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Executive Summary

This deliverable presents the planned dissemination strategy and activities of GenerIoT. First the overall dissemination strategy and goals in accordance with the different phases of the project are presented. Afterwards various dissemination channels are listed. The different channels are mutually supportive, so we have tried to group them according to their nature. Because the different partners have different goals with the dissemination, the overall dissemination goals are considered from two points of view: common project-wide dissemination and partner-specific dissemination. The deliverable is completed by a concrete list of dissemination activities in the first dissemination phase.

Dissemination Strategy and Activities

I Dissemination strategy

The following section presents the overall dissemination strategy, by highlighting the goals of the dissemination in the different phases of GenerIoT. The project is organized in various phases supported by different milestones.

Q01	Q02	Q03	Q04	Q05	Q06	Q07	Q08	Q09	Q10	Q11	Q12
Use cases										Evaluation	
	Requirements & Methodology		Design			Implementation			Integration		
			MS1			MS2			MS3		MS4

MS1 is reached when the use cases are analyzed and requirements on the methodology are specified. With MS2, the technical concepts are specified. Selected feasibility studies are implemented, and the overall implementation is ready for evaluation at MS3. MS4 marks the project's end with a completed evaluation. The dissemination is planned in accordance with these phases.

Q01	Q02	Q03	Q04	Q05	Q06	Q07	Q08	Q09	Q10	Q11	Q12
Attention			Methodology & Concept			Solution			Demonstration		

In the first project phase, the focus of the dissemination was on creating awareness and user interest in the proposed solution of GenerIoT. In the second phase, the GenerIoT methodology is specified, and the dissemination focuses on making the basic **Methodology & Concept** known to a broad audience as well as collecting further application areas or stakeholder needs from outside of the consortia. At the beginning of this stage, the focus is on expert-level dissemination to reach experts of focused dissemination target topics (e.g. the multi-project RISC-V Firmware Workshop including experts from multiple large consortia). The most important dissemination phases start in the **Solution** phase when dedicated GenerIoT solutions are presented and discussed. This is the phase where the later user basis of the GenerIoT methodology and tools is created. The following **Demonstration** phase supports these goals by demonstrating the previously presented solutions.

I.1 Dissemination channels

The following section highlights various dissemination channels that could be utilized within the project. This is the second version of the list, which can still be updated over the period of the project. To get a better understanding the different channels are grouped by their nature.

Asynchronous channel – Internet presence

The most important dissemination channel is certainly the internet. It has an extensive reach and helps to make potential users aware of the GenerIoT methodology. The formats that can be used for online dissemination are manifold: They range from general project information and status updates on project-related websites over scientific and industrial publications, which present in-detail aspects of the GenerIoT methodology to audio-visual media, such as tutorials to ease the application of the GenerIoT tools. Another very important dissemination channel is open-source releases. They provide users with an actual tool chain to apply parts of the GenerIoT methodology.

Channel ID	Description	Example
D.Ac.WS	Public websites	edacentrum.de/generiot
D.Ac.PR	Press releases	pressebox.at
D.Ac.NL	Newsletter, leaflet	ITEA newsletter
D.Ac.SM	Social media posts	LinkedIn, Twitter, Facebook
D.Ac.IP	Industrial publications Product announcement	Article, Whitepaper on partner websites; Trade journals like Elektronik Praxis, Markt und Technik, e&i Elektrotechnik und Informationstechnik
D.Ac.SP	Scientific publications	IEEE, ACM publications; Journals like MDPI Sensors, MDPI Electronics
D.Ac.AV	Audiovisual media	Youtube
D.Ac.OS	Open source releases	GitHub
D.Ac.TH	Bachelor, Master, doctoral thesis	Thesis at a university

Synchronous channel – User events

An important and very valued dissemination channel are meetings with potential users of the GenerIoT approach. Besides a close interaction with the users, that enables the presentation of user-relevant parts of the GenerIoT tooling ecosystem, it also enables direct feedback, which greatly helps to develop a relevant toolchain. The table below lists a collection of various meeting options. It should be noted that both virtual as well as physical meetings are considered, and no further separation is made within the strategy planning. Another aspect that is not separated during strategy planning is the accessibility of the meetings. Meetings can be both public and partner internal. Besides traditional external customers, e.g., tool users, potential GenerIoT users are also located within the partner companies, especially if the GenerIoT methodology should be applied internally to improve current IoT development. During planning, no further separation between external and internal events is made. This results in the following list of dissemination channels for user events.

Channel ID	Description	Example
D.Sc.SC	Scientific conference	DATE, DAC, RISC-V Summit, edaWorkshop
D.Sc.IF	Industrial fairs	Embedded World, HMI

D.Sc.TR	Workshop Hands-on Training	Tool tutorials
D.Sc.CP	Customer presentation Demonstrator presentation	Trade fairs
D.Sc.FE	Events of funding authorities/organizations	ITEA PO days, FFG software days Vienna
D.Sc.LE	Lectures	At universities but also from training activities
D.Sc.OE	Other events	Events of national and ITEA funding authorities

Hybrid channels - Standardization

Another dissemination channel that could be considered is the presentation of the envisioned GenerIoT methodology in standardization bodies. This is not only a one-time event; instead, it is a very long process, most likely outlasting the project runtime. However, even the initial presentation, and discussion with the standardization bodies can result in important input/hints. Because the coordination with standardization bodies ranges from committing initial ideas, to presenting/defending your ideas in person, this channel is tagged as hybrid.

Channel ID	Description	Example
D.Hc.SA	Standardization activity	OMG

I.2 Dissemination goals

In this section potential goals for the dissemination are discussed. Because the different partners have different goals with the dissemination, the overall dissemination channels are considered from two points of view: common project-wide dissemination and partner-specific dissemination.

Project-wide dissemination strategy

The project-wide dissemination strategy focuses on the presentation of the project as a whole. The overall goal is to raise attention for the project. Therefore, the activity covers the general project presentation as well as aggregating the partner contributions (cf. partner-specific dissemination).

The central element of both the project-wide as well as partner-specific dissemination is the project website (Activity 1, D.Ac.WS). News about the project, as well as partner dissemination, will be gathered on the site. Especially an overview of published asynchronous items, such as (scientific) publications, will be given here. Besides the website, different channels will be applied to publish general information about the project. Examples are social media posts when essential events, such as the general assembly or milestone, happened (D.Ac.WS, D.Ac.NL, D.Ac.SM). Other project wide presentations are planned (D.Sc.FE), e.g., for the ITEA PO days.

Partner-specific dissemination strategy

A major part of dissemination will be driven by each partner, especially in the phases Methodology & Concept, Solution, and Demonstration. In the following, the focus points of both the research partner and industrial partner will be discussed. It should be noted that a clear separation of the dissemination activities cannot be made; this is only an estimate of the focus of each group. For example, industry partners also strive for scientific publications and the supervision of theses, but in general, research partners have a higher interest in these channels.

The **research partner** will focus mainly on scientific publications (D.Ac.SP, D.Sc.SC). By publishing the GenerIoT results in the research community, the project and the partner gain visibility. Another benefit is that the community reviews the published as well as submitted

work. In this way, the relevance and acceptance by the research community can be ensured. Besides the external scientific publications, the research partners utilize the state-of-the-art research as an outcome of GenerIoT to support their lectures (D.Sc.FE) with practical, industry-relevant examples. This ensures that the lecture is lively and relevant to practice as well as students can get familiar with the envisioned GenerIoT methodology. This supports another dissemination channel, mainly associated with the research partners, that is the supervision of theses, such as bachelor, master or doctoral theses as well as student jobs (D.Ac.TH). This teaches students the GenerIoT methodology and transfers it indirectly to future, potential users in industry. Another aspect often driven by research partners is the open-source publication (D.Ac.OS) of the tools developed. In the context of GenerIoT it is planned to publish essential parts of the developed tools.

The **industrial partners** can be separated into two groups based on their targeted user group. First, the partners that would like to apply the GenerIoT methodology for their own development. They will focus mainly on internal dissemination, to establish the methodology in the company. The second group will enhance the methodology and prototypical tools during the project and prepare integration into their product after the project. External customers will afterwards be targeted to try out and apply the methods and tools developed. Both will mainly focus on Industrial Publications (D.Ac.IP), Workshop/Hands-on/Training (D.Sc.TR) and especially customer/demonstrator presentations (D.Sc.CP). These dissemination channels enable the partners to raise interest among future users and demonstrate the benefits of the GenerIoT methodology. The industry partners looking for external customers also use public industry fairs (D.Sc.IF) to reach a broader user group. Another aspect that is more in the focus of industry partners than of the research partners, is the usage of their own internal appearance to inform colleagues about ongoing research and results (D.Ac.WS, D.Ac.PR, D.Ac.NL, D.Ac.SM).

As mentioned above, this is only a general allocation of typical dissemination channels to partners; the reality will be much more mixed-up.

II Activities of Phase I (project start-30.09.2023)

This section gives an overview of concrete activities planned or even carried out during the initial project phase.

Activity ID	Description	Date	Type	Responsible Partner
Activity 1	Project Website https://www.edacentrum.de/generiot	01.12.22	D.Ac.WS	Consortium
Activity 2	ITEA4 Website https://itea4.org/project/generiot.html	01.12.22	D.Ac.WS	Consortium
Activity 3	Project leaflet of German project executing agency https://www.softwaresysteme.dlr-pt.de/de/itea.php https://www.softwaresysteme.dlr-pt.de/media/content/01IS22084_Projektblatt_GenerIoT.pdf	01.12.22	D.Ac.NL	Consortium
Activity 4	Partner project side https://www.imd.uni-rostock.de/forschung/projekte/forschungsprojekte/generiot-bmbf/	01.12.22	D.Ac.WS	URO
Activity 5	Article on partner website https://www.granlund.fi/uutinen/itea4-tutkimushankkeessa-ideoidaan-iot-mittareita-tuulivoimaloiden-yllapitoon/	02.03.23	D.Ac.IP	GRA
Activity 6	Wind Finland 2023, Oulu, Finland. https://www.windfinland.fi/wind-finland-oulu-2023/	02.03.23	D.Sc.IF	GRA
Activity 7	Workshop, Sisäilmastoseminaari 2023, Helsinki, Finland. Vesa Vihanninjoki, Jatkuvatoimisten ilmanlaatumittausten TVOC-viitearvojen taustoittaminen ja käyttökelpoisuuden arviointi (in Finnish). https://www.sisailmayhdistys.fi/Tapahtumat/Sisailmastoseminaarit/Sisailmastoseminaari-2023	12.03.23	D.Sc.IF	GRA
Activity 8	Wind Finland Offshore 2023, Helsinki. https://www.windfinland.fi/wind-finland-offshore-2023/	21.-22.03.23	D.Sc.IF	GRA
Activity 9	Partner project side https://loopshore.com/itea-generiot-hanke-on-kaynnissa/	27.03.23	D.Ac.WS	LOOP
Activity 10	Regulatory workshop related to Reserves and Balancing Power markets. GenerIoT project was introduced and requirements validated with national agency of Transmission System Operator (Fingrid).	31.04.23	D.Sc.CP	TIETO
Activity 11	Vaasa Energy Week 2023, Vaasa, Finland. https://www.energyweek.fi/	04.05.23	D.Sc.IF	GRA/LOOP
Activity 12	Master's Thesis, Vesa Vihanninjoki, Real-Time Indoor Environment Quality Assessment of Sports Facilities. http://urn.fi/URN:NBN:fi:aalto-202306183990	11.05.23	D.Ac.TH	GRA
Activity 13	Twitter post on the second general assembly https://twitter.com/Tietoevry/status/1671512153138896900	21.06.23	D.Ac.SM	TIETO
Activity 14	LinkedIn Post https://lb.linkedin.com/company/edacentrum-gmbh?trk=similar-companies_org_title	21.06.23	D.Ac.SM	edacentrum
Activity 15	TUM Industry Day https://wiki.tum.de/display/tueisecevents/CoC+Industry+Day+2023?desktop=true&macroName=confiform-entry-register	21.07.2023	D.Sc.FE	TUM
Activity 16	State-of-the-Art Report, Kanwar Zulfiqar, Esko Sistonen, Structural Health Monitoring of Wind Turbines, Confidential.	1.9.2023	D.Ac.IP	GRA
Activity 17	ITEA PO days	12-13.09.23	D.Sc.FE	Consortium
Activity 18	The German-Finnish Chamber of Commerce interviewed Markus Jakobsson from Unikie about cybersecurity. Project and project activities were presented.	19.9.2023	D.Ac.WS D.Ac.SM	UNI

III Activities of Phase II (01.10.2023-30.06.2024)

This section gives an overview of concrete activities planned or carried out during the second project phase.

Activity ID	Description	Date	Type	Responsible Partner
Activity 19	RISC-V Firmware (RVF) Multi-Project Workshop in Tampere, Finland. https://www.edacentrum.de/rvf	2.-4.10.2023	D.Sc.TR	TAU, FZI, TUM, IFX, SSCE
Activity 20	Contribution to Wind Finland 2023, Kaapelitehdas, Helsinki. https://www.windfinland.fi/wind-finland-2023/	4.10.2023	D.Sc.TR	GRA
Activity 21	Regulatory workshop related to Reserves and Balancing Power markets. 2nd round of GenerIoT requirements validated with national agency of Transmission System Operator (Fingrid).	31.10.2023	D.Sc.CP	TIETO/STJ
Activity 22	Presentation of the project at the productronica 2023 in Munich, Germany: https://productronica.com/en	14 – 17.11.23	D.Sc.IF	BEE
Activity 23	Youtube Video about Minimal Test and Simulation Demonstrator (finsish)	1.04.2024	D.Ac.AV	EMO
Activity 24	We presented the project on the booth of RAZ at the Embedded Software Engineering Congress (ESE), Sindelfingen, https://ese-kongress.de	5.-7.12.23	D.Sc.IF	RAZ/EMO
Activity 25	Presentation of GenerIoT-Methodology at FZI Open House	08.02.2024	D.Sc.CP	FZI
Activity 26	Paper "A Model-Driven Architecture Approach to Efficient and Adaptable Software Code Generation" at MBMV Workshop on Methods and Description Languages for Modeling and Verification of Circuits and Systems, Kaiserslautern.	14.-15.2.2024	D.Sc.SC	IFX and others
Activity 27	We presented the project on the booth of RAZ at the embedded world 2024, Nuremburg, https://www.embedded-world.de	9.-11.4.24	D.Sc.IF	RAZ/EMO
Activity 28	Contribution to RISC-V Summit 2024 in Munich	24.-28.06.2024	D.Sc.SC	IFX and others
Activity 29	Advertisement for student research projects regarding the implementation of IoT sensor systems.	12.03.2024	D.Ac.TH	FZI
Activity 30	Keynote at EDCC entitled 4th Generation HW-Design-Formalisms", published as "" in https://arxiv.org/abs/2404.05599"	9.4.2024	D.Sc.SC	IFX
Activity 31	Presentation of the project at the embedded world 2024 in Nuremberg, Germany: https://www.embedded-world.de/en	09. – 11.04.24	D.Sc.IF	BEE
Activity 32	LinkedIn Post: https://www.linkedin.com/posts/esko-sistonen-92b15654_s%C3%A4hk%C3%B6talo-shm-koherent-activity-7198329626476040192-oqUd?utm_source=share&utm_medium=member_desktop related to Structural Health Monitoring for Indoor Environment Technology (GRA-UC-3)	15.06.2024	D.Ac.SM	GRA
Activity 33	Poster presentation at the TUM Industry Day	21.06.2024	D.Sc.FE	TUM
Activity 34	Extended abstract and poster presentation during the RISC-V Summit Europe	25.-27.06.2024	D.Ac.IP, D.Sc.SC	TUM
Activity 35	Presentations with Minimal Test and Simulation Demonstrator including Requirements Engineering for different Companies: BMW, Liebherr, Sparx Systems, Ancud, Shanghai Shibei, Nanjing Delegation, Physical. Instrumente, Dolphin, ST Engineering, Bosch Syntegon, Push4Impact, Infoteam, Ferag AG, KEB, Lenze, Knowtion, Knorr Bremse, Meiler Kipper, Ymer, MS-Control, Multivac, Emerson, Hilscher, General Electric, Cap Gemini invent	1.10.2023-30.06.2024	D.Sc.CP	EMO
Activity 36	Presentation of the project on the booth of Bayern Innovativ at the Hannover Fair 2024, Nuremburg, https://www.hannovermesse.de/de/landingpage/img/	22.04.24 - 26.04.2024	D.Sc.IF	EMO

IV Activities of Phase III (30.06.2024-31.03.2025)

This section gives an overview of concrete activities planned or carried out during the third project phase.

Activity ID	Description	Date	Type	Responsible Partner
Activity 37	GitHub Repository for grismo VS Code syntax extension and modeling language tools and code generators for IoT-PML with graph visualization.	2023-2025	D.AC.OS	FZI, TAU
Activity 38	Benchmarking tools, customizations and Ansible scripts for benchmarking micro runtimes on RaspberryPi3, ESP32, and nRF52 devices GitHub repository collection	2023-2025	D.Ac.OS	TAU
Activity 39	Master's Thesis, Kanwar Zulfiqar related to GRA-UC-1 Structural Health Monitoring (SHM) for wind power stations.	31.07.2024	D.Ac.TH	GRA
Activity 40	Bachelor projects related to Digital Twins of IoT Energy Monitoring System	July 2024	D.Ac.TH	ISEP
Activity 41	ITEA PO days	10.-12.09.2024	D.Sc.FE	Consortium
Activity 42	Bachelor projects related to simulator and DSL of IoT Energy Monitoring System	September 2024	D.Ac.TH	ISEP
Activity 43	Presentation at the CODES + ISSS conference during ESWEEK	30.09. - 03.10.2024	D.Sc.SC	TUM
Activity 44	Preparation of Multi-project RISC-V Firmware Workshop (Follow-Up activity of highly successful workshop), in Munich	September/October 2024	D.Sc.TR	FZI, TUM, IFX, TAU, SSCE
Activity 45	Poster presentation during "Infineon meets University 2024"	23.10.2024	D.Sc.IF	TUM
Activity 46	Paper on the IoT Energy Monitoring System Demonstrator	Oct 2024	D.Sc.SC	ISEP
Activity 47	Multi-project RISC-V Firmware Workshop (Follow-Up activity of highly successful workshop), in Munich	End Oct 2024	D.Sc.TR	IFX, TUM, TAU
Activity 48	Presentation of the project at the electronica 2024 in Munich, Germany: https://electronica.de/en/	12 – 15.11.24	D.Sc.IF	BEE
Activity 49	We will present the project on the booth of Advantech at the Smart Production Solution 2024, Nuremburg, https://https://www.sps.mesago.com/nuernberg/de	12.11.2024 - 14.11.2024	D.Sc.IF	EMO
Activity 50	Lecture on ESE Congress https://ese-kongress.de Title: Simulation-based development and testing for machine controls Subtitle: Do modern development concepts deliver what they promise?	03.12.2024, 16:45 - 17:25	D.Sc.SC	EMO
Activity 51	Review article analyzing DevOps and model-based development state-of-art for IoT	Planned end of 2024	D.Ac.SP	TAU
Activity 52	We will present the project on our booth at the Embedded Software Engineering Congress (ESE), Sindelfingen, https://ese-kongress.de	Planned December 2024	D.Sc.IF	RAZ
Activity 53	Participation in Electronica trade fair	2024	D.Sc.IF	UNI
Activity 54	Master's Thesis, Kanwar Zulfiqar related to GRA-UC-1 Structural Health Monitoring (SHM) for wind power stations.	90 % Ready	D.Ac.TH	GRA
Activity 55	Journal Article about VP-Framework	2024 - 2025	D.Ac.SP	URO
Activity 56	Open-source release of GitHub repository containing software performance simulation environment	2024/2025	D.Ac.OS	TUM
Activity 57	A report article or Master's thesis and/or Bachelor's thesis on researching the effects of utilizing Micro runtimes on resource-constrained IoT devices.	Planned 2024-2025	D.Ac.SP Or D.Ac.TH	TAU

Activity 58	Attending and make presentation to the international wind energy conference https://www.winterwind.se/	February 2025	D.Sc.SC	GRA
Activity 59	We will present the project on our booth at the embedded world 2025, Nuremburg, https://www.embedded-world.de	Planned March 2025	D.Sc.IF	RAZ
Activity 60	Publication of scientifc paper in IEEE TCAD ESWEEK special issue	Planned early 2025	D.Ac.SP	TUM
Activity 61	Journal Article about using AI for Anomaly Detection in the context of IoT-Devices	2025	D.Ac.SP	SCS
Activity 62	Conference paper and presentatiop on graph-based system modellling	2025	D.Ac.SP	FZI
Activity 63	Article on modeling CI/CD pipelines using IoT-PML or SysML	2025	D.Ac.SP	TAU, FZI
Activity 64	Participation in CES tech event	2025	D.Sc.IF	UNI
Activity 65	Preparation of Multi-project RISC-V Firmware Workshop (Follow-Up activity of highly successful workshop) potentially in Vienna	Tbd 2025	D.Sc.TR	IFX, TUM, TAU
Activity 66	pressebox.at - Description of GenerIoT project including topics like technical innovation, consortium and duration	Planned	D.Sc.PR	SSCE