



DELIVERABLE

6.2

Final report on OCs

PROJECT NO

101120731

PROJECT ACRONYM

MAGICIAN

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IMMERSIVE LEARNING FOR
IMPERFECTION DETECTION AND REPAIR
THROUGH HUMAN-ROBOT INTERACTION

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EXECUTIVE SUMMARY

This deliverable reports on the implementation and results of the two MAGICIAN Open Calls managed under WP6 – Cascaded Funding Management. Through Financial Support to Third Parties (FSTP), the calls engaged external start-ups and SMEs to extend MAGICIAN technologies and validate their application in new industrial environments. OC1 focused on Application Solutions (ASs) enhancing MAGICIAN functionalities, while OC2 supported Application Use Cases (AUCs) transferring MAGICIAN capabilities to sectors beyond the original automotive context.

The calls attracted strong participation, with 72 eligible proposals under OC1 and 75 under OC2. Five ASs were funded through OC1 and six AUCs through OC2, including one additional project supported through the €120,000 remaining FSTP budget. The selection process combined independent external evaluation, internal MAGICIAN assessment, business-case evaluation and a final consensus process, followed by EC validation/non-objection.

Selected projects receive financial, technical and innovation-management support throughout implementation. Dedicated MAGICIAN Monitoring Partners follow technical progress, milestones, deliverables, KPIs, risks and integration with the MAGICIAN framework, while formal reporting checkpoints link payments to validated progress. Experience from OC1 was incorporated into OC2 through strengthened monitoring, interoperability requirements and industrial validation.

Overall, the Open Calls have expanded the MAGICIAN ecosystem with external innovation capacity, strengthened and diversified its technological applications and established new pathways for transferring MAGICIAN robotics, AI, sensing and human-robot interaction capabilities to industrial environments beyond the core project.

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LIST OF ABBREVIATIONS

ACRONYM	DESCRIPTION
AS	Application Solution
AUC	Application Use Cases
CR	Cleaning Robot
FSTP	Financial Support to Third Parties
OC	Open calls
SME	Small medium enterprise
SR	Sensing Robot
WP	Work Package

CONTEXT OF THE MAGICIAN PROJECT

MAGICIAN – *iMmersive leArninG for ImperfeCtion detectIon and repAir through human-robot interactioN* – is a Horizon Europe project aimed at developing a modular, human-centred automation solution in which robotic systems support the **detection and reworking of manufacturing defects before the final production stages**. The MAGICIAN architecture combines two complementary robotic solutions: a **Sensing Robot (SR)** for defect detection and analysis and a **Cleaning Robot (CR)** for defect reworking. The two systems can operate independently or in combination, while maintaining a human-centred approach to improve productivity and product quality while enhancing workers' safety, ergonomics and acceptance of automation.

MAGICIAN brings together **11 European partners** combining expertise in robotics and automation, artificial intelligence, manufacturing, human-robot interaction, industrial validation, innovation and cascade-funding management. The consortium includes UNITN, ALTINAY, FORTH-ICS, HWH, IIT, Lund University, CRF, Pipple, Tofas, Zabala Innovation Consulting and Steinbeis Innovation GmbH. This combination of research, technological and industrial expertise supports the development and validation of MAGICIAN technologies and their uptake beyond the project consortium.

A central element of MAGICIAN's approach is the involvement of external start-ups and SMEs through Financial Support to Third Parties (**FSTP**). Within WP6, two competitive **Open Calls (OCs)** were designed as complementary innovation pathways. In accordance with the Grant Agreement, OC1 focuses on deepening and expanding the functionalities developed within MAGICIAN's core pilots, while OC2 focuses on extending the intelligence embedded in the MAGICIAN systems towards new industrial use cases. The overall objective is to fund and support **10 external solutions, five through each Open Call**, with each awarded project eligible for financial support of **up to €200,000** and an implementation period of up to 12 months.

The two Open Calls therefore address two complementary dimensions of the MAGICIAN innovation strategy:

Open Call 1 – Application Solutions (AS). The first Open Call was designed to **integrate new functionalities into the existing MAGICIAN solution**, strengthening the capabilities of the Sensing Robot and Cleaning Robot through innovative technologies provided by external SMEs and start-ups. Applicants could address perception-related functionalities, such as new sensing technologies, improvements to the polarised camera system, defect-removal tools, multimodal annotation and advanced defect-detection algorithms, or human-robot collaboration functionalities.

Selected third parties could participate through:

- **Single AS**, involving one applicant supported by MAGICIAN expertise; or
- **Twin AS**, involving two complementary external companies working together on the proposed solution.

Each selected project also benefited from access, where relevant, to MAGICIAN datasets, robotic facilities, integration support and application-domain knowledge.

Open Call 2 – Application Use Cases (AUCs). Building on the technological developments and experience of the first call, OC2 shifted the emphasis from adding functionalities to **demonstrating the transferability and adaptability of the MAGICIAN framework in new industrial environments beyond the automotive sector**. Each proposal was required to adapt up to two MAGICIAN capabilities to one specific industrial use case and demonstrate interoperability with the existing MAGICIAN hardware, software and data infrastructure. The targeted sectors included *aerospace, electronics, heavy industry and energy, interior-design components, maritime and shipbuilding, public transport, intermediate components based on glass, plastic or textiles, and white goods*. As in OC1, both Single and Twin configurations were possible, although for OC2 the Twin configuration combining a technical provider with an industrial early adopter from the targeted sector was particularly encouraged.

Beyond the provision of financial support, the Open Calls were conceived as an **integrated support mechanism**. Selected third parties receive access to MAGICIAN's technological expertise and infrastructure, administrative and technical monitoring, innovation-management support and guidance towards market uptake. WP6 therefore covers the full FSTP lifecycle: preparation and promotion of the calls, applicant support, evaluation and selection, contractualization and financial support, monitoring of implementation, innovation management and impact assessment.

1 INTRODUCTION

MAGICIAN responds to industrial needs for more flexible, intelligent and human-centred manufacturing by opening the project ecosystem to external start-ups and SMEs through Financial Support to Third Parties (FSTP). To this end, two Open Calls (OCs) were established to create new collaborations between the MAGICIAN consortium and external technology providers and industrial actors. The two calls address complementary objectives: OC1 supports the extension and improvement of the functionalities developed within the MAGICIAN core solutions, while OC2 supports the transfer and validation of MAGICIAN technologies and embedded intelligence in new industrial use cases.

WP6, Cascaded Funding Management, covers the complete management and support framework associated with these Open Calls, from their preparation and publication to the implementation and follow-up of the selected projects. Its activities include:

- management and promotion of the Open Calls and continuous guidance to prospective applicants throughout the application process.
- definition and implementation of the evaluation and selection process, including the involvement of independent external evaluators and the MAGICIAN Evaluation Committee.
- contractualization, financial support, monitoring and administrative and technical assistance to the selected start-ups and SMEs.
- innovation management and market-oriented support aimed at strengthening the exploitation potential and business development of the selected solutions.
- impact assessment and identification of lessons learnt from the FSTP implementation; and
- technical assistance for the adaptation and further development of MAGICIAN technologies in collaboration with the external organisations joining through the Open Calls

WP6 is structured into four complementary tasks. **T6.1** – Open Calls launch, management and selection process covers the preparation and dissemination of the calls, applicant support and the complete evaluation and selection procedure. **T6.2** – OC implementation and monitoring establishes the monitoring and coaching processes for the selected third parties, providing a single point of contact and coordinating administrative, business and technological support throughout implementation. **T6.3** – Innovation management, impact assessment and lessons learned complements the technical implementation with business and market-oriented support, visibility and investment-readiness activities, impact assessment and the systematic collection of lessons learnt. Finally, **T6.4** – Development and technical assistance for FSTP supports

the adaptation and further development of MAGICIAN technological solutions according to the requirements of the new technology providers and use cases introduced through the Open Calls.

WP6 also interacts closely with other MAGICIAN activities:

In particular, Open Call promotion is coordinated with **WP7**, contractual aspects are supported through **WP1**, while the technical partners involved in **WP6** ensure that the externally developed solutions can effectively interact with and contribute to the evolution of the MAGICIAN technological framework.

2 ANALYSIS OF RESULTS

Overall, **MAGICIAN** open calls for AS/AUCs resulted in a total of €2,000,000 allocated funds, supporting a total of 5 AS & 6 AUCs implemented by 16 companies.

The €120,000 remaining from the combined OC1 and OC2 FSTP budget was reallocated to support one additional AUC selected from the OC2 reserve list, thereby maximising the use of the available cascade-funding envelope.

The results of the 2 OC launched and closed between M17 and M45 are detailed below:

OC1 (M17-M35)			OC2 (M27-M45)		
Tot allocation:			Tot allocation:		
Total ASs	Single ASs	Twin ASs	Total AUCs	Single AUCs	Twin AUCs
5	5	0	6	1	5

2.1 PROPOSAL PHASE RESULTS

Application Solutions (AS) are cascade funding pathways that select and finance SMEs, mid-caps and start-ups to develop digital solutions based on existing or to-be-developed prototypes and products. Two public Open Calls (OC) were opened following the European Commission's guidelines for transparency, confidentiality, and equal treatment.

The applicants could apply to two types of experiments: Single ASs and Twin ASs.

- Single AS: a company (SME/Startups) requests funding (maximum €200k)
- Twin AS: two SMEs or Startups jointly apply for maximum funding of €200k per applicant,

The two Open Calls (OC1, OC2) produced results during their respective proposal phases that are analysed in this section hereunder.

Open Call 1 (OC1)

Open call 1: out of the over 72 eligible proposals which involved 86 European companies including start-ups, SMEs from across Europe, 22 European companies / Horizon Europe associated have been selected to receive financial, technical and innovation management support for the creation of smart applications to help digitise European Industry.

Greece and Italy recorded the highest number of eligible applications, with 12 applications each, followed by Türkiye with 11 and Spain with 6. France accounted for 4 applications, while the United Kingdom and the Netherlands each submitted 3. The remaining applications were distributed across a further 15 countries, confirming the capacity of the Open Call to attract companies from a wide range of national innovation ecosystems.

The Open Call targeted Application Solutions (ASs) through which SMEs and start-ups could adapt and extend MAGICIAN technologies to new industrial applications. Applicants could participate either as a SINGLE AS, involving one applying company supported by MAGICIAN partners, or as a TWIN AS, involving two companies cooperating to develop the proposed solution. The final selection process resulted in five funded Application Solutions, geographically distributed across Türkiye (2), Portugal (1), Italy (1) and Spain (1). This means that the funded portfolio covered four different countries, with Türkiye accounting for 40% of the selected projects and the other three countries each representing 20%.

Geographical distribution of eligible applications

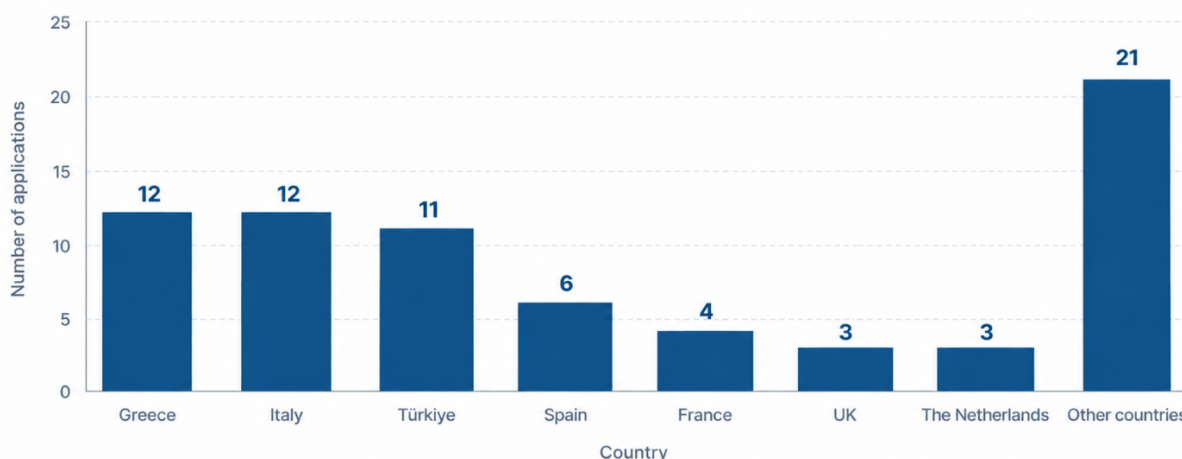


Figure 1- [OC1] ASs Geographical distribution

The geographical distribution of the selected projects therefore shows a concentration in countries with relatively high applicant representation, while also demonstrating that the competition was open to companies from a broad range of countries. In particular,

Italy, Greece and Türkiye together represented 35 of the 72 eligible applications (48.6%), while only one of the five funded projects originated from Greece, despite Greece being one of the two largest applicant pools. Conversely, Spain represented 8.3% of eligible applications but accounted for 20% of the selected projects.

Among the 72 eligible proposals submitted to MAGICIAN OC1, 59 (81.9%) were SINGLE Application Solutions and 13 (18.1%) were TWIN Application Solutions. Funded: 100% SINGLE / 0% TWIN

Open Call 2 (OC2):

MAGICIAN Open Call 2 attracted 75 eligible proposals, demonstrating a broad geographical reach across the European and Horizon Europe innovation ecosystem. Based on the country of the first applying company, eligible proposals originated from 24 different countries, with Spain recording the highest number of applications (15), followed by Italy (10), Türkiye (9) and Greece (6). Belgium and France each accounted for 4 applications, while Germany and Serbia each recorded 3. The remaining proposals were distributed across a further 16 countries, confirming the broad geographical reach of the Open Call.

Applications by Country: Open Call 1 vs Open Call 2

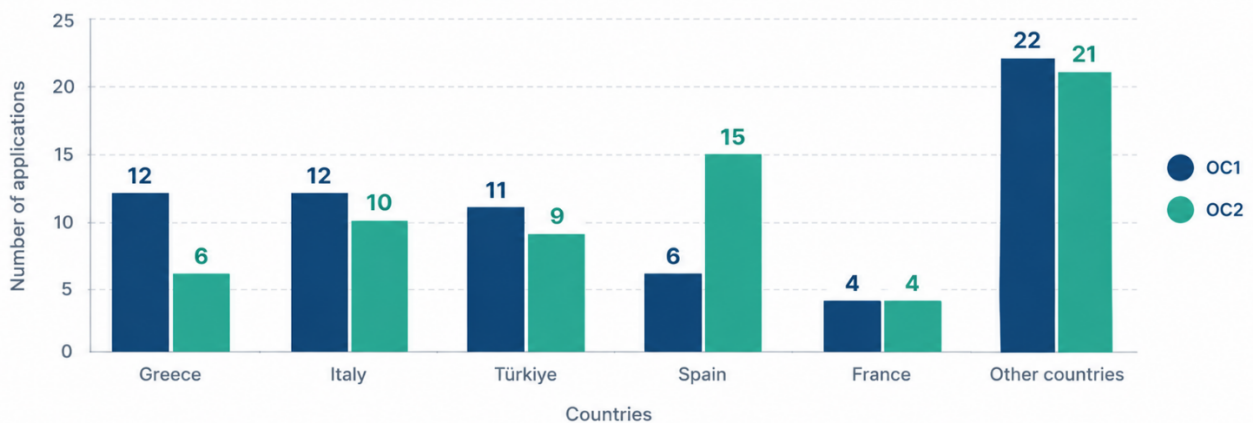


Figure 2 - [OC2] AUCs Geographical distribution

The geographical distribution was therefore more concentrated in a small number of countries than the overall country coverage alone might suggest. Spain, Italy, Türkiye and Greece together accounted for 40 of the 74 proposals with a reported country (54.1%), while the remaining 34 proposals came from 20 different countries.

In terms of configuration, 45 proposals (60%) were SINGLE and 30 (40%) were TWIN, representing a substantial increase in collaborative applications compared with OC1, where TWIN proposals represented only 18.1%. Of the five projects eventually selected, four (80%) were TWIN and one (20%) SINGLE, while geographically the selected projects originated from Greece (2), Italy (1), Spain (1) and Serbia (1). The results therefore show

both a stronger uptake and a stronger representation of the TWIN model among successful OC2 applications, alongside a funded portfolio distributed across four countries.

Application Type Distribution: Open Call 1 vs Open Call 2

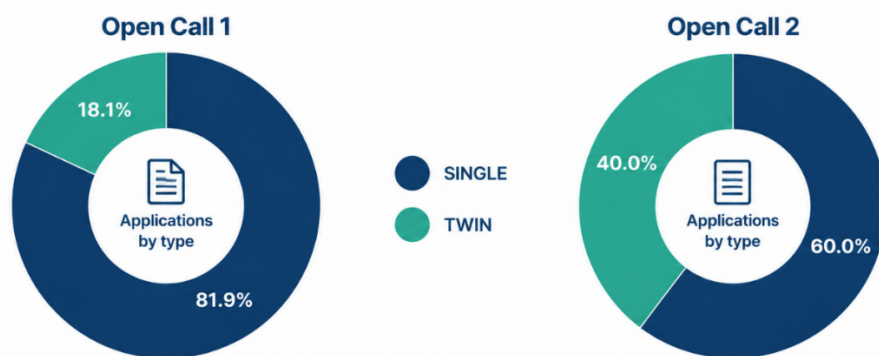


Figure 3 - ASs/AUCs configuration

The total score per application is also analysed. The score is obtained by simply adding the scores in four criteria (Business, Excellence, Implementation and Quality). A clearer dominance of TWIN ASs is observable, especially if only focusing on the winners of OC2. A difference is also observed in TWIN ASs between the two OCs. In this case, the dispersion of the scores drastically increases for winners, as well as overall applicants. A possible explanation could be related to the fact that SINGLE proposals were being more comprehensively guided by the MAGICIAN technical partners, hence containing the dispersion of scores.

3 OCS IMPLEMENTATION OVERVIEW

The Open Calls constitute MAGICIAN's main mechanism for involving external start-ups and SMEs in the development, extension and validation of the project technologies. Through WP6, MAGICIAN organised two complementary Open Calls, designed to support up to 10 external projects overall, with five projects targeted under each call and financial support of up to €200,000 per selected project. OC1 focused on extending and improving the functionalities developed within the MAGICIAN core solutions, while OC2 shifted the focus towards demonstrating the adaptability and transferability of MAGICIAN capabilities in new industrial use cases beyond the automotive sector.

The two calls were distributed over the project lifetime, allowing the experience gained through OC1 to inform the design and implementation of OC2. OC1 closed on 2 May 2025, while OC2 closed on 2 March 2026, with implementation of the latter foreseen from June 2026. The following figure provides an overview of the main phases of both calls, covering

their launch, evaluation and selection, contractualisation, Kick-off and implementation periods.

	2025	2026	2027
OC 1			
Information to applicants	30-Jun		
Contracting	July - Septemebr (3 months)		
Implementation	Sept- August (12 months)		
OC 2			
Information to applicants		30-Apr	
Contracting		May-july (3 months)	
Implementation		August - July (12 months)	

Figure 4 - OCs Implementation Timeline

In addition to cascade funding, selected third parties benefit from a broader portfolio of support provided by the MAGICIAN consortium. Depending on the configuration and technical needs of each project, this includes access to MAGICIAN technologies, datasets and testing facilities, technical support for integration and adaptation, application-domain knowledge, administrative and financial guidance, and innovation-management and business-development support. The purpose of this support is not only to facilitate the technical implementation of the funded projects, but also to strengthen their exploitation potential and their contribution to the further development and validation of the MAGICIAN framework.

Following selection and notification, the implementation phase is formalised through the signature of the applicable Standard Agreement and specific AS/AUC Agreement, defining the work plan, responsibilities, financial arrangements, access to relevant MAGICIAN results and the conditions governing the collaboration between the selected third parties and the consortium. Each project then enters its implementation phase following the Kick-off Meeting, which also constitutes the condition for release of the initial pre-financing payment. Funding is structured in three stages: up to 50% as pre-financing, up to 35% following approval of an intermediate Status Report, and the remaining balance of up to 15% following successful completion and validation of the agreed milestones and deliverables.

Monitoring of the selected AS/AUCs is ensured through a dedicated MAGICIAN competence/monitoring partner, acting as the main technical interface with the selected third party and following implementation against the agreed work plan. Regular interactions and formal reporting checkpoints enable the consortium to track technical and financial progress, identify deviations and agree corrective measures where needed. In OC2, this approach was further formalised through monthly monitoring meetings and the review and approval of M6 and M12 Status Reports, linking intermediate and final payments to validated progress, milestones and deliverables.

While the overall principles of contractualisation, monitoring and support remain

consistent across both calls, the experience of OC1 was used to refine the second-call approach, notably through a clearer definition of the monitoring role, more structured reporting checkpoints, strengthened interoperability requirements and a stronger emphasis on industrial use-case validation and exploitation. The remainder of this chapter first presents the consolidated results of the two Open Calls and then describes the launch, selection and implementation of OC1 and OC2 separately, including the main issues encountered, corrective measures adopted and lessons learned.

3.1 OCS EVALUATION PROCESS

The review and selection process combined external independent expertise with internal consortium assessment, ensuring both the technical quality of the proposals and their alignment with MAGICIAN objectives. For each Open Call, a pool of seven external and seven internal reviewers was established. At the first evaluation stage, each eligible proposal was assigned to one external and one internal reviewer, who independently assessed it against the criteria of **Excellence, Impact and Quality of Implementation**. External experts were selected for their relevant scientific, industrial or academic expertise and were required to comply with confidentiality and conflict-of-interest provisions.

To reinforce the robustness of the assessment, proposals obtaining an initial score of 12 points or above underwent a second internal review. This additional assessment was performed by a different internal reviewer, ensuring that the same person did not evaluate the proposal in both rounds. For OC2, CRF was additionally involved in the internal review process, strengthening the industrial perspective of the assessment. In both OCs, ZABALA performed the dedicated business-case assessment, considering market attractiveness, the proposed business model, economic and industrial value, scalability and adoption potential.

Following these evaluation stages, the results were consolidated into a ranking of the ten highest-scoring proposals, which formed the basis for the final consensus and selection process. During the **MAGICIAN Evaluation Committee consensus meeting**, the proposals were discussed collectively and the Committee selected five proposals for funding and five for the reserve/waiting list. Quality remained the primary basis for selection and, where proposals were otherwise comparable, priority was given to the proposal achieving the higher Excellence score, reflecting the importance attributed to innovation, technical soundness and feasibility. This is consistent with the evaluation methodology, **which establishes minimum thresholds of 3/5 for each criterion and 9/15 overall and gives Excellence priority in the event of equal overall scores**.

The final selection also sought to build a complementary portfolio of ASs/AUCs rather than concentrating funding on highly similar applications. In OC1, this meant considering the diversity of MAGICIAN functionalities and technological capabilities integrated and demonstrated across the selected solutions. In OC2, whose objective was to extend MAGICIAN technologies to new manufacturing environments beyond the

original automotive setting, portfolio considerations focused particularly on achieving diversity across the targeted use-case sectors. These considerations were applied at the final consensus stage while preserving the evaluation results and giving priority, where relevant, to the strongest Excellence score.

The selected proposals were subsequently reported to the European Commission Project Officer for final validation/non-objection before applicants were formally notified and the contracting process initiated.

3.2 OC1 OVERVIEW

OC1 was launched on 3 February 2025 and closed on 2 May 2025. The outcome of the call was the selection of five Application Solutions (ASs), which received financial and technical support to integrate new functionalities into the MAGICIAN framework. The call foresaw a maximum FSTP contribution of €200,000 per selected AS, while any remaining FSTP budget (60k) was reserved for a potential additional solution under OC2.

ID	AS	AS TYPE	MONITORING PARTNER
16	POLARQI-NET	SINGLE AS	PIPPLE
24	NEODES	SINGLE AS	FORTH
30	AMMSAS	SINGLE AS	UNITN
63	ARRAS	SINGLE AS	ALTINAY
79	HARMONY	SINGLE AS	IIT

OC1 ASs context:

ID16 POLARQI-NET: PolarQI-Net focuses on improving real-time defect detection and classification within MAGICIAN's F1-PERCEPTION module (C1.5). The project develops a lightweight, quantum-inspired deep-learning model using polarized-camera imagery and tactile data to detect subtle surface defects with high accuracy while reducing computational requirements. Targeting $\geq 90\%$ recall, $>50\%$ lower VRAM usage and <150 ms inference latency, the solution will be integrated into the MAGICIAN robotic pipeline as a ROS2- and Docker-compatible node.

ID24 NEODES: NEODES focuses on AI-driven multi-modal data annotation and enhanced defect detection, addressing MAGICIAN capabilities C1.4 and C1.5. The project combines RGB and polarized imagery (DoLP/AoLP), zero-/few-shot AI-assisted annotation and synthetic data generation through NVIDIA Omniverse to accelerate dataset creation and improve model training. CNN- and Transformer-based models target 87–90% detection accuracy and ≥ 25 FPS, with the final solution delivered as a containerized inference engine.

ID30 AMMSAS: AMMSAS focuses on advanced surface defect detection and classification, addressing MAGICIAN capabilities C1.1 and C1.5. The solution combines structured-light sensing, FFT-based signal processing, visual saliency and few-shot learning to detect and classify surface irregularities down to 0.3 mm, targeting a 1–2 minutes inspection cycle. Designed for integration with the MAGICIAN robotic platform through ROS2 and industrial communication standards.

ID 63 ARRAS: ARRAS focuses on AI-driven defect detection and automated robotic rework, addressing MAGICIAN capabilities C1.3 and C1.5. The project combines transformer-based defect classification using polarized-camera data with a new robotic rework toolset, including a hammer-like actuator and specialised grinder, to autonomously detect and repair dents and weld splatter. Integrated into MAGICIAN's Cleaning Robot, ARRAS targets >95% classification accuracy, detection of defects down to ~0.3 mm and >50% reduction in manual rework.

ID 79 HARMONY: HARMONY focuses on Human-Robot Interaction (F2.2) through an Augmented Reality interface that provides operators with real-time information from MAGICIAN's Sensing and Cleaning Robots. Developed in Unity for Magic Leap 2, it visualises defect locations, robot tasks, forces and timings while enabling hands-free interaction and commands through gestures. Starting from TRL5 and targeting TRL7, HARMONY will validate multi-robot monitoring and role-specific interfaces

3.2 OC2 OVERVIEW

OC2 was launched on 1 December 2025 and closed on 2 March 2026. Building on the experience gained through OC1, the second call shifted the focus from extending individual MAGICIAN functionalities to validating the adaptability and transferability of the MAGICIAN framework in new industrial use cases beyond the automotive sector. Each proposal could address up to two MAGICIAN capabilities within one of the eligible industrial sectors, and both Single and Twin AUC configurations were supported, with Twin applications involving a technical provider and an industrial early adopter particularly encouraged.

ID	AS	AS TYPE	MONITORING PARTNER
30	COSMIC-AI	TWIN AUC	ALTINAY
36	HULLMAP	TWIN AUC	CRF
86	PRISM	TWIN AUC	IIT
104	WELDDER	TWIN AUC	UNITN + LU
105	WIZARD	SINGLE AUC	FORTH
91	REWASH	TWIN AUC	UNITN + ZAB

AUC 105 – WelDDeR was selected as the official second MAGICIAN use case, with UNITN acting as the Monitoring Partner and LU providing additional technical support during its implementation.

OC2 AUCs context:

ID30 COSMIC-AI: COSMIC-AI targets the inspection of PCB welding/solder joints used in space electronics, where sub-millimetre defects can compromise the reliability of mission-critical components. Addressing MAGICIAN Capability C1.5, the project develops an agentic and explainable AI inspection system combining computer vision, adaptive model optimisation and low-latency inference to replace or complement manual microscopy and rule-based automated optical inspection. The system will identify, localise and classify soldering defects and provide confidence scores to support robotic inspection and automated rework workflows. COSMIC-AI will be integrated with MAGICIAN and validated in an operational space-electronics manufacturing environment,

ID36 HULLMAP: HULLMAP targets maritime ship repair and refurbishment, automating the inspection and repair preparation of large, curved composite hull surfaces. Addressing MAGICIAN Capabilities C1.1 and C1.3, it combines polarized vision and contact sensing to detect and geometrically map hull defects with robotic, force-controlled grinding for surface preparation. Demonstrated by TROIA Shipping on defective composite hull sections, the workflow converts detected defects into CAD-compatible 3D maps, supports case-specific composite patch design, and verifies bond-ready surfaces after preparation. HULLMAP will validate the complete inspect → map → prepare → repair → verify workflow in an operational ship-repair environment

ID86 PRISM: PRISM targets high-precision robotic welding in white-goods manufacturing, specifically electric water heaters produced by Metalac Bojler, where 1–2 mm component misalignments can compromise weld quality. Addressing MAGICIAN Capabilities C1.2 and C1.5, PRISM combines polarimetric 3D metrology to measure reflective stainless-steel and carbon-steel surfaces with an AI-based offset estimation engine that generates robot-ready 3D correction vectors. Deployed as a pre-weld Quality Gate, the system detects misalignment before welding and automatically supports robot path correction, targeting <0.3 mm measurement accuracy

ID104 WELDDER: WelDDeR targets weld quality inspection in the prefabricated building sector, where large metal frames are currently inspected manually. Addressing MAGICIAN Capabilities C1.5 and C2.2, the project combines a mobile collaborative robot, polarized-camera inspection and a human–robot interface, bringing automated inspection directly to large structures on the shop floor. Demonstrated at KMF’s production facility, the robot will inspect completed weld sections while welders continue working elsewhere, targeting a 50% reduction in inspection time and <5% defect miss rate

ID105 WIZARD: WIZARD targets inline quality inspection of plastic intermediate components, including moulded, extruded and thermoformed parts used in automotive, electronics and consumer goods. The project combines a 6-axis robotic

manipulator with high-resolution vision, 3D laser sensing and AI-based multimodal sensor fusion to automatically detect, classify and assess surface and near-surface defects in real time. The system will generate 2D/3D defect heatmaps and integrate with production systems through ROS2 and OPC-UA. WIZARD will validate ASAG Plastics' operational production line.

ID91 REWASH: ReWash targets advanced quality control of recovered washing-machine components for their reintegration into manufacturing, supporting more circular production in the white-goods sector. Developed by Hiro Robotics as technology provider and BRAL as industrial end-user, the project combines the MAGICIAN Polarized Camera System with Human Interface and Interaction capabilities to inspect components from BRAL's existing washing-machine dismantling line. The solution will assess whether recovered parts meet the required aesthetic and functional standards before reuse, supported by flexible HMI interactions between operators and the robotic system. ReWash will develop and validate an integrated Proof of Concept in a real industrial environment, demonstrating safe human-robot collaboration and efficient quality control while contributing to waste reduction, component recovery and increased circularity in white-goods manufacturing.

4 ISSUES ENCOUNTERED AND RISK MANAGEMENT

Within WP6, the following reported risks were considered in anticipation of the possible issues/deviations that could impact the Ass' selection and implementation works; correspondingly, dedicated mitigation measures were foreseen and actuated in case of need

Risks	Mitigation Measures
Task 6.1 – Open Calls launch, management and selection process	Risk a) did not materialise, as both calls attracted a substantial number of applications and the planned portfolio of five projects per call could be selected.
a) Insufficient quantity or quality of submitted proposals	In OC1, Single AS received higher participation than Twin AS
b) Unbalanced participation across the targeted configurations, capabilities and sectors,	c) In OC2 TWIN AS received more participation with very high quality

Task 6.2 - OC implementation and monitoring Risk of delays between selection, contracting and implementation start Different interpretations of IPR/confidentiality rules could restrict MAGICIAN partners' access to jointly generated result	Both OCs were launched earlier than foreseen in the GA to create a buffer before implementation. However, contractualisation took longer than expected. OC1 started in September 2025 instead of July 2025; OC2 in August 2026 instead of June 2026; The anticipated launch helped absorb the delay and limit its impact on the overall FSTP schedule
Activities or expenditure of an AS/AUC may deviate from the approved proposal and budget One AS was identified as not fully aligned with its approved technical and financial plan	Enhanced technical and financial review of the Status Report and validation by the MAGICIAN General Assembly. Outcome: Corrective actions and conditions for continued implementation were jointly agreed.
Access to results and interpretation of IPR provisions Different interpretations of IPR/confidentiality rules could restrict MAGICIAN partners' access to jointly generated results	Application of the relevant Subgrant Agreement/SAUCA provisions and development and circulation of the DAC Protocols.
Technical compatibility with MAGICIAN Third-party solutions may not be fully compatible with MAGICIAN hardware, software or interfaces.	Early technical specifications, access to MAGICIAN technologies/testing facilities and support from assigned technical partners

5 INNOVATION MANAGEMENT

The MAGICIAN Innovation Management support aimed to complement the technical development of the selected Application Solutions with a stronger focus on market readiness, exploitation and business development, in line with Task 6.3. The Grant Agreement foresees support to jointly mature the technical and business dimensions of the solutions, including market access, investment planning and longer-term growth perspectives.

For OC1, this support was delivered through a dedicated Innovation Management

training held in May 2026 (M32), attended by representatives of all five selected ASs. The training built on the business information already provided during the application phase, where applicants had been required to describe their market attractiveness, business model/exploitation strategy, sales and marketing approach and expected economic benefits.

The training focused on supporting the companies in reviewing and strengthening their business case and Unique Value Proposition (UVP), identifying target customers and markets, clarifying the competitive positioning of their solutions and considering possible pathways towards industrial uptake. Particular attention was also given to adapting the business-development approach to the different maturity, size and market needs of the five selected companies.

The training represents the first structured innovation-management support provided to the OC1 beneficiaries. Further impact-oriented follow-up is foreseen under Task 6.3, including an interview six months after the end of each AS implementation to assess the longer-term effects of MAGICIAN support on the companies' business and growth perspectives.

6 ADDITIONAL SERVICES IMPLEMENTED ALONG THE AS IMPLEMENTATION

Maximising the visibility, networking opportunities and market exposure of the selected start-ups and SMEs, as well as of the innovative Application Solutions (ASs) and Application Use Cases (AUCs) supported through the MAGICIAN Open Calls, represents an important complementary element of the FSTP activities. Beyond the technical implementation, these actions aim to increase the visibility of the third-party solutions, facilitate exchanges with industrial and innovation stakeholders and create opportunities for future cooperation and market uptake. This approach is consistent with Task 6.3, which foresees the preparation of success stories and other communication material to increase the visibility of the supported companies and their solutions at European level.

To support these objectives, MAGICIAN has used its main communication and dissemination channels to present the selected companies, their solutions and implementation progress. In particular, the project website includes dedicated information on the Open Calls and selected projects, including a specific OC1 Winners section presenting the five selected companies and their Application Solutions. The beneficiaries and their activities have also been promoted through the project's LinkedIn and audiovisual channels, including dedicated posts and a video in which the five OC1 winners present their companies, projects and collaboration with MAGICIAN. The same visibility approach is being extended to the OC2 portfolio following the announcement of the five selected AUCs in August 2026.

In parallel, selected third parties are encouraged to undertake their own dissemination

and networking activities, including participation in relevant industrial, technological and research events. The Open Call framework explicitly allows dissemination-related travel activities and recommends that beneficiaries foresee appropriate resources for them. These activities complement the communication actions of the MAGICIAN consortium and provide the selected companies with opportunities to showcase their developments, connect with potential users and partners, and strengthen their position within the wider European manufacturing, robotics and innovation ecosystem.