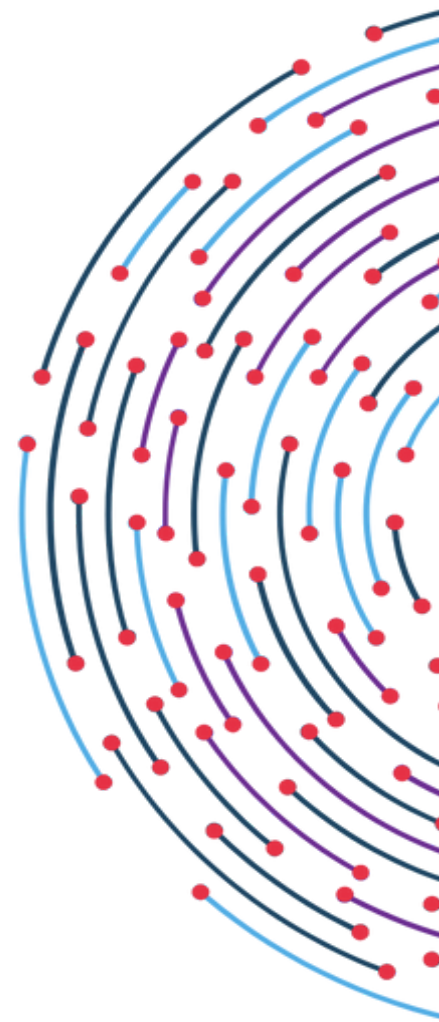


TWINRELECT

Twinning for excellence in reliable electronics



D4.1

**DELIVERABLE
REPORT**

D4.1: Networking Plan

WP4: Enhancement of Networking Capacity



Document information

Deliverable/Title	D4.1 Networking Plan	Work Package	4
Leading Partner	UOM	Participating Partner(s)	UTH, IHP, CNRS
Authors	Davide Bertozzi, Nikos Zazatis, Georgios-Ioannis Paliaroutis, Nikos Chatzivangelis		
Editors	Luigi Dilillo, Marko Andjelkovic, Christos Sotiriou		
Deliverable Type	R	Dissemination Level	PU
Official Submission Date	M5 of Project	Actual Submission Date	28/02/25

Document history				
Version	Date	Description	Editors	Comments
0.1	01/02/2025	Initial Draft	Georgios-Ioannis Paliaroutis	
0.2	10/02/2025	Rough writing of some sections	Georgios-Ioannis Paliaroutis, Nikos Zazatis	
0.4	15/02/2024	Refining some sections	All Authors	
0.5	21/02/2024	Inserted Tables and Tentative Schedule	All Authors	
0.6	25/02/2024	Filled and refined all sections	Davide Bertozzi	
1.0	27/02/2024	Final Version	All Authors and Editors	

DISCLAIMER

Funded by the European Union (Grant Agreement N° 101160314). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

Contents

1. Introduction.....	4
1.1 Objectives of the TWIN-RELECT project and WP4: Enhancement of Networking Capability.....	4
1.2 Scope and Focus of the Networking Plan and Activities.....	4
2. Strategic Objectives of Networking Activities.....	6
2.1 Enhancing UTH's Scientific Reputation.....	6
2.2 Increasing Collaboration with Industry and International Institutions.....	7
2.3 Key Stakeholder Categories.....	7
3. Detailed Networking Plan.....	10
3.1 Definition of Networking Plan.....	10
3.2 Organization of Business Forums.....	11
3.2.1 Key Stakeholders.....	11
3.2.2 Agenda, schedule, and rough dates.....	15
3.3 Webinars with Related Projects.....	16
3.3.1 Agenda, schedule, and rough dates.....	16
3.4 Organization of Scientific Workshops.....	18
3.4.1 Agenda, schedule, and rough dates.....	19
3.5 Organization of Special Conference Sessions.....	21
3.6 Visits to Reputable Research Centers and Labs.....	22
3.7 Organization of Final Symposium.....	23
3.8 Schedule of Networking Activities.....	24
4. Monitoring and Evaluation of Networking Success.....	26
4.1 Evaluation of Each Activity and Reporting Outcomes.....	26
4.2 Promote Networking Activities Utilizing Project's Website.....	27
5. Other Networking Activities.....	28
6. Conclusion.....	30

1. Introduction

1.1 Objectives of the TWIN-RELECT project and WP4: Enhancement of Networking Capability

The TWIN-RELECT project aims to significantly strengthen the research and innovation capacity of University of Thessaly (UTH) in the field of reliable electronics through a collaborative effort with the University of Montpellier, the French National Centre for Scientific Research (CNRS), the Leibniz Institute for High-Performance Microelectronics (IHP) in Germany, and the University of Manchester (MAN). By bringing together a diverse team of partners, the fundamental purpose of this initiative is to analyze and improve Integrated Circuit (IC) reliability, specifically in relation to radiation effects. The project revolves around a comprehensive methodology to model the generation and propagation of transient glitches in ICs toward the design of more reliable and robust electronic circuits and systems.

The Networking Plan aims to enhance UTH's scientific reputation by establishing effective collaborations with local, regional, and international scientific networks, positioning UTH as a more active and visible member of the research and development community at various levels. This effort will be significantly strengthened by organizing specialized scientific events in collaboration with the advanced partners, with the strong and credible support of UOM playing a pivotal role. A networking strategy has been developed through joint brainstorming, leading to a set of actionable recommendations that propel progress in the networking of UTH with relevant and diverse stakeholders.

The networking initiatives will communicate the goals and key outcomes of the TWIN-RELECT project as they emerge, while also forging strong connections with potential partners in both academia and industry. This effort will be underpinned by the University of Thessaly's (UTH) enhanced expertise and expanded skills in developing cross-layer methodologies and tool flows for reliability analysis of modern electronic circuits, emphasizing its leadership in making the project technologies accessible.

1.2 Scope and Focus of the Networking Plan and Activities

The TWIN-RELECT project aims to establish a network of stakeholders, ranging from academic researchers to industrial partners, to promote the adoption of a novel approach to the reliable and robust design of advanced ICs. This approach focuses on a comprehensive and vertically-integrated assessment methodology of fault mechanisms and effects across multiple levels of abstraction, from the device level to the system level. In this context, the strengthened research capacity and expertise of UTH will position it as a key player in linking device- and circuit-level reliability analysis methodologies to design methods for reliable system design. UTH will thus play a pivotal role in handling the scale and reliability optimization challenge of complex hardware designs in realistic applications. As a result, promoting the project will also promote UTH, and highlighting UTH as a research partner will help to showcase the project's outcomes.

To implement this strategy, a comprehensive Networking Plan has been created to outline the individual activities and their seamless integration toward the overall networking objectives, while also defining each partner's contributions to the specific initiatives. Some initiatives stand out for their strategic role. On the one hand, two Business Forums will be organized by UTH to foster collaboration,

align research outcomes with industry needs, and promote the practical application and project's findings. On the other hand, the partnership with reputable EU research institutions will be strengthened by means of three webinars, focused on reliability-related projects and on other Twinning projects, and of three scientific workshops, focusing on experimental methods to assess the effect of faults in devices, circuits, and systems. The Networking Plan will be complemented by a final three-day symposium, special sessions at major international conferences, and visits to leading research centers (e.g., ESA, CERN, and DLR) to reinforce networking, cooperation, and knowledge exchange in the field of reliable electronic system design.

The rest of the document is organized into 5 sections:

Section 2 provides an overview of the strategic purposes of networking activities, aiming at improving UTH's scientific reputation, enhancing collaboration with industry and international institutions, and outlining the key stakeholders categories..

Section 3 describes the detailed Networking Plan, including the organization of business forums, webinars, scientific workshops, a final symposium, special conference sessions, and visits to reputable research centers.

Section 4 discusses the monitoring and evaluation of networking success, with a focus on assessing activities and employing a website for reporting and promoting networking strategy.

Section 5 outlines additional activities to maximize networking opportunities.

Section 6 concludes the document.

2. Strategic Objectives of Networking Activities

2.1 Enhancing UTH's Scientific Reputation

One primary goal of the Networking Plan is to enhance the scientific reputation of UTH. Pursuing this objective implies a number of action items:

- **Strengthening Research Excellence:** Supporting UTH's commitment to fostering high-quality, impactful research through engagement with advanced partners, but also securing international collaborations, and promoting cutting-edge technologies in the area of reliable electronics.
- **Promoting International Collaborations:** Aim at establishing partnerships with leading global universities, research institutions, and industry players, ensuring knowledge exchange and increasing the visibility of the UTH's research.
- **Hosting High-Profile Scientific Events:** Organizing and hosting qualified scientific events, including thematic sessions, workshops, and symposia, inviting experts and thought leaders in the field from advanced partners and beyond to present and engage with the UTH's research community, thereby positioning the university as a hub for scientific dialogue.
- **Research Dissemination:** Disseminating research outcomes through focused thematic events as well as scientific events with a broader scope, but also through high-impact journals, open-access platforms, and media outlets to reach a wider audience, increasing the global reach and recognition of UTH's work.
- **Engaging with Industry:** Connecting academia with industry e.g. through business forums to foster conversations, discussions, and exchange of ideas, ensuring that UTH research contributes to real-life applications and strengthens its reputation as an innovation hub.
- **Developing Talented Researchers:** Nurturing the next generation of scientists by offering high-level training, mentoring, and professional development to equip students and researchers with the skills needed for impactful, globally recognized research.
- **Showcasing Success Stories:** Highlight and notify successful UTH projects and/or outcomes, to demonstrate the university's research impact and scientific leadership.
- **Teaming Up with Similar Institutions:** Collaborating with institutions facing similar challenges (e.g., leaders of other Twinning projects), sharing knowledge, strategies, and best practices to collectively enhance research capabilities and strengthen global scientific reputation.
- **Visiting International Centers of Excellence and/or Participating in High-Level Technical-Scientific Activities:** Engage with leading institutions and participate in ongoing top-tier technical-scientific activities. By engaging with excellence, the university can learn to become an excellence itself.

To be effectively implemented, these initiatives require a Networking Plan that outlines opportunities for engagement with academic and industrial stakeholders, as well as the methods of interaction, which can range from webinars and scientific workshops to business forums and special sessions at conferences.

2.2 Increasing Collaboration with Industry and International Institutions

In general, a combination of international visibility, concrete collaborations, and applied innovation can significantly enhance scientific reputation and strengthen relationships with the global academic and industrial communities. The following guidelines have been identified to increase collaboration with industry and international academic institutions toward more active involvement and a stronger scientific reputation of UTH:

- **Build Strategic Collaboration Networks:** Join or establish alliances with companies and universities in relevant fields by participating in joint community events, research projects, and innovation initiatives, to increase visibility and lay the groundwork to access funding.
- **Participate in International Conferences and Workshops:** Actively participate in international conferences, workshops, and symposia to connect more strongly with the scientific community, to present research findings, and exchange ideas. Additionally, organizing special sessions or workshops at international events helps strengthen reputation.
- **Mobility of researchers:** Promote the mobility of researchers and students through academic exchanges or secondments, so that the international experience can help broaden networks and acquire new skills.
- **Collaborate with relevant Industries:** Develop strong relationships with global companies to lay the groundwork for applied research projects, consulting, and technology transfer. This not only improves visibility but also allows for applying scientific discoveries to real-world solutions, enhancing the impact of research.
- **Promote Interdisciplinary Research:** Engaging in barrier-breaking interdisciplinary research, like the one targeted by the TWIN-RELECT project in collaboration with the advanced partners, holds the promise of outcomes that can more easily attract attention.
- **Organize Networking Events with Industry and Academia:** Organize forums, roundtables, and seminars that involve both researchers and industry professionals. These events can be physical or virtual and serve to foster knowledge exchange, idea-sharing, and potential future collaborations.

2.3 Key Stakeholder Categories

UTH aims at strengthening its reputation and impact in the field of design methodologies and tool flows for reliable integrated circuit (IC) design. Toward this long-term goal, a broad range of stakeholders from both academia and industry should be engaged. Relevant stakeholder categories include:

- Academic Institutions and Research Centers:
 - *University Departments:* Departments specializing in Electrical Engineering, Computer Science, and Materials Science that are focused on IC design, reliability, EDA tools and related fields.

- *Research Groups*: Specialized research groups within universities and independent research centers focusing on circuit design, reliability analysis, synthesis tool flows, and system-on-chip (SoC) design.
- *Collaborating Universities*: International academic partners with expertise in similar or complementary areas to share knowledge, research, and best practices.
- **Industry Partners:**
 - *IC Design Companies*: Companies involved in designing and manufacturing digital integrated circuits.
 - *EDA Tool Vendors*: Companies that develop Electronic Design Automation (EDA) tools, which are crucial for IC design, verification, and reliability analysis.
 - *Semiconductor Manufacturers*: Companies that fabricate ICs and may have a strong interest in new design methodologies for improving IC reliability.
 - *Design Technology Providers*: Companies that supply key technologies related to IC design, such as hardware, software, or advanced simulation tools.
 - *Consultants and Contractors*: Experts who can offer industry-specific advice on the application and commercialization of new design methods.
- **Education, Government and Regulatory Bodies:**
 - *Funding Agencies*: National and international funding bodies that support research in electronic design, semiconductor technology, and reliability engineering.
 - *Standardization Bodies*: Organizations that create standards for IC design, such as JEDEC or IEEE, whose input is crucial for aligning the new methodologies with industry standards.
 - *Authorities*: City council, regional government, Greek Ministry of Education.
 - *Education*: Secondary schools, centers for promotion of science.
- **Professional Associations and Networks:**
 - *Innovation Clusters for High-Tech Industries*: Networks that foster collaboration among businesses, research institutions, and public-private organizations within specific technological domains, promoting innovation and competitiveness.
 - *Industry Alliances and Associations for Emerging Technologies*: Groups that unite industrial and academic leaders to advance emerging technologies, such as semiconductors, microelectronics, and embedded systems, and facilitate cross-regional collaboration.
 - *National and Regional Space Industry Associations*: Organizations representing companies and professionals in the space sector, supporting research, development, and international collaborations in space technology and applications.
- **End Users and Application Domains, for instance:**
 - *Automotive Industry*: Companies involved in the design and production of automotive electronics, which increasingly rely on highly reliable ICs for safety-critical systems.
 - *Aerospace and Defense*: Organizations that require high-reliability ICs for aerospace, military, and space applications.
 - *Consumer Electronics*: Companies that produce electronics such as smartphones, wearables, and other devices where IC reliability is crucial for consumer satisfaction and device longevity.

- *Medical Device Manufacturers:* Companies focused on medical electronics where IC reliability can impact the safety and performance of life-saving devices.

By involving these stakeholders, UTH can ensure that its research in design methodologies and tool flows for reliable IC design is aligned with both current industry needs and future technological advancements, fostering a dynamic ecosystem for innovation and collaboration.

3. Detailed Networking Plan

3.1 Definition of Networking Plan

The definition of a comprehensive Networking Plan is a vital step to ensure the success of TWIN-RELECT's networking endeavors, which play a key role in effectively communicating the project's overall objectives and UTH's leading role at the forefront of design methodologies and EDA tool flows for reliable IC design. The primary networking activities, outlined in more detail in the subsections below, will be categorized into business forums, webinars, scientific workshops, special sessions, the final symposium, and visits to leading research centers and laboratories. These events will be the diversified setting where the strategic objectives outlined in Section 2 will be concretely and effectively pursued.

The fundamental choice underpinning most of these events was to enable high levels of interaction between participants. This will give project members the opportunity to engage directly with a diverse range of stakeholders from both industry and the scientific community toward higher visibility, tighter collaboration, and community building/expansion. All networking activities will be homogeneously distributed throughout the project's lifetime, and will encompass the following specific initiatives:

- **Business Forums:** Two 2-day Business Forums will be held by UTH in Greece to bring together relevant companies and lawmakers to discuss opportunities for future collaboration and the prospect of transferring the research results into practical products and applications.
- **Webinars:** Three webinars will be organized as part of the TWIN-RELECT project: two with relevant collaborating groups/researchers of advanced partners in the context of their ongoing research projects, and one cross-fertilization event with academic institutions facing similar widening and consolidation challenges to UTH.
- **Scientific Workshops:** UTH will organize three scientific workshops in Greece, promoting knowledge exchange and advancement on the scientific aspects of reliable electronic systems design.
- **Special Sessions:** Two special sessions at prominent international conferences will be organized by the TWIN-RELECT partners to enhance visibility and networking with the industrial and academic communities.
- **Visits to Reputable Research Centers and Labs:** The UTH team will visit at least three research centers in Europe to discuss potential collaborations with their staff and familiarize themselves with the facilities and with the activities that take place in them.
- **Final Symposium:** A final Symposium will be organized by UTH in Volos, inviting researchers, academics, and professionals from partner institutions and beyond (through an open call for papers) to promote the presentation of scientific and innovative papers and facilitate scientific discussions and engagement among researchers.

3.2 Organization of Business Forums

Pivotal networking events within the project will be the organization of two 2-day Business Forums. These events will provide an opportunity to bring together academic researchers, industry leaders, and technology providers to discuss the latest advancements in reliable IC design methodologies and tool flows. They will serve as a platform for sharing insights, identifying industry needs, and fostering collaborations that bridge the gap between academic research and practical, real-world applications. Additionally, the forums will facilitate networking, partnerships, and discussions around the uptake of new design technologies for reliable electronics, helping to ensure that research outcomes are well-aligned with industry demands and contribute to the development of more robust and reliable integrated circuits.

In particular, the two Business Forums will be organized by UTH in Greece to bring together relevant industrial stakeholders while at the same time facilitating the engagement with local and national companies. Advanced partners will contribute their expertise in the organization of similar events and help extend the stakeholders network with relevant European companies and leading academic researchers. These forums will provide an ideal opportunity to discuss the prospect of transferring the research results into practical products and applications, as a diverse range of companies and lawmakers will be involved.

3.2.1 Key Stakeholders

Both stakeholders from Greece as well as from Europe at large will be contacted to engage with project activities, stay updated on project outcomes and participate in the Business Forums.

[Table 1](#) lists several Greek companies that UTH and TWIN-RELECT partners are interested to approach, since the design of reliable electronic circuits and systems is highly relevant to their business. These companies operate in fields such as aerospace, advanced engineering solutions, reliable electronics, and telecommunications. Partnering with them holds promise of potential collaborations, facilitating knowledge exchange, and creating opportunities for future joint initiatives between industry and academia.

Company	Brief description
Creative Systems Engineering (CSE) Ltd	Engineering firm that targets the provision of state-of-the-art products and services for Telecommunication, Defence/Space, Industrial Control and Automation, ATE.
EULAMBIA Advanced Technologies	A hard tech company focused on photonic applications for security.
FEAC Engineering P.C.	It is a leading engineering firm specializing in Digital Twins, physics-based simulations, and AI-driven solutions.

Company	Brief description
Space Asics	It develops innovative technologies for space applications, including satellite components and high-reliability electronic systems.
OHB Hellas	The first dedicated Space Systems company in Greece
Prisma Electronics	It develops and manufactures a wide array of IT, smart-grid and wireless-based systems, and integrated electronic components
Leo Space Photonics	It develops high-speed optical transceivers and photonic ICs for satellite communications.
Alma Technologies S.A.	Specializes in semiconductor IP design, providing high-performance hardware solutions for embedded systems since 2001.
Integrated Systems Development	An independent organization which develops Integrated Systems (IS) that exhibit guaranteed quality and performance
Hellas Sat	A Satellite communications company that provides advanced satellite services since 2001.

Table 1: Greek companies eligible for participation in the Business Forums

Similarly, we extend the network of potential stakeholders with the companies listed in [Table 2](#), [Table 3](#), [Table 4](#) and [Table 5](#) respectively, which act at a continental or international level. They cover diverse sectors, including rad-hard and reliability design for space applications, semiconductor foundries, Electronic Design Automation (EDA), and automotive electronics. Their involvement would considerably contribute to the relevance of the TWIN-RELECT research on designing reliable electronic systems and would foster the establishment of strategic partnerships. In some cases, the advanced partners already have good ties and/on ongoing collaboration activities with some of these industrial partners. For instance, CNRS is currently involved in collaborative scientific actions with TRAD (Test & Radiations), which has its core business in the testing and analysis of radiation effects on materials, components, and electronic systems, and the mission to assist companies wishing to better predict and minimize radiation effects on their products.

In case some companies or academic researchers reject the invitation to join the Business Forums for various reasons, UTH will consider alternative solutions by inviting other stakeholders to ensure the success of these events.

Company	Brief description
IROC Technologies	It offers advanced analysis software, testing services, and expert consulting to help semiconductor industries manage reliability risks.
Cadence	A leader in Electronic Design Automation (EDA), offering software and hardware solutions to optimize the design of ICs and systems.
Synopsys	A leading provider of silicon-to-systems design solutions and one of the largest EDA tool providers.
TRAD Tests & Radiations	It focuses on radiation effects testing and analysis, supporting companies to predict and minimize radiation impact on their products. (Several scientific actions with the partner CNRS)
DSI Aerospace	It specializes in high-speed, space-grade electronics for airborne and space missions, delivering reliable and optimized systems since 1997.
Siemens	It provides software and hardware tools that enable the design, verification, and manufacturing of complex electronic systems, including integrated circuits and printed circuit boards.
Intento Design	It provides EDA software that automates and accelerates the design and migration of analog and mixed-signal integrated circuits.

Table 2: European and/or International EDA companies eligible for participation in the Business Forums

Company	Brief description
Airbus Defense and Space	A major player in the global defense and aerospace industry, providing a wide range of products and services, including military aircraft, space systems, and secure communications
Thales Alenia Space	Specializing in the design, integration, and delivery of innovative space systems for telecommunications, navigation, Earth observation, environmental management, exploration, and orbital infrastructure
Arquimea	Diversified technology company specializing in the development and deployment of innovative solutions across sectors like aerospace, defense, biotechnology, and critical infrastructure
Redcat	A company with a strong focus on drone technology

Company	Brief description
DSI Aerospace	Creates critical electronic components for use in space based applications
ICSense	IC design company specializing in custom ASIC development and supply for diverse industries
Nanoxplore	Graphene producer that develops and integrates graphene-enhanced materials for diverse industrial applications
IDEAS	Delivers radiation detection and imaging systems with proprietary readout technology
Cobham Geisler	Develops high-performance microprocessors, advanced electronic components, and software solutions designed for space and other high-reliability applications

Table 3: European and/or International Rad-hard and reliability design companies eligible for participation in the Business Forums

Company	Brief description
GlobalFoundries	An international leader in semiconductor foundries, providing cutting-edge technologies for chip production and electronic systems.
STMicroelectronics	A global technology company focused on providing innovative solutions for automotive, industrial, and consumer electronics.
XFAB	A specialty foundry group that manufactures analog/mixed-signal integrated circuits for diverse industries
UMC	A leading global semiconductor foundry providing diverse, high-quality IC fabrication services with a focus on logic and specialty technologies, operating multiple fabs across Asia
TSMC	World's largest dedicated independent semiconductor foundry, specializing in manufacturing advanced integrated circuits for a wide range of global technology companies

Table 4: European and/or International Semiconductor foundries eligible for participation in the Business Forums

Company	Brief description
Continental AG	An automotive company where electronics are critical for developing advanced systems like ADAS and autonomous driving, alongside their traditional tire and component businesses
Robert Bosch GmbH	A global leader in automotive electronics, providing critical components and systems for modern vehicles, with a strong focus on innovation in areas like autonomous driving and electric mobility
Infineon Technologies AG	A leading semiconductor company providing essential chips for power management, automotive, industrial, and security applications globally

Table 5: European and/or companies involved in development of automotive electronics eligible for participation in the Business Forums

Our goal is to make these events successful by fostering meaningful interactions between industry and academic experts in IC reliability. The participation of researchers and academic stakeholders to the Business Forums will elevate the discussions, ensuring they are cutting-edge and highly relevant to the project's research, while still suitable for industrial uptake. Along this direction, Professors from UTH and from other Greek and European Universities will greatly enrich the scientific quality of discussions at these events.

3.2.2 Agenda, schedule, and rough dates

The TWIN-RELECT Business Forums are planned to take place in Greece in September 2025 and September 2026. These forums will bring together researchers, industrial players, and policymakers to foster innovation in the field of high-reliability electronics. Furthermore, to increase participation and maximize global engagement from academia and industry, the events will also offer the option of remote participation.

These events will span two days, with an agenda designed to address all aspects of the TWIN-RELECT project's progress and highlight the stakeholders' backgrounds. Specifically, at the opening of both business forums, UTH and the other partners will introduce the TWIN-RELECT project, outlining its objectives in advancing electronic reliability research and fostering connections between academia and industry. The remaining time will revolve around keynote speeches and presentations from other participants, including researchers, industry experts, and policymakers. These sessions will provide valuable insights into industry trends, such as reliability challenges in critical applications, advancements in reliable electronics, and opportunities for collaboration to bridge the gap between research and industry. Throughout the events, formal or informal discussions will foster networking, with a particular focus on exploring investment opportunities for innovations in reliable system design.

The organization of these events, including venue selection and addressing procedural obligations and challenges, will be managed by the UTH members of the TWIN-RELECT project. In particular, UTH will

coordinate the identification of appropriate venues within the Department of Electrical and Computer Engineering or at a hotel, and arrange accommodations for all participants.

3.3 Webinars with Related Projects

To foster collaboration and knowledge exchange, this initiative focuses on organizing webinars with institutions involved in related reliability and Twinning projects. Leveraging the advanced partners' involvement in numerous national and EU-funded projects on this topic, the aim is to establish stronger links between UTH and reputable EU research institutions.

Two key activities are planned:

- **Webinars with Reliability-Related Projects:** Two webinars will be organized with institutions engaged in various reliability-related projects. As reliability is a key focus of the project, engaging with professionals and experts working on similar challenges will provide valuable insights into cutting-edge methodologies, emerging trends, and best practices in reliability analysis. This collaboration will not only enhance the TWIN-RELECT partners' understanding of the latest advancements in the field but also allow for the exchange of practical knowledge on how to tackle common issues related to system and circuit reliability. Additionally, it will provide an opportunity to strengthen existing networks, forge new partnerships, and explore potential joint initiatives that could benefit the ongoing project. Ultimately, this webinar will contribute to advancing the scientific knowledge and technical expertise needed to improve the project's outcomes and further bolster the reputation of the partners in the field of reliability, especially the coordinator institution.
- **A Two-Day Webinar on Twinning Projects:** A dedicated two-day webinar will be organized to facilitate the exchange of experiences with the coordinators and partners of both ongoing and previous Twinning projects. This initiative will provide a platform for collaboration, as many projects funded through comparable funding schemes often encounter common or similar challenges. By bringing together project leaders with analogous objectives, the webinar will offer an invaluable opportunity to learn from one another's experiences, address common issues more effectively, and explore strategies that have proven successful in overcoming similar hurdles. This collaborative effort will not only help to enhance the overall management and execution of these projects but also contribute to the strengthening of scientific reputation and the advancement of mutual goals.

3.3.1 Agenda, schedule, and rough dates

The consortium partners have identified the following projects we could potentially get in touch with to organize the networking webinars:

- **Webinars with Reliability-Related Projects.**

Projects have been identified either through the involvement of TWIN-RELECT's advanced partners or due to their alignment with TWIN-RELECT's scientific objectives, always considering their thematic relevance:

COCHISA (<https://cochisa-project.eu/>). COCHISA aims to foster the European non-dependence in terms of critical RF components for space applications. For this, scalable multi-channel radiation-hard beamforming core-chips operating in X-band (10 GHz) as well as Ka-band (28 GHz) will be developed. Moreover, a fully European supply chain for the core-chips will be established, based on the European foundry and packaging partners. This includes the availability of a proven radiation-hard SiGe BiCMOS technology with qualified radiation-hard libraries.

CORENEXT (<https://corenext.eu/>). This project aims at a trustworthy-by-design platform based on a new computing architecture for base stations to push European capabilities in 5G/6G to the next level.

MIRELAI (<https://mirelai.eu>). MIRELAI is an EU-funded Industrial Doctoral Network with the ambition to address the challenges posed by the reliability, sustainability, and verification efforts related to the production of microelectronics components, and boost Europe's innovation capacity and competitiveness in the market. To achieve this goal, the project recruited doctoral candidates to investigate the physics of degradation and reduce testing and verification efforts across the value chain of electronic components and systems, while providing invaluable skills to the next generation of engineers.

SMARTEDGE (<https://www.smart-edge.eu>). SMARTEDGE is a European project on semantic low-code programming tools for edge intelligence, with use cases in manufacturing, automotive, and healthcare. The SmartEdge project aims to achieve dynamic integration of decentralized edge intelligence while prioritizing reliability, security, privacy, and scalability. This will be realized through a semantic-based interplay of edge devices in a cross-layer toolchain, allowing seamless and real-time distribution of autonomous intelligence swarms.

EBRAINS 2.0 (<https://www.ebrains.eu/projects/ebrains-2-0>). The overarching goal of EBRAINS 2.0 is to foster a deeper understanding of brain structure and function with dedicated and mature software tools. In the context of the project, neuromorphic computing platforms are evolved in the direction of further scalability, efficiency and reliability.

Contacts with the partners of these projects are in the early stage of development, since the associated webinars are scheduled for the second and third year of the project. During project execution, the onset of new opportunities to partner with other consortia will be continuously monitored.

- **Webinars with other Twinning project partners.**

Discussion of best practices, issues and synergies with the coordinator and/or partners of other current or previous Twinning projects, encompassing the enhancement of scientific capacity, of research management and administration capacity, the networking capacity, the long-term sustainability of research collaborations, dissemination and exploitation strategies, and potential joint research opportunities. The following projects have already been identified as very promising for this initiative:

- *AIDA4Edge* (<https://aida4edge.elfak.rs/>). A Twinning for Excellence project in adaptive edge AI, targeting data processing in neuromorphic vision applications through the hybrid integration of spiking and artificial neural networks.

- **TAICHIP** (<https://taichip.taltech.ee/>). A Twinning for Excellence project in AI chip design, aiming to advance the state-of-the-art in the design of reliable and efficient artificial intelligence chips.
- **COIN3D** (<https://coin3d-project.eu/>). A Twinning for Excellence project in 3D VLSI reliability, which addresses key challenges in 3D VLSI and microelectronics, with the goal of driving innovation in next-generation semiconductor solutions.

Facilitated by the advanced partners, early contacts have already been established with the partners of these projects, which holds promise of a successful implementation of the webinar with them and with other projects that might be identified at a later stage.

The webinars are tentatively scheduled as follows:

Webinar	Date	Duration
Webinar with the other Twinning projects.	October 2025	2 Days
Webinar with partners of other reliability-related projects	October 2026	1 Day
Webinar with partners of other reliability-related projects	May 2027	1 Day

3.4 Organization of Scientific Workshops

Three scientific workshops will be hosted by UTH in Greece, each lasting three days. These workshops will provide a platform for academics and professionals from Greece and worldwide to exchange knowledge and expertise on scientific aspects of reliable electronic systems design. Workshops can offer valuable insights, foster collaboration, and contribute to the development of better, more dependable electronic technologies. All project partners (CNRS, UTH, IHP, and MAN) will contribute lecture presentations to the program of each workshop.

This series of workshops is dedicated to exploring the critical aspects of fault tolerance and reliability in the design of circuits and systems. As technological demands increase and systems become more complex, ensuring reliability at all levels of abstraction becomes a vital challenge. The workshops will delve into methodologies that address fault modeling, fault-tolerant design, and experimental validation, offering a comprehensive view of how to enhance the reliability of electronic systems, and covering the most promising design methods and tools to achieve this goal. The broad scope of the workshop series has been refined into specific topics for each workshop, as follows:

- **Workshop 1:** Fault models at different abstraction levels, including simulation-based and analytical techniques for fault tolerance analysis. This event will introduce participants to the underlying principles of fault behavior, ranging from low-level device failures to system-level impacts, and explore the tools that enable rigorous fault analysis, with focus on tool integration across the design hierarchy for cross-layer reliability analysis.
- **Workshop 2:** Fault-tolerant design (static and dynamic techniques), and real-time reliability monitoring with on-chip sensors. Building on the foundation of the first workshop, the second

edition will emphasize fault-tolerant design strategies through both static and dynamic techniques. It will also cover real-time reliability monitoring, specifically through the use of on-chip sensors, enabling designers to proactively assess and mitigate potential failures during operation. This workshop will highlight modern approaches to embedding resilience within circuit and system architectures.

- **Workshop 3:** Experimental characterization of fault effects in custom and COTS devices and systems, qualification procedures, and design of test setups for experiments. This workshop will transition to experimental characterization, addressing fault effects in the real-world, encompassing both custom and commercial off-the-shelf (COTS) devices. Participants will gain insights into fault effects, qualification procedures, and the design of test setups for evaluating system reliability under various conditions. This hands-on approach to fault characterization will provide practical knowledge on how to validate theoretical models and design for reliability methods.

The workshops will facilitate knowledge sharing and collaboration among researchers and professionals, disseminate project outcomes through presentations and discussions, and create networking opportunities to establish new partnerships and collaborations.

3.4.1 Agenda, schedule, and rough dates

The program of each workshop will be shaped by presentations from leading professionals, invited experts, and contributions from project partners. Through a combination of keynote speeches, invited talks, and lectures from project partners, attendees will leave with a deeper understanding of the challenges and evolving solutions in ensuring system robustness across all stages of the design and operational life cycle.

Project partners will contribute their own presentations to the workshops program. [Table 6](#) below reports a tentative list of talks given by members of partner institutions, indicating the broad topic covered by each of them.

Partner	Topic - Workshop 1	Topic - Workshop 2	Topic - Workshop 3
IHP	Characterization and modeling of SET effects in standard combinational cells	Overview of different on-chip particle detectors	Design of test circuits for experimental analysis of SET effects
IHP	Silicon Lifecycle Management Based on Cross-Layer Sensing	Combined Effects of Ionizing and Non-Ionizing Radiation: from simulation to practical experiments	On-Chip Sensor for Iddq Monitoring
CNRS	SRAM cell reliability for different technology	Error monitoring and handling on the HARV	Operational function, radiation issues and

Partner	Topic - Workshop 1	Topic - Workshop 2	Topic - Workshop 3
	nodes explored through the PredicSEE software tool	(RISC V) microcontroller	resilience of COTS non-volatile memories. In particular, the topics that will be explored will be: - The basic structure of electronic memories; - The function of COTS Flash memories, MRAM, PCRAM, FRAM and RRAM; - Weakness and resilience features of non-volatile COTS memories facing a harsh radiation environment.
UOM	Reliability analysis of hardware accelerators through compiled cycle-based simulation	Fault-tolerant design of neuromorphic communication architectures	Qualification of neuromorphic hardware: from hardware faults to learning algorithms
UTH	Probabilistic SET Analysis Using STA Principles	STA-based Radiation Hardening Framework	Reliability Analysis EDA Tool Flow

Table 6. Contributions of project partners to the scientific workshops.

The workshops will be scheduled as follows:

Workshop	Date	Host	Duration
Workshop 1	21-23 July 2025	UTH (Volos)	3 Days
Workshop 2	July 2026	UTH (Greece)	3 Days
Workshop 3	July 2027	UTH (Greece)	3 Days

3.5 Organization of Special Conference Sessions

The TWIN-RELECT project will organize special sessions at well-known conferences to present advanced research on reliable electronics and reinforce discussions on reliability analysis methodologies. For the first session, we are currently exploring the possibility to organize one at **DFTS 2025** (38th IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems), but we are also looking at several alternatives, especially for a second special session in mid-2026 to early-2027.

- **DFTS Special Session on CAD Methodologies for Reliability Analysis**

The first special session proposal will be submitted to the DFT Symposium 2025, focusing on *CAD methodologies for reliability analysis*. The focus will be on exploring how CAD tools can aid in analyzing and enhancing the reliability of designs, forecasting potential failure points, and reducing risks related to fault behavior. Planned contributions include:

1. **UPSET - PredicSEE SET Analysis Framework**

The first paper will examine the use of the PredicSEE tool for generating Single Event Transients (SET) pulses and the UPSET tool for their propagation. PredicSEE will simulate various SET pulses induced by different types of particles, including heavy ions, protons, and neutrons. These pulses will then be analyzed using the Static Timing Analysis (STA)-based SET propagation engine of UPSET to evaluate the reliability of a set of circuit designs under various radiation exposure scenarios. *Leading partner: CNRS.*

2. **Reliability Analysis of Dynamic NNs**

The second paper will examine the impact of permanent faults on the MAC array of an industry-grade deep learning accelerator (NVDLA). A new methodology integrating existing unconnected tools allows for the C++ modeling of the MAC array's synthesized gate-level implementation and supports fast and accurate fault injection campaigns. *Leading partner: UOM.*

3. **BDD-Based Probabilistic SEU Analysis**

The third paper will explore a probabilistic Binary Decision Diagram (BDD)-based framework for the reliability analysis of combinational circuits. The study will focus on the impact of Single Event Upsets (SEUs), which arise from Single Event Transients (SETs) that are captured by the sequential elements of a given circuit design. The proposed framework aims to provide an efficient method for evaluating the reliability of digital circuits affected by radiation-induced soft errors and to evaluate the scalability of BDDs for such applications. *Leading partner: UTH*

- **Second Special Session**

The second TWIN-RELECT special session will be scheduled at a later time, most likely from mid-2026 to early 2027. We are exploring various conferences related to the project's research, and the final date will depend on their timelines:

- *IOLTS. The International On-Line Testing Symposium* is an annual conference focused on the latest research and developments in the area of online testing for digital systems.
- *RADECS. The Radiation and its Effects on Components and Systems Conference* is an international conference focused on the effects of radiation on electronic components and systems.
- *DDECS. The Design and Diagnostics of Electronic Circuits and Systems Conference* is an international conference focused on the design, testing, and diagnosis of electronic circuits and systems.
- *DFT. The IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems* is a leading annual conference focused on the research and development of techniques and methodologies for ensuring the defect tolerance, fault tolerance, and overall reliability of VLSI and nanotechnology-based systems.
- *ISCAS. The International Symposium on Circuits and Systems* is one of the most prestigious events in the field of circuits and systems, covering a wide range of topics related to the theory, design, and application of circuits and systems in various fields, including electronics, communications, signal processing, and more.
- *ISVLSI. The International Symposium on VLSI (Very Large Scale Integration) Design* is a leading conference focused on the latest developments in VLSI design, which covers a wide range of topics related to the design, analysis, and implementation of VLSI systems, including both hardware and software aspects.
- *VLSI-SoC. The Very Large Scale Integration Systems on Chip Conference* is an international conference focused on the design, implementation, and application of System on Chip (SoC) technology.

In addition to papers submitted in the context of the TWIN-RELECT research, these special sessions may host contributions from academic experts and professionals. One main goal is to foster ideas for the design of innovative methodologies and tool flows aimed at enhancing IC functionality.

3.6 Visits to Reputable Research Centers and Labs

The UTH team will visit at least three prestigious research centers as part of the TWIN-RELECT project. These visits will play a crucial role in enhancing networking opportunities, fostering connections with leading institutions across Europe, and exposing UTH staff to top-notch research and development frameworks.

The initial plan is to visit three of the most prestigious centers in Europe, including **ESA** (European Space Agency), **CERN** (European Organization for Nuclear Research), and **DLR** (German Aerospace Center). These institutions provide innovative research and promote technological advancements in electronic reliability. These visits are also expected to contribute significant feedback to the ongoing research conducted within the project. However, to ensure that the visits are productive and beneficial, careful planning will be essential. Below are the identified key requirements and recommendations for making these visits fruitful:

1. *Definition of Specific Goals:* Determine what UTH aims to achieve at each research center. It could be collaboration opportunities, learning about specific technologies, exploration of future research

opportunities, or gaining insight into certain methodologies and practices. Setting clear objectives will guide the visit and ensure it stays focused and valuable.

2. Preparation of Relevant Questions and Topics: UTH should familiarize with the ongoing projects and research at each center beforehand. Understanding their current work will help UTH ask informed questions and engage in more meaningful discussions.

3. Engaging with Experts: UTH should meet with individuals who are directly involved in the areas most relevant to their interests. This could include researchers, engineers, program managers, or project leads.

4. Review of the Practical Aspects of the Visit: guidelines for visitors should be strictly adhered, and regulations carefully met (e.g., confidentiality agreements, security procedures, etc.).

5. Tour of the Facilities and Labs: During the visit, UTH should be able to tour the facilities that are most relevant to their research or area of interest.

6. Follow-up Actions: Documentation of the key takeaways from the visit (e.g., ideas, insights, contact details, and potential collaboration opportunities); establishing networking channels and specific follow-up actions.

Overall, the goal will be not only to gain deeper insights into cutting-edge research and technology but also open the door for future collaborative efforts and knowledge exchange.

3.7 Organization of Final Symposium

The TWIN-RELECT Project's Final Symposium will be hosted by UTH in Greece during the final year of the project, tentatively scheduled for September 2027. This prestigious three-day event will take the form of an international conference, aimed at establishing a prominent reputation within the scientific community. Efforts will be made to secure technical co-sponsorship from renowned professional organizations such as IEEE or ACM, ensuring the symposium's standing and visibility in the field.

In addition to showcasing cutting-edge research papers, the conference will feature a series of keynote lectures delivered by TWIN-RELECT project partners, as well as renowned professors and researchers from leading academic and research institutions. These sessions will foster dynamic and interactive discussions, promoting scientific exchange and providing a platform for the dissemination of the project's groundbreaking outcomes.

The conference will be open to research paper submissions from the global scientific community through a call for papers, which will be issued eight months prior to the event. All submitted papers will undergo a rigorous double-blind peer-review process to ensure high-quality contributions. A distinguished panel of experts from fields such as fault tolerance, dependability, reliability, and testing will be invited to join the technical program committee to oversee the selection process.

Accepted papers will be presented at the conference and published in the electronic proceedings. Additionally, a special issue of a leading scientific journal will be organized to feature extended versions of the top-tier submissions, providing further opportunities for high-impact dissemination.

All logistics of the conference, along with organizational obligations and challenges, including venue selection and catering for coffee breaks and meals, will be coordinated by UTH members. The SMACD conference was held at the Department of Electrical and Computer Engineering facilities last year, proving that the UTH members have experience in organizing successful international conferences.

An alternative option will be explored, consisting of volunteering for the organization of a mainstream conference in the field rather than organizing a new event from scratch. There might be significant advantages in terms of scientific reputation, submission quality, and overall event success. Here are some key benefits of this choice:

1. *Established Reputation and Credibility.* Benefit from an existing conference's established academic excellence and credibility, ensuring higher recognition and trust within the scientific community.
2. *Stronger Submission Pool.* Attract higher-quality and more numerous submissions from global researchers due to the conference's proven reputation.
3. *Enhanced Participation and Networking Opportunities.* Gain access to a broader, engaged audience and valuable networking opportunities with experts, researchers, and industry professionals.
4. *Sponsorship and Financial Support.* Leverage the conference's established reputation to easily secure sponsorships and industry support, ensuring financial backing.
5. *Streamlined Logistics and Resources.* Take advantage of pre-existing infrastructure, such as submission systems and experienced organizers, to reduce planning effort.
6. *Increased Visibility and Dissemination.* Achieve broader international reach and ensure your work is widely disseminated through indexed conference publications.
7. *Reduced Risk.* Minimize the risks associated with organizing a new event by relying on a conference with a proven, successful track record.
8. *Sustainability of the Event.* Ensure long-term continuity and impact for the TWIN-RELECT project by integrating it into an established event, fostering ongoing recognition.

3.8 Schedule of Networking Activities

In the next page a [wrap-up table](#) with key events and tentative dates is reported.

Year	PM	Mon	Scientific Workshops	Business Forums	Webinars	Special Conference Sessions	Visits to Research Centers	Symposium
2025	4	JAN						
	5	FEB						
	6	MAR						
	7	APR						
	8	MAY						
	9	JUN						
	10	JUL	1st Scientific Workshop					
	11	AUG					Visits to at least three research centers	
	12	SEP		1st Business Forum				
	13	OCT			1st Webinar (2D)	DFTS 2025		
	14	NOV						
	15	DEC						
2026	16	JAN						
	17	FEB						
	18	MAR						
	19	APR						
	20	MAY						
	21	JUN						
	22	JUL	2nd Scientific Workshop					
	23	AUG						
	24	SEP						
	25	OCT			2nd Webinar (2D)			
	26	NOV		2nd Business Forum		At Least one special session in another international conference		
	27	DEC						
2027	28	JAN						
	29	FEB						
	30	MAR						
	31	APR						
	32	MAY			3d Webinar (1D)			
	33	JUN						
	34	JUL	3d Scientific Workshop					
	35	AUG						
	36	SEP						Final Symposium

4. Monitoring and Evaluation of Networking Success

4.1 Evaluation of Each Activity and Reporting Outcomes

The networking activities are strategically designed to foster partnerships with key external stakeholders, including industry and academia, while strengthening knowledge exchange and facilitating the transfer of research outcomes into practical applications. These activities aim to establish a solid foundation for future collaborations and support innovative research across both sectors.

The success of each event will be evaluated based on qualitative and quantitative impacts, with key performance indicators (KPIs) focusing on participation levels, stakeholder engagement, and achievement of activity-specific objectives. Interaction levels will provide further insights into event effectiveness, while participant feedback will assess the quality of discussions and the promotion of collaborative opportunities. These indicators will generate data that clearly demonstrate the success of the networking activities in meeting their objectives.

Reports from each event will capture key discussions, results, and potential partnerships. Business forum reports will document discussions and outline future business collaborations. Webinar reports will highlight research information and potential joint projects, while scientific workshop reports will focus on innovative concepts and future research directions. The final symposium report will feature noteworthy scientific papers, presentations, and significant discussions. Special conference session reports will summarize coverage of cutting-edge topics. Lastly, reports from visits to research centers will outline key outcomes and assess the potential for further engagement with these institutions.

Quantifiable KPIs for the success of the networking events are as follows:

Networking event	KPI	Target
Business Forums	overall number of involved companies	at least 8
Business Forums	diversity of stakeholders	Representatives for all categories in section 2.3
Webinars with project partners	number of projects partners come from	at least 3 projects
Webinar with partners of other Twinning projects	number of projects partners come from	at least 3 projects
Scientific Workshops	number of keynote speeches and invited talks from external partners	at least 10 overall invited talks/keynote speeches
Scientific Workshops	total number of talks	at least 30 overall talks

Networking event	KPI	Target
Visits to Research Centers	number of visits	at least 3
Special Sessions	number of special sessions	at least 2
Special Sessions	number of presentations per session	at least 3
Final Symposium	number of submitted papers	at least 15
Final Symposium	number of attendees	at least 50

4.2 Promote Networking Activities Utilizing Project’s Website

The TWIN-RELECT project website, as detailed in Deliverable 6.1 (*Dissemination, Exploitation, and Communication*), will serve as a central hub for promoting the project to various relevant stakeholders. It will play a vital role in boosting networking endeavors by providing comprehensive information about project initiatives and activities.

In particular, the Virtual Knowledge Platform will serve as a dynamic repository, providing stakeholders access to valuable resources from various events. These resources will include presentations from business forums, educational materials from webinars and scientific workshops, research papers from specialized conference sessions, and outcomes from the final symposium. Moreover, it will retain visual and informational content from visits to renowned research centers and laboratories, highlighting key benefits and insights acquired.

Furthermore, TWIN-RELECT's social media channels (*YouTube, Instagram, LinkedIn, and Twitter/X*) will be actively utilized to strengthen the purpose of the Networking Plan. These platforms will serve as key tools for maintaining a broader audience informed about project activities, fostering collaboration, and expanding the online community. Through strategic social media promotion, we desire to engage potential stakeholders, motivate knowledge exchange, and enhance the project's overall impact.

5. Other Networking Activities

The partners will not only actively engage in the planned initiatives, but will also take advantage of every opportunity to further enhance the achievement of the project's goals, maximizing both the outcomes and the impact of the activities. Along this direction, UTH has already engaged in a series of events further amplifying networking opportunities.

1) University of Manchester's Research Staff Conference

The Research Staff Conference is a free annual event designed to support the career development of research staff through a range of workshops, panel discussions, and networking opportunities. Held by University of Manchester in partnership with the University of Salford and Manchester Metropolitan University, the conference provides a unique space for researchers (especially postdoctoral ones) to connect, share insights, and gain practical skills. In the context of the TWIN-RELECT project, postdoctoral staff members from UTH were allowed to attend the 2025 edition of the Research Staff Conference in January 2025, entitled "Futureproof your career - collaboration, development and sustainability". Researchers had a chance to attend valuable sessions to define the next steps of their professional careers, interact with researchers from various scientific fields and exchange ideas. They were offered the chance to expand their network to the UK and to feel part of a wider research community

The event was followed by a brainstorming session with researchers from other EU-funded projects on the following hot topics: (i) design methods for the reliability of ICs, (ii) security and (iii) neuromorphic computing.

2) TAICHIP Winter School

TAICHIP is a HORIZON Europe Twinning Bottom-Up action. Building on Estonian Tallinn University of Technology (TalTech) teams' long-term expertise in the field of computer engineering and its high-level capacity in the domain of diagnostics and testing of nanoelectronic systems, this project aims at establishing in TalTech, with the strong support of the Advanced Partners, the capacity to R&D&I a complete customised AI-chip design flow. TAICHIP Winter Schools are organized annually in winter at TAICHIP project partners' premises. The events primarily target TalTech's and partners' PhD students and researchers, yet they are open to a wider research community. Staff members from UTH were invited to participate to the 1st edition of the TAICHIP Winter School in Frankfurt Oder in February 2025. The event facilitated establishing new collaboration opportunities with partners of the TAICHIP network and laid the groundwork for follow-up joint activities (e.g., the webinar with partners of other Twinning projects). The theme of the Winter School was fully aligned with the focus of TWIN-RELECT: "Reliable Hardware Infrastructure for Upcoming AI Chips".

3) TUZ Workshop

The workshop "Test Methods and Reliability of Circuits and Systems" (TuZ-Workshop) is the most significant German forum for discussing trends, results, and current issues related to testing, diagnosis, and reliability of digital, analog, mixed-signal, and RF circuits. The exchange of ideas is a central focus of the workshop. Under the auspices of IHP Microelectronics, UTH staff members have taken part to the

workshop in February 2025 in Berlin to strengthen their connections in Germany, and Prof. Sotiriou from UTH has even been invited to deliver the opening keynote. This event was also a valuable initiative to present TWIN-RELECT's research targets and interact with leading experts and diverse stakeholders from industry and academia, especially from Germany.

4) Professional networks

As partners of an EU research program, UTH plans to participate in the [Greek Space Tech Forum](#) held in Athens in April 2025, [Si-Cluster](#) Networking Event in June 2025 in Athens, and the [Space Tech Expo](#) in Bremen, Germany, in November 2025. In these events, they will have the opportunity to engage and develop professional and strong relationships with key industry leaders in the field of space technologies and discuss the prospect of potential collaborations. Furthermore, they will enhance their research background by staying exposed to the latest advancements, challenges, and opportunities related to space technology innovations.

6. Conclusion

The Networking Plan outlined in this deliverable emphasizes a strategic approach to fostering long-term collaborations with research institutions, academia, and industry while enhancing UTH's scientific reputation. In particular, all the networking activities aim to facilitate knowledge exchange and create new opportunities for TWIN-RELECT to elaborate joint and innovative initiatives.

The primary objective of UTH and other project partners is to engage with renowned experts and leading organizations in the field of reliable electronic circuits and systems. These networking initiatives, organized and coordinated primarily by UTH, aim not only to inform stakeholders about TWIN-RELECT's research objectives but also to establish a basis for sustainable collaborations that extend beyond the project's duration. Therefore, the networking endeavors, including business forums, webinars, scientific workshops, special conference sessions, the organization of a symposium, and research center visits, will be carefully designed to establish and promote lasting excellence in the field of reliable electronics.

Ultimately, the collaborative and interactive environment fostered through the networking efforts will provide a significant opportunity to promote TWIN-RELECT's objectives and contribute to the growth of UTH's reputation in the field of CAD tools and methodologies for reliable electronic system design. A detailed description of all networking events will be provided in Deliverables D4.3 and D4.4, titled "2nd Report on Networking Events" and "Material from Networking Events," respectively. These are scheduled for submission in month 36 of the project.