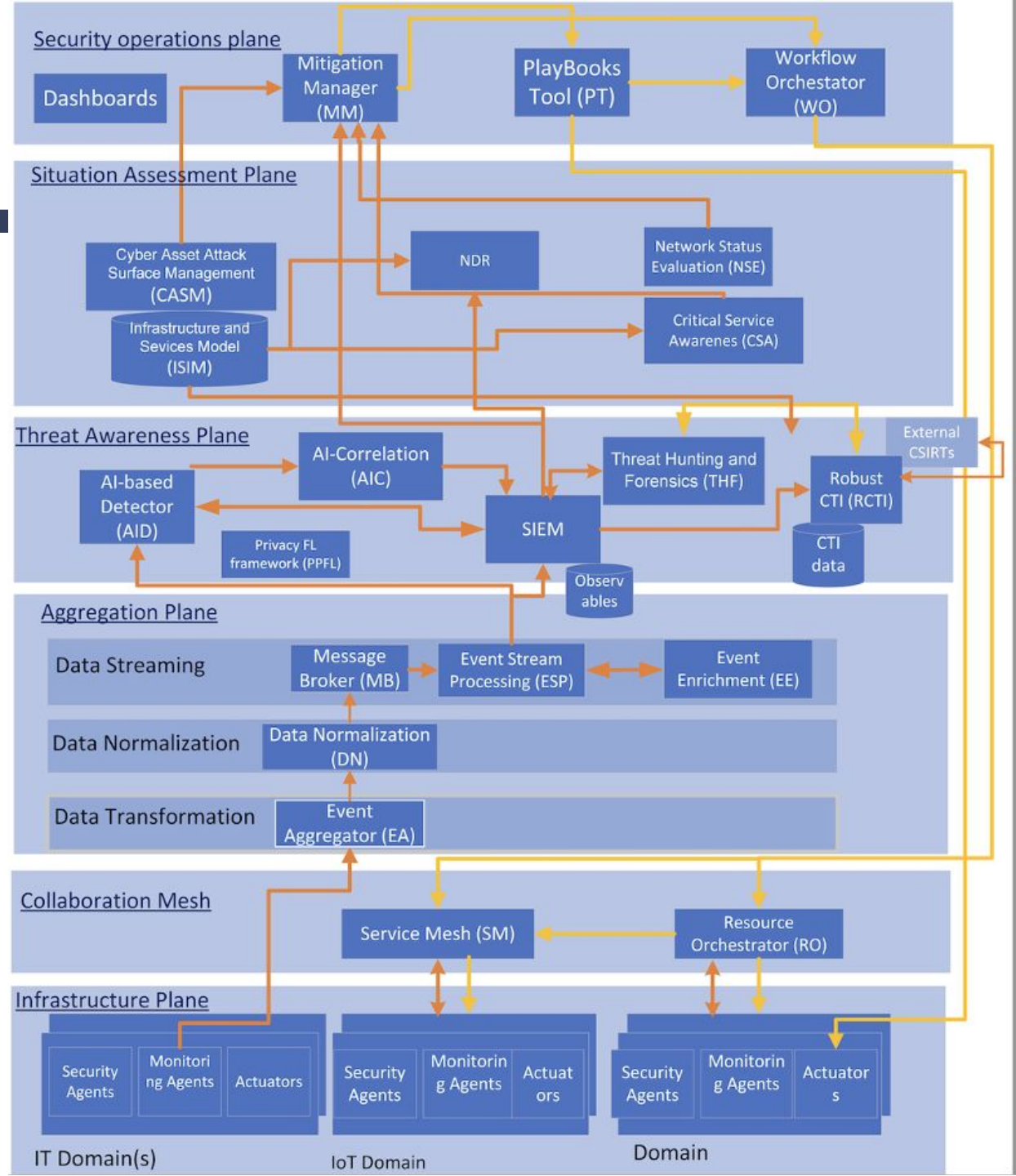
High level Architecture

- **Aggregation Plane -** collects, aggregates, normalizes and streams data and events from multiple heterogeneous sources including logs, IDS, network
- **Collaboration Mesh -** collaborating underlay enable the operation of the system across the dispersed digital infrastructure
- **Threat Awareness Plane-** suite of analytics functions to manage event correlation and alarming, attack detection and prediction, CTI sharing and threat hunting.
- **Situation Assessment Plane** - captures dependencies between services onto the IT/OT resources that realise them; visualises the current network risk status ; forecasts the near-term situation evolution
- **Security Operations Plane** – automates and orchestrates response and mitigation actions



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High level Architecture

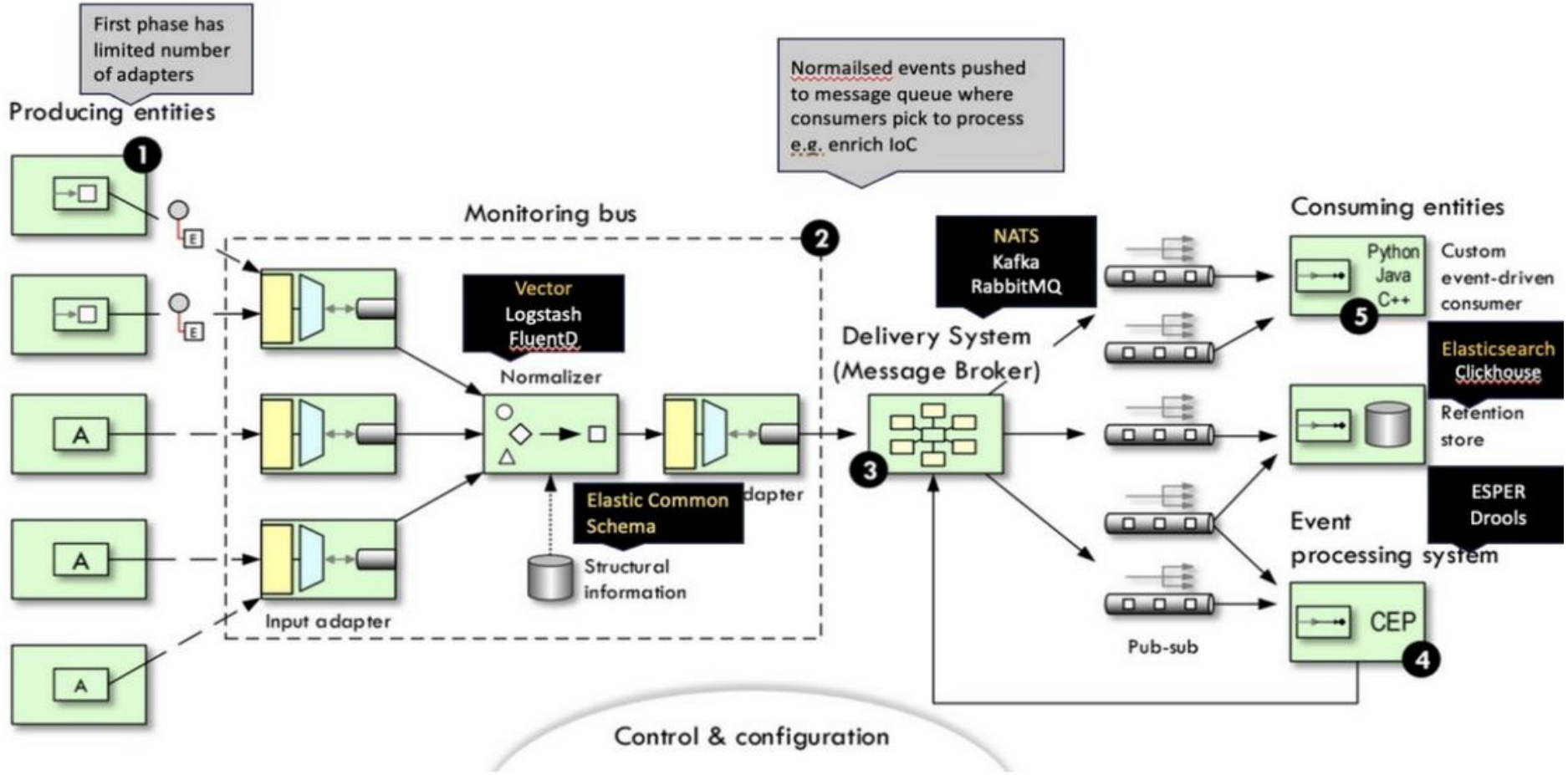

Figure 6 Resilmesh Aggregation and Service Layer Implementation Architecture

Challenge 1: Extensions to Resilmesh via the collaboration mesh IRP's

i) Connectivity Mesh

- Demonstrate how a K8S service mesh capability can provide adaptivity to improve the resilience of the Resilmesh platform
- Address known K8S security issues that could arise in the use of Kubernetes service mesh such as mTLS configuration issues,

ii) Interworking Mesh

- Extend the interoperability in the security application layers i.e. Threat Awareness, Situation Assessment and Security Operations- between Resilmesh components and other tools along the lines of the Open XDR Architecture (OXA) principles including the use of 'Meshroom' tool.

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Challenge 2: New Analytic Algorithms and Architectures

i) User and Entity Behaviour Analytics (UEBA)

UEBA can apply to both endpoint and network traffic behaviours. One approach here could be to extend the Resilmesh NDR functional component with network behaviour analytics

ii) **Novel edge AI AD architectures**

- Ensemble methods
- Distributed deep learning
- Incremental learning
- Edge-to-Edge Collaborative Anomaly Detection

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For more Information:

- **D2.3 System Architecture v2**

https://resilmesh.eu/wp-content/uploads/2025/09/Resilmesh-D2.3-0725-Resilmesh-Architecture-v2-B.pdf

- **D3.1 Resilmesh Platform Reference Implementation**

https://resilmesh.eu/wp-content/uploads/2024/07/Resilmesh_D3.1-0224_Platform_Reference_Implementation-_A-1.pdf

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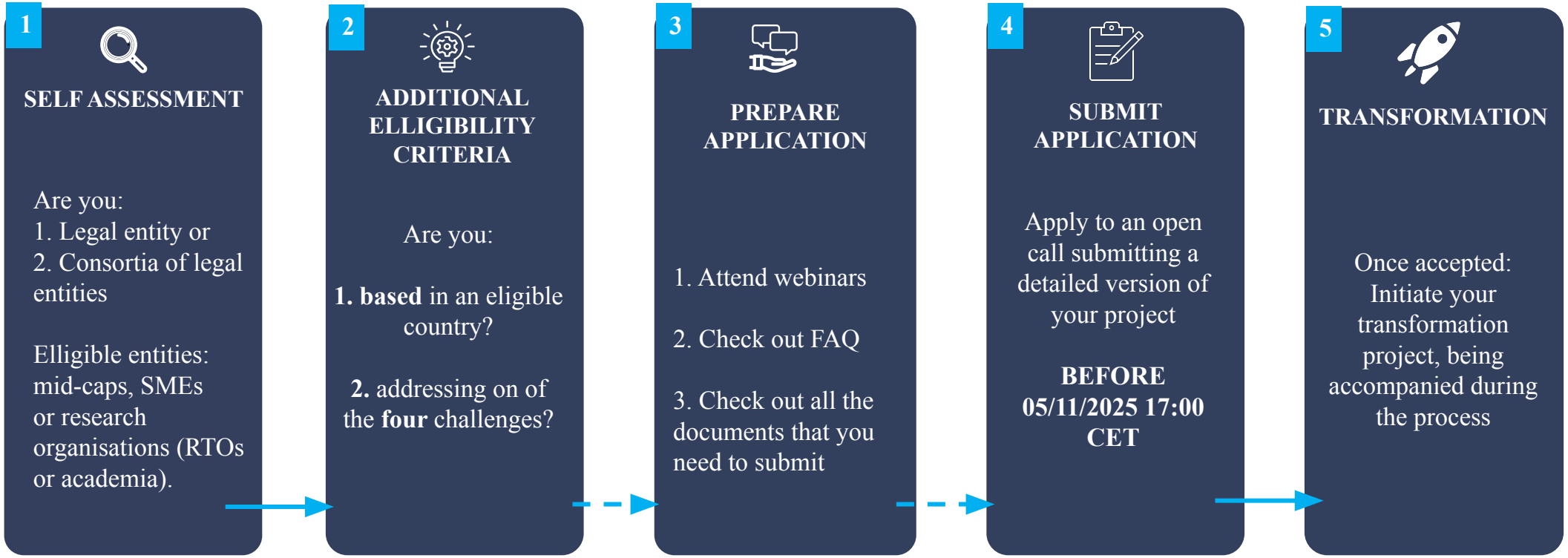
HOW TO PARTICIPATE?



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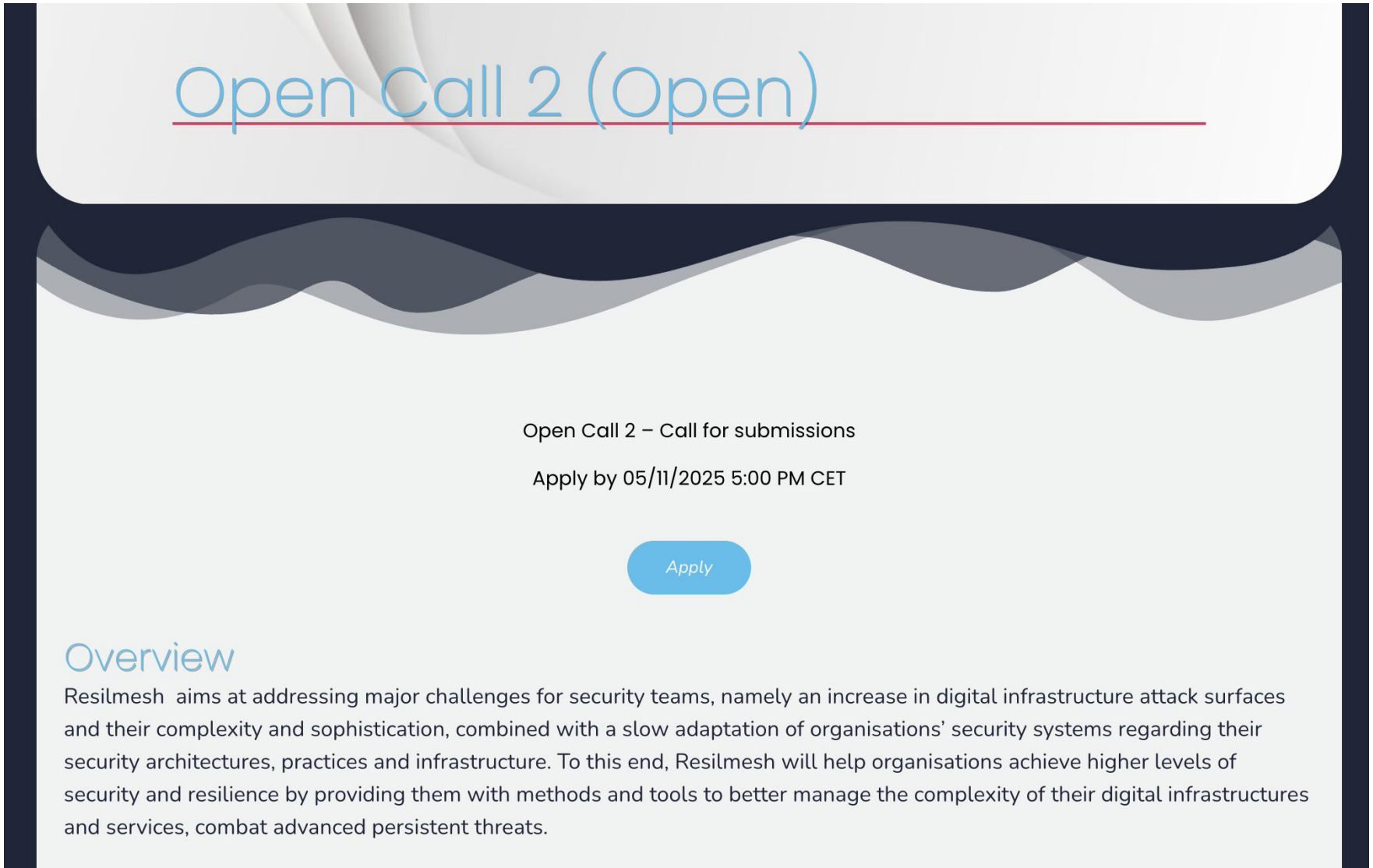
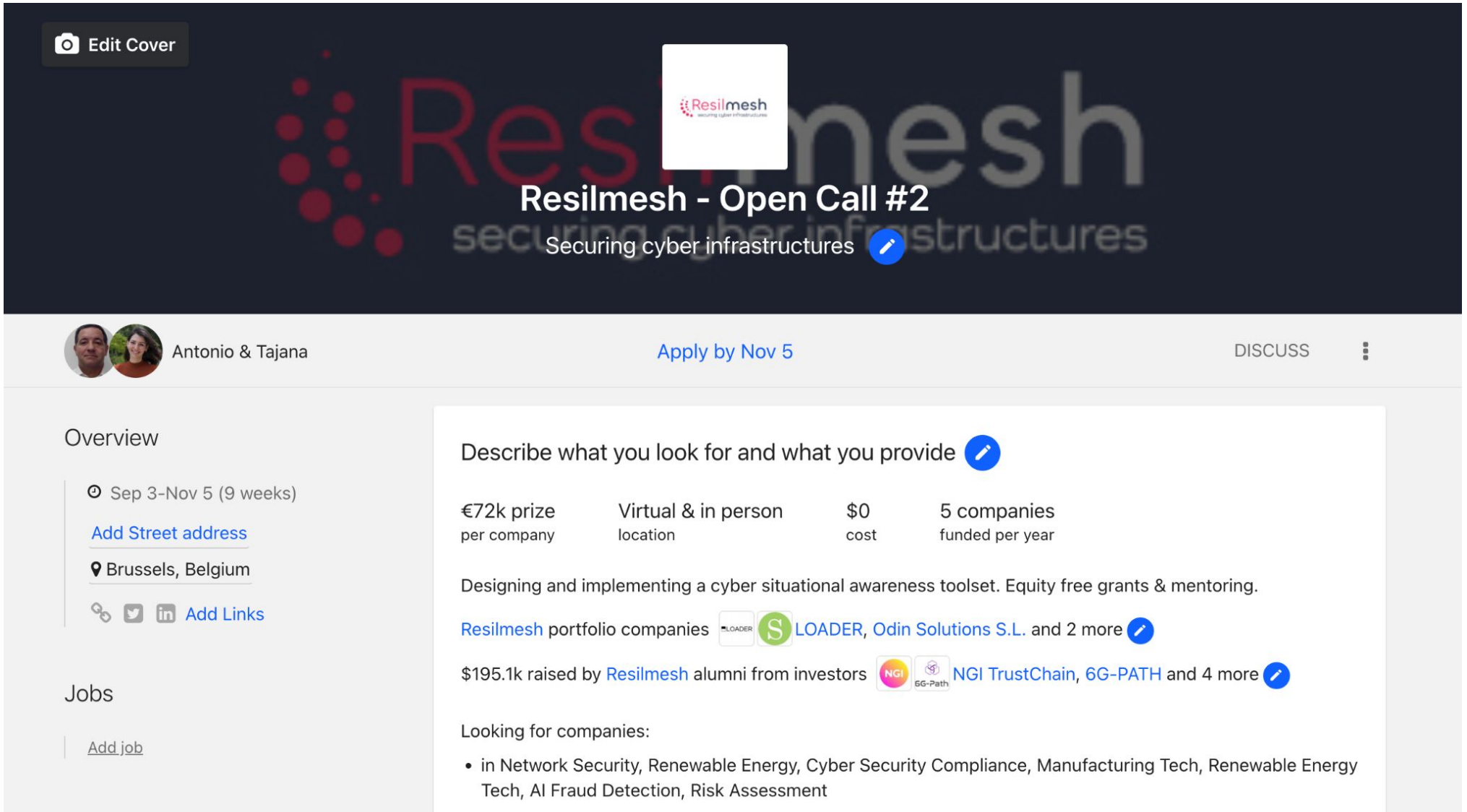
Step 1: Resilmesh website



Step 2: F6S platform



Step 3: Application form

SECTION 1: Proposal Identification

1 **Proposal Title ***

2 **Proposal Acronym ***

Should be different than the Proposal name

3 **Proposal Summary ***

Please provide a detailed summary that will be used for promotional purposes and made public.
Maximum length 1500 characters (including spaces).

SECTION 2: Applicant information

According to Guidelines for applicants Resilmesh Open Call #2 will finance

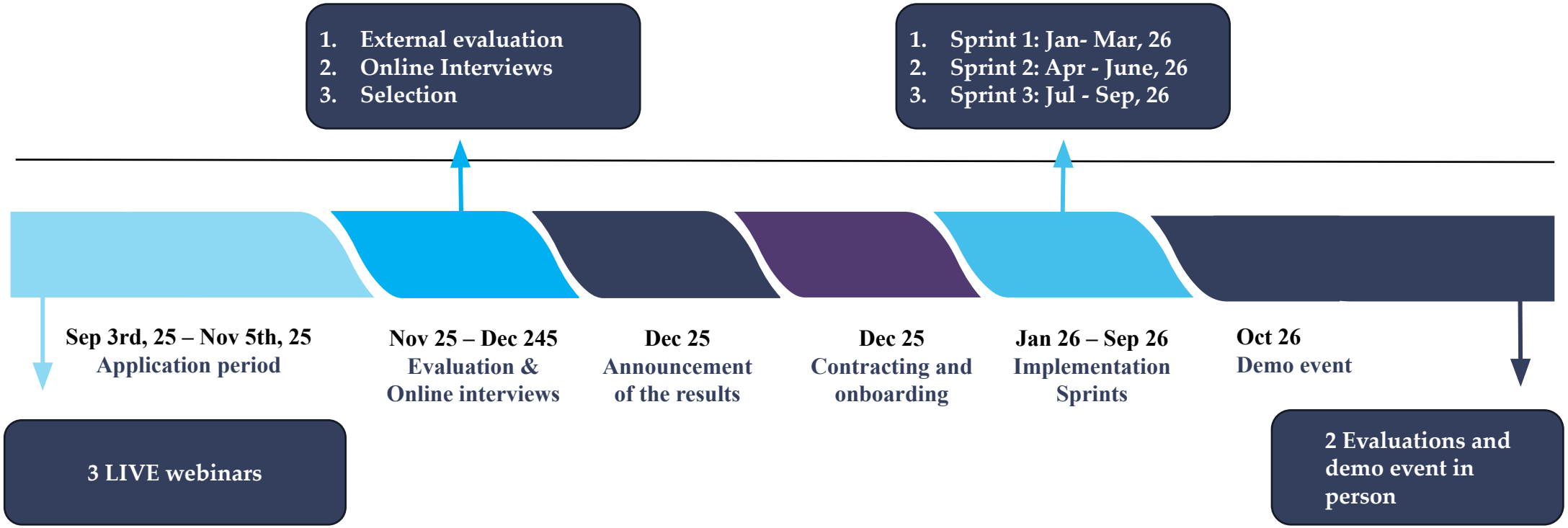
- Single entity - Micro, small and medium-sized enterprises (SMEs)

OR

- Consortium of maximum of 2 entities - Micro, small and medium-sized enterprises (SMEs)

Please note to justify the role of each organisation, and the capacity in terms of expertise and resources for the selected topic in the Annex 2 Proposal Technical Annex (template).
In case of a single entity application "Applicant 2" fields should not be answered.

TIMELINE



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Thank you for your attention!
Next webinars: 17/10 & 29/10 [10:OOAM CET]
Questions?

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More information:

www.resilmesh.eu

Stay informed about the progress of the project by subscribing to **our newsletter**

Ask questions directly:

Help desk: resilmesh@f6s.com

F6S discussion board: www.f6s.com/resilmesh-open-call-1/discuss