Robotics4EU

Boosting Wider Adoption of Robotics in Europe

Deliverable 3.1

Methodology of the community building and knowledge transfer events

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D3.1

Methodology of the community building and knowledge transfer events

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1. Executive Summary

The aim of this Deliverable is to present the methodology that has been developed for the purposes of organization and implementation of knowledge sharing events, as well as activities that aim at empowering the responsible robotics community within the context of Robotics4EU project. Towards this end, under Work Package 3 of the project, a series of online and physical workshops - as well as a final high-level stakeholder forum - will be organized and implemented by the partners of our consortium within the first two years of the project. The methodology that has been developed and is presented in this document aims at serving as a "how-to" tool for the partners that are involved in the implementation of above-mentioned events and activities by providing the necessary guidance and assistance in regards to the overall approach of this endeavour, the objectives, expected outcomes and planning and scheduling of the respective events themselves.

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2. Introduction

This document constitutes the outcome of the task T3.1 "Methodology of the community building and knowledge transfer events", which is part of WP3 "Empowerment of responsible robotics community" of the Robotics4EU project. The aim of this document is to present the methodology that has been developed to meet the needs and requirements of the organization and implementation of the knowledge sharing events and activities that have been planned during the first two years of the project.

The general aim of WP3 is to broaden and empower the responsible robotics community through the transfer of knowledge and sharing of good practices regarding non-technological aspects of robotics (ethical, legal, socioeconomic, data protection, privacy, cybersecurity, etc.) and their impacts. Towards this end, a series of online and physical workshops, as well as a high-level stakeholder forum, will be held. More specifically, 4 online and 1 physical workshop will be organized and implemented for each one of the 4 priority areas addressed within Robotics4EU, namely healthcare, agri-food, inspection and maintenance of infrastructure, and agile production (20 workshops - online and physical - in total).

To ensure uniformity and consistency amongst all of the above-mentioned events, we developed the presented methodology as a tool of guidance to all the involved consortium partners. The methodology is presented and elaborated within this document under the following scheme:

- **Approach and action plan** – An overall description of the approach where the strategy that will be followed, the objectives and the outcomes of the events, the thematic coverage of the events, the targeted participant groups, and the overall planning and scheduling of the events are thoroughly described;

- **Online Workshops / Physical Workshops / Stakeholder Forum** – Three different sections, where details on each form of event are provided (preparation steps, technical setup, detailed description of the phases and agendas that events are proposed to follow);

- **Ethics and compliance** – Relation of the activities described in D3.1 with ethical and data protection procedures and requirements set out in the project;

- **Conclusions** – Overview and key conclusions of the document;

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- **Annexes** – A set of additional documents and templates relevant for the organization of events (forms for participant consent, code of conduct, registration, and event outcome reporting).

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3. Approach and action plan

3.1. Overall approach

The outcome of this deliverable – the methodology of the community building and knowledge transfer events – is part of the general goal of WP3, which is the empowerment of the responsible robotics community. In turn, this goal is constituent to the overall objective of Robotics4EU, which is to ensure a more widespread adoption of (AI-based) robots through the implementation of the responsible robotics principles amongst the robotics community to maximize societal acceptance of the robotics solutions in application areas.

To achieve an effective and productive process of knowledge sharing and community building, and to increase the potential impact of Robotics4EU, we have developed a series of different kinds of events to be held within the above-mentioned 4 priority areas of the project. In more detail, there will be 4 online workshops and 1 physical workshop held per priority area, followed up by a cross-sectoral high-level stakeholder forum. Thus, a total of 21 events will be organized and held within the first two years of the project. These events will support the debate around cutting-edge issues, ideas for practical solutions, and establishment of networks that will promote and enable wider adoption of the principles of responsible (AI-based) robotics.

The currently presented methodology will serve as a guideline to all involved consortium partners, so we can ensure uniformity and consistency during the organization and implementation of the above-mentioned events and, therefore, a high-level quality of results. The proposed joint approach will increase the impact of Robotics4EU mainly amongst the stakeholders involved in events or directly affected by our project, as well as - to a lesser extent - amongst the general public regarding its level of robotics solution acceptance and adoption. Towards this end, our methodology revolves around two key principles that, we believe, can deliver the desirable results - *Collaboration* and *Interactivity*.

Collaboration represents a two-way approach that we have established regarding the engagement between Robotics4EU (its consortium, its content, its activities, etc.) and all the prospective interested parties (developers, researchers, implementers, end-users, policy makers, etc.). Our strategy is focused - on one hand - on raising awareness,

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sharing good practices, transferring knowledge, capacity and community building through consultation, etc., but - on the other hand - the identification of the most demanding challenges of each industrial domain, and the issues that arise regarding the societal acceptance and adoption of robotics are developed through the feedback that we collect and evaluate from the targeted stakeholders (see section 3.3).

Interactivity represents our approach to communicating our messages to the potential interested parties. We want to ensure that we can hold events that can exceed the unidirectional engagement model of "teacher and student", but that could on the contrary actively engage the event participants in co-creation sessions and multilateral knowledge sharing. For that reason, we have incorporated into the methodology a hybrid event model that balances "educational" activities (such as real time demonstrations of good practices from operational environments), while participants will be actively engaged in shaping the contents of the workshops through brainwriting and break-out room sessions (see section 4.2).

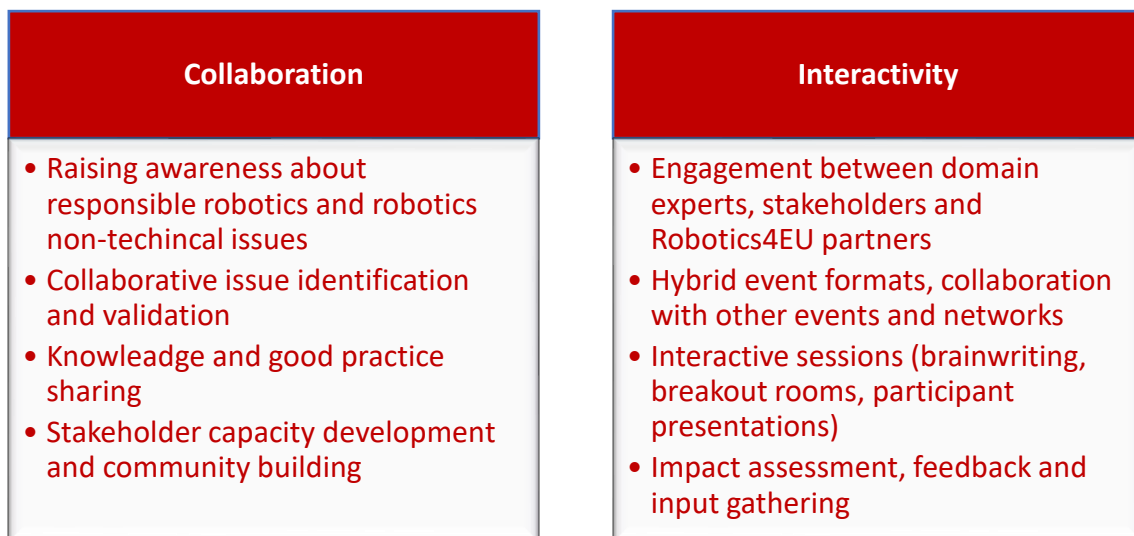| Collaboration	Interactivity
• Raising awareness about responsible robotics and robotics non-techincal issues • Collaborative issue identification and validation • Knowleadge and good practice sharing • Stakeholder capacity development and community building	• Engagement between domain experts, stakeholders and Robotics4EU partners • Hybrid event formats, collaboration with other events and networks • Interactive sessions (brainwriting, breakout rooms, participant presentations) • Impact assessment, feedback and input gathering

Figure 1 – Approach to community building and knowledge sharing events

3.2. Objectives and outcomes

The table below (Table 1) presents the objectives of the planned events and justifies the development of the methodology presented within this deliverable.

Table 1 – Objectives of knowledge transfers and community building events

Objective	Description
To raise and broaden awareness regarding non-technological aspects of robotics	The aim of the events is to raise awareness to the ongoing discussions about issues in robotics that are not always directly related to the practical aspects of the industry, but to the issues that are non-technological. These issues are tightly connected to the level of general societal acceptance and responsible adoption of robotics, such as legal, ethical, socio-economic issues, etc.
To enable knowledge transfer and good practice sharing	The purpose of workshops is to elevate the knowledge of participants through the interaction with experts in the particular domains, as well as amongst each other. The exchange of good practices amongst participants is to be supported through brainwriting and break-out room sessions, followed up and built upon with knowledge provided by participating experts.
To establish ecosystems that will support wider adoption of the principles of responsible (AI-based) robotics	Besides knowledge sharing, the events will be a motive for the participants to engage with colleagues and stakeholders from different sectors and areas of expertise, to build the necessary collaborative ecosystems that could promote and enable the adoption of the principles of responsible robotics in their respective domains.
To validate and collect stakeholder feedback on the maturity assessment model (WP1)	The events are also meant to serve as a practical and instrumental part in the overall Robotics4EU project, by enabling validation and feedback gathering for robotics stakeholders on the maturity assessment model

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developed within WP1 and improved upon through the various activities of the project.

During the community building and knowledge exchange events, the following activities (Table 2) will be performed as integral parts of each (online and physical) workshops.

Table 2 – Activities during community building and knowledge sharing events

Activity	Description
Impact assessment	A two-part survey, via questionnaires that will be distributed to the participants. A questionnaire at the beginning of the events will allow participants to position themselves in regards to non-technological aspects of robotics; one at the end of the event will assess the impact of the event on their views.
Identification and validation of cutting-edge issues	Through the brainwriting session all participants will be involved in the process of proposing and identifying the most important issues and challenges related to the theme of the workshop. The validation and possible expansion of these issues will follow through the experts' presentations and discussions.
Good practice gathering	Through the break-out room sessions the participants, under the guidance and assistance of the appointed moderator, will share their experiences on good practices regarding the adoption of robotic solutions in their respective areas.
Contribution collection on maturity assessment	During the break-out room sessions the participants will deploy the principles of the maturity assessment

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model and SRL improvements	model and the SRLs to evaluate their own examples of good practices and by the end of this process they will be able to provide feedback and suggestions regarding the improvement of both the practices and the assessment model.

The table below (Table 3) presents the relevant Robotics4EU KPIs in regards to the targeted number of events and number of participants partaking in them.

Table 3 – Key Performance Indicators (KPIs) relevant to the activity

Type of event	KPIs
Online Workshops	● 4 online workshops organized per 4 priority areas - 16 online workshops in total ● At least 50 participants in each online workshop - at least 800 participants in total
Physical Workshops	● 1 physical workshop organized per 4 priority areas - 4 physical workshops in total ● At least 30 participants in each physical workshop - at least 120 participants in total
Stakeholder Forum	● 1 high-level cross-sector Stakeholder Forum organized ● At least 100 participants in the Stakeholder Forum
TOTAL	● 21 community building and knowledge transfer events organized in total ● At least 1020 total participants in the events

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3.3. Thematic coverage

In order to avoid repetition and to ensure that the planned workshops cover the broadest possible spectrum of challenges and issues regarding non-technological aspects of robotics acceptance and adoption, an approach was chosen to focus each event around a broader theme. More specifically, the themes – a general topic around which each workshop is expected to revolve – and the relevant issues that are tightly connected to each theme have been identified and incorporated in the foreseen community building and knowledge sharing event planning process. The themes are also based on the feedback received from relevant stakeholders of each priority area (healthcare, agri-food, inspection and maintenance of infrastructure and agile production), policy makers and the general public, presented within a previous deliverable D1.2 "Robotics community, citizens and policy makers needs analyses".

Each event will be focused on a specific theme, through which particular issues related to responsible robotics adoption will be reached and discussed by participating stakeholders. The table below (Table 4) presents the identified event themes per priority area and their relation to non-technical issues areas. The themes are to be considered as preliminary, with their formulations open to change by partners leading the priority area before event announcement and promotion.

Table 4 – Event thematic coverage and related issue areas

Priority Area	Foreseen event themes	Event format	Non-technical issue areas related to the theme
Healthcare (lead partner – NTNU)	Fear of technological unemployment	Online workshop #1	Socio-Economic Issues
	Quality in roboticized healthcare	Online workshop #2	Legal Issues; Education and Engagement Issues

	Robots in health, involving multiple stakeholders	Online workshop #3	Data Issues, Legal Issues
	Ethical & legal considerations for robots in health	Online workshop #4	Ethical Issues; Data Issues; Legal Issues; Education and Engagement Issues
	A robot taking care of you?	Physical workshop	Socio-Economic Issues; Engagement and Education Issues
Agri-food (lead partner – AFL)	Financial vs. Environmental sustainability: leveraging agri-food robotics	Online workshop #1	Socio-Economic, Ethical, Legal Issues
	Robots as data miners: monetization, privacy and security	Online workshop #2	Socio-Economic, Ethical, Data Security, Legal Issues
	Perceptions and social acceptance of robotics in agri-food	Online workshop #3	Socio-Economic, Ethical, Education and engagement issues
	Agri-food robotics adoption and change (in collaboration with industry partner)	Online workshop #4	Socio-Economic, Ethical, Education and engagement issues

	Policy issues in agri-food robotics	Physical workshop	Socio-Economic, Ethical, Data Security, Legal, Education and engagement issues
Inspection & Maintenance (lead partner – CE)	Autonomy and AI solutions in I&M robotics. Industry and research. Transformation from autonomy to AI.	Online workshop #1	Socio-Economic, Legal, Data Security and engagement issues
	Social acceptance of M&I of infrastructure robotics.	Online workshop #2	Socio-Economic, Ethical and engagement issues
	Introduction of SMEs to the I&M of infrastructure robotics in Europe	Online workshop #3	Socio-Economic, Ethical, Education and engagement issues
	Ensuring a more widespread adoption of I&M robotics in infrastructure	Online workshop #4	Socio-Economic, Legal and engagement issues
	Policy issues in I&M of infrastructure robotics	Physical workshop	Socio-Economic, Ethical, Data Security, Legal, Education and engagement issues
Agile production	Industry 4.0, Innovation and training for future generations	Online workshop #1	Data Security Issues

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(lead partner – Robotex)	Robotics Community building	Online workshop #2	Socio-Economic, Legal, Education and engagement issues
	Development of the digital state	Online workshop #3	Socio-Economic, Ethical, Data Security, Legal, Education and engagement issues
	Job market impact	Online workshop #4	Socio-Economic, Ethical, Education and engagement issues
	AI industry - process automation in industry. Transferring automation to AI	Physical workshop	Data Security Issues
Stakeholder Forum (lead partner – LNE)	The forum will include all the above-mentioned themes as an event that will serve as a conclusion of all the previous workshops	Physical forum	Socio-Economic, Ethical, Data Security, Legal, Education and engagement issues

3.4. Event planning and scheduling

The planned events are scheduled to be implemented within the first two years of the project. The events are foreseen to be organized and held in 4 main stages:

- Stage 1 – Targeting to hold at least 2 online workshops per priority area in 2021;

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- Stage 2 – Holding the remaining online workshops per priority areas in the beginning of 2022;

- Stage 3 – Holding physical workshops, preferably, in 2022 and after online workshops of particular priority areas have been finalized;

- Stage 4 - Organizing and hosting the cross-sectorial high-level Stakeholder Forum in mid-2022 as a final event of the workshop series.

The table below (Table 5) presents an overview of the foreseen event schedule per priority area.

Table 5 – Estimate schedule of online and physical workshops

Priority area and lead partner	Event type	Estimate workshop date									
		M9 Sep'21	M10 Oct'21	M11 Nov'21	M12 Dec'21	M13 Jan'22	M14 Feb'22	M15 Mar'22	M16 Apr'22	M17 May'22	M18 Jun'22
Healthcare - NTNU	Online #1	■									
	Online #2			■							
	Online #3						■				
	Online #4							■			
	Physical									■	
Agri-food - AFL	Online #1		■								
	Online #2			■							
	Online #3						■				
	Online #4							■			
	Physical								■		
Inspection & Maintenance - CE	Online #1			■							
	Online #2				■						
	Online #3						■				
	Online #4							■			
	Physical									■	

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Agile production - Robotex										
Online #1			■							
Online #2					■					
Online #3							■			
Online #4									■	
Physical			■							

To ensure a stable and effective workflow regarding the planning, organization and implementation of the events, an internal coordination work group, led by AFL, will be established with members from each involved partner that will be responsible for coordinating and leading the events in each of their particular domains, while maintaining open communication with the rest of the consortium.

The table below (Table 6) presents the responsibilities that each Robotics4EU consortium partner has in regards to the organization, coordination and implementation of planned events.

Table 6 – Robotics4EU partner roles and responsibilities

Partner	Role and responsibilities
AFL	Leader of WP3, coordinator of community building and knowledge sharing events, and leader of the agri-food robotics priority area events. Besides overall coordination of the joint efforts by project partners, AFL will also provide partners with technical assistance in online workshop setup and hosting.
NTNU	NTNU will organize and hold online and physical workshops within the healthcare robotics domain, as well as contribute to the promotion of events held within other priority areas.
CE	CE will organize and hold online and physical workshops within the inspection and maintenance robotics domain, as well as contribute to the promotion of events held within other priority areas.

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ROBOTEX	ROTOTEX will organize and hold online and physical workshops within the agile production robotics domain, as well as contribute to the promotion of events held within other priority areas.
LNE	LNE will organize and hold the cross-sectorial high-level Stakeholder Forum, as well as contribute to the promotion of events held within the separate priority areas.
DBT	DBT will contribute to the promotion of the planned events, especially regarding outreach to national stakeholders.
LOBA	LOBA will contribute to the promotion of the planned events, especially regarding outreach to national stakeholders.

3.5. Promotion and recruitment

To reach the objectives, increase the impact of planned activities, and to ensure that the events will attract as many prospective participants as possible, we have identified the following target groups. Stakeholders within these groups will be reached out through dissemination and communication actions. The following table (Table 7) outlines and describes the main relevant target audiences and approach for their involvement in the planned online and physical events.

Table 7 – Target audiences of community building and knowledge exchange events

Target Audience	Description	Involvement strategy
European robotics	Robotics solutions developers and providers	Direct contact through the mailing lists that the consortium partners have through their involvement in relevant projects and initiatives, as

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community stakeholders		well as, in activities and tasks related to the Robotics4EU context.
Policy makers	National and European legislative and regulatory institutions	Direct communication with agencies and stakeholders on national and international level through the network and the ecosystems built through the partners' involvement in related projects and initiatives.
End-users of robotics solutions	Any possible customer that would be interested in the implementation of robotic solutions in the 4 main domains included in the project (healthcare, inspection and maintenance of infrastructure, agri-food, and agile production)	Multi-layered approach through the official communication channels of the project (website, social media accounts, etc.) and the respective ones of each partner individually, putting in use, thus, both the project's network and the ecosystems built individually by each of the partners.
Academia and R&D stakeholders	Undergraduate and postgraduate students, researchers and academic personnel	Targeted approach through our collaborations with the academia and R&D stakeholders. We will use our social network channels, publications of our current work and results of the project, targeted panel discussions, etc.

To successfully promote the foreseen events among targeted stakeholders, multiple communication channels and means will be used.

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It is important to increase the visibility both within the national contexts of respective Robotics4EU partners, as well as at an international level. Towards this end, it is necessary for the consortium partners to promote the events amongst our existing networks, as well as to use our communication tools to reach potential participants that are not directly connected to Robotics4EU.

On an internal level, the most efficient way to communicate our scheduled events with our current network is through emails. Each partner can use the mailing lists that we - as a consortium - have established and been using for a variety of different activities related to the project and approach the respective contacts with the aim of sharing with them all the necessary information of the events (the goals, the location – in case of a physical event –, the date, the topic, the keynote speakers, etc.).

On an external level and for a broader reach to potential participants, both the partners of the consortium individually and the Robotics4EU consortium as a whole, will use the existing communication tools and channels to promote the events. At least two months before each event, the project's website will be updated by providing the necessary information for the respective upcoming event.

The same information will be posted and shared via the project's social media channels (Facebook, Twitter, LinkedIn) and each partner's as well, building, thus, a community potentially interested in our events early enough. Meanwhile, our individual social media channels will be updated with any relevant to the events posts, to ensure that the topic remains topical and maintains the interest throughout the organizational process of the event.

4. Online workshops

The majority of the scheduled events – 16 out of the 21 in total – will be held in an online workshop format. During these workshops, challenges and issues regarding the non-technological aspects of robotics will be addressed in the 4 priority areas of the Robotics4EU project. More specifically, each leading partner – NTNU, AFL, CE, Robotex – will organize and implement 4 online workshops per priority area during the first two years of the project (in 2021 and 2022).

The workshops will be thematically-centred (see section 3.3) and based on the feedback received from previous engagement with relevant stakeholders, in order to ensure that the planned event themes are relevant to the needs, requirements and interests in the robotics industry and wider community. The events will also aim at utilizing a hybrid presentation model – combining an online event with streaming from an onsite location (robotics use case demonstration, virtual visits, meetings with experts, onsite participant involvement, etc.) – and will include brainwriting sessions to ensure that the expected outcomes of the online workshop will be a result of an interactive and collaborative process.

The next section presents the preparation process, the online tools that will be used and a detailed format of the online workshop.

4.1. Preparation and setup

To ensure a productive and effective event and to optimize its potential impact amongst the participants, an internal coordination work group will be established, led by AFL and consisting of members from every involved partner of the consortium. Amongst the responsibilities of this work group will be all the necessary preparatory actions before the actual implementation of the online workshops, in regards to their organization, content and technical setup.

Content-wise, partners leading the events in their particular domains will be responsible for finalizing each event's agenda and to proceed to its announcement, preferably at least two months before the actual event. Towards this end, both the coordination work group and the entire consortium will utilize their current ecosystems to attract the necessary key-note speakers/experts to deliver the presentations involved in the agenda

of the events, and moderators to interact with the participants on subjects relevant to the workshop's priority area and theme.

Part of the event's preparation is for the coordination work group to ensure that it will be able to provide the necessary number of moderators, depending on the foreseen number of participants and the respective break-out room groups that will be formed during the event. To achieve the above, the involved partners of the consortium will establish a "moderator lending/swapping" scheme amongst themselves, by providing the needed number of moderators to partners that might not have the sufficient human resources to deliver the expected results, as long as the circumstances allow it - mainly regarding potential language barriers.

Regarding the technical setup of the online workshops, the online platform MeetButter (https://meetbutter.io/) has been identified as the most suitable toolset for the purpose and the aims of online workshops. The MeetButter platform meets the needs and requirements of the planned online events, since it provides features such as video calls, interactive survey tools, open-closed questions, customized break-out groups, online polls, whiteboards for brainwriting sessions, etc. - all integrated into a single online workshop environment with high convenience both for the hosts and participants alike. The functionalities of the platform have been tested and will be customized by AFL, in accordance to the planned activities and content of the events. In cases where an online workshop might be held as part of a bigger event with its own technical setup, the content of the online workshop will be customized to meet the capabilities of the used online event tools, but will be necessitated to keep a similar agenda and activity implementation approach.

Finally, an integral part of the preparation of the events is their promotion. Towards this end, all partners of the Robotics4EU consortium will be involved in attracting participants amongst their current networks and beyond (see section 3.5.). For this reason, partners leading workshops within their priority areas are encouraged to connect their workshops with other relevant events (conferences, etc.) from similar projects and activities that might attract common target audiences.

4.2. Online workshop model agenda

The online workshop model agenda is a proposed joint event structure for all online workshops, irrespective of their priority area. The goal of setting up a joint model agenda is to ensure that all online workshops will implement the same activities, reach compatible results and, collectively, will contribute to achieving the objectives of the community building and knowledge transfer events in a coordinated manner.

The proposed model agenda consists of an event (online workshop) held in three phrases, each roughly 1 hour in duration (total online workshop duration – approx. 3 hours). Partners are encouraged to follow the model agenda as much as possible, but are also enabled to make changes to its agenda, activities and their duration in accordance to the context of a particular workshop, as long as the outcomes of the said workshop can be considered compatible with the overall approach implemented by other Robotics4EU partners.

The following figure (Figure 2) presents an overview of the proposed online workshop model agenda, while each phase and its constituent activities are described in detail in the section below.
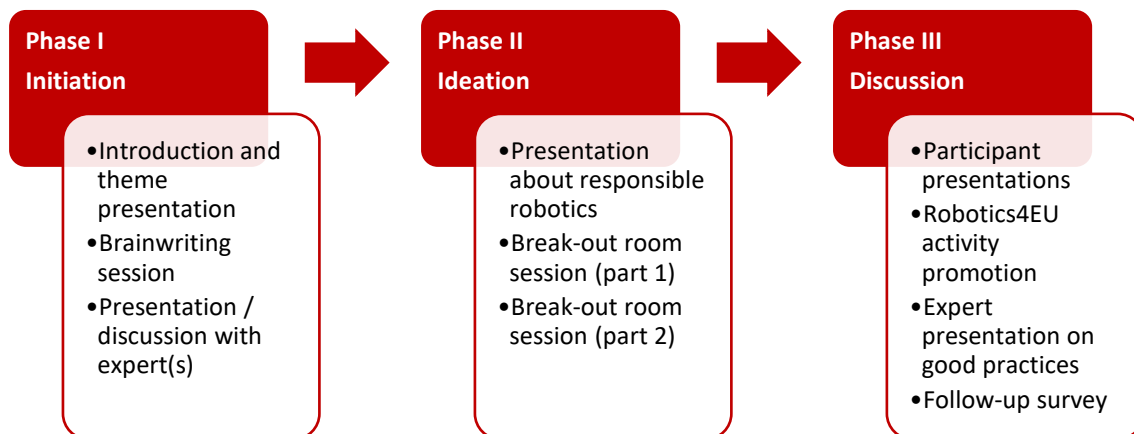
Phase I
Initiation

- Introduction and theme presentation
- Brainwriting session
- Presentation / discussion with expert(s)

Phase II
Ideation

- Presentation about responsible robotics
- Break-out room session (part 1)
- Break-out room session (part 2)

Phase III
Discussion

- Participant presentations
- Robotics4EU activity promotion
- Expert presentation on good practices
- Follow-up survey

Figure 2 – Online workshop model agenda

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Phase I – Initiation

Phase I of the workshop includes an introductory section, the brainwriting session and a presentation/discussion with a keynote speaker/expert and it will last approx. 50 minutes.

The introductory section will include a brief presentation of the Robotics4EU project, the workshop, the workshop's theme and its agenda to the participants. It will be conducted by one of the consortium partners and the theme presentation could be conducted by one of the Robotics4EU community members, who specializes in the respective area that each workshop would focus on each time. The hybrid model presentation mentioned earlier could be used in this section if the circumstances allow it.

The brainwriting session is one of the key activities of the online workshop that aims at involving the participants in the development of the events' content as much as possible, to ensure that the content of the workshop responds to the needs and requirements of the participants, and to maintain their interest throughout the event. The content of the brainwriting session itself will include an initial impact assessment survey – an online questionnaire distributed to the participants, evaluating their pre-workshop position on non-technological aspects of robotics related to the workshop's theme – and an interactive identification of non-technological robot adoption issues in the respective priority area. This process will be supported throughout its implementation by the appointed moderators of the workshop.

The brainwriting session will be followed by a presentation and discussion of a keynote speaker/expert of the respective area and theme covered in the workshop. The purpose of this section is the validation of the identified issues by an expert in the particular area and the possibility of expansion on issues and challenges that potentially would not have been identified during the brainwriting session by the participants. In this section, as well, the hybrid presentation model could be deployed should the theme and the circumstances allow it.

The table below (Table 8) provides a descriptive presentation of the suggested timeframe and the agenda of Phase I of the online workshops.

Table 8 – Model agenda of online workshop phase I (initiation)

Est. duration	Activity	Description
15 mins	Introduction and theme presentation	§ Introduction to the workshop, the Robotics4EU project and the workshop's theme § Theme presentation could be conducted by one of the Robotics4EU partners or their community (cross-promotion) § Conducted (preferably) in a hybrid presentation model or (in other cases) as an ordinary online presentation
20 mins	Brainwriting session	§ Brief impact assessment survey (initial) § Interactive identification of non-technical robot adoption issues that are related to the general theme § Moderated reflections during and after the session
15 mins	Presentation/Discussion with expert(s)	§ Validation of identified issues by expert(s) and/or § Expansion on relevant issues that were not identified during the brainwriting session
10 mins		Break

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Phase II – Ideation

Phase II of the online workshops includes a presentation on the principles of responsible robotics and two break-out room sessions and it will last approx. 50 minutes in duration.

The presentation will meet the dissemination purposes of the workshop, since it will be focused on describing and elaborating on the key concepts and principles of responsible research and innovation in the robotics industry. It will serve as an introduction to the ideas and concepts that will be useful to the participants during the next two break-out room sessions. More specifically, the scheme of the societal readiness levels that the Robotics4EU project has developed under WP1 T1.1, and the responsible robotics maturity assessment model that is in development under WP1 T1.3 will be presented and explained to workshop participants for them to be able to utilize their principles during the break-out room sessions.

During the first part of the break-out room session, participants will be divided into small teams (up to 10 participants in each team) with an assigned moderator to assist and coordinate the process. This part will serve as the first more direct acquaintance amongst the participants and it will be focused on gathering experiences related to the workshop's theme by the participants themselves, such as robotics adoption cases and good practices. The expected result for participants will be the ability to evaluate their shared cases and experiences according to the previously presented responsible robotics and innovation principles and the societal readiness levels.

The second part of the break-out room session will be developed around a "case study". The participants will choose one of the robotics adoption focus cases that have been discussed during the first part of the session and evaluate it according to the responsible robotics maturity assessment model. The expected result of this part is for the participants – under the guidance and assistance of the moderator – to prepare a strategic approach that could be employed in order to improve the societal readiness level of the robotics adoption case.

The table below (Table 9) provides a descriptive presentation of the suggested timeframe and the agenda of Phase II of the online workshops.

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Table 9 – Model agenda of online workshop phase II (ideation)

Est. duration	Activity	Description
15 mins	Presentation about responsible robotics	§ Key concepts in and principles of responsible research and innovation, societal readiness levels and robotics maturity assessment § Providing simple analytical tools and principles for break-out sessions
15 mins	Break-out room session (part 1)	§ Teamwork in break-out rooms – up to 10 participants in each with moderator § Sharing robotics adoption cases, experiences and good practices among participants § Evaluating cases according to RRI and SRLs
20 mins	Break-out room session (part 2)	§ Selection of 1 robotics adoption focus case from among the cases presented § Case evaluation according to the principles of the maturity assessment model § Discussion and preparation of a strategy to improve the SRL of the robotics adoption case (moderator lead)
10 mins		Break

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Phase III - Discussion

Phase III of the online workshops includes presentations by the participants, a brief promotion of the Robotics4EU activities, a presentation on good practices in the robotics industry by an expert, possibly followed by a Q&A session and, finally, a brief follow-up survey regarding the workshop's impact assessment. In total, phase III of the online workshops will last approximatively 60 minutes.

The participants' presentations will be focused on the strategies that they would have developed in the previous break-out room session, regarding the Social Readiness Level improvement of the respective focus cases. The presentations will be carried out per break-out room group and one of the members of the group will be asked to present their strategy, which will be supported with content provided by the group's moderator (key notes from the previous break-out rooms).

A short promotion session of the Robotics4EU activities will follow. A brief introduction to WPs related to the respective theme of each workshop will be included, along with any other relevant project activities and events that will be presented to the participants by the Robotics4EU consortium partners.

The final presentation of the online workshop will be conducted by an expert and it will be focused on good practices in responsible robotics adoption. The purpose of this presentation will be to validate the good practices and examples that will have been developed and shared by the participants' groups in earlier stages of the workshop and to expand potentially on cases that might have not been examined. This session will follow, preferably, the hybrid model presentation as well, perhaps streaming from an operational environment and it will be followed, ideally, by a Q&A session, so that the participants have the chance to delve into more details about potential future investments on robotics.

Finally, the online workshops will be concluded with a follow-up survey, as a continuation of the initial survey of Phase I regarding the workshop's impact assessment. In addition, this section will serve as an opportunity for the consortium of Robotics4EU to gather feedback and contributions on the responsible robotics maturity assessment model.

The table below (Table 10) provides a descriptive presentation of the suggested timeframe and the agenda of Phase III of the online workshops.

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Table 10 – Model agenda of online workshop phase III (discussion)

Est. duration	Activity	Description
25 mins	Participant presentations	§ Presentation of focus cases and their SRL improvement strategies § Done per break-out room group with one participant as presented § Supported with the content provided by the room moderator
5 mins	Robotics4EU activity promotion	§ Brief introduction into Robotics4EU WPs' activities related to the workshops' themes
25 mins	Expert presentation on good practices	§ Presentation on good practices in responsible robotics adoption § Done (preferably) in a hybrid model focusing on particular cases, or (in other cases) as an ordinarily online presentation § Can be followed up with a Q&A session and discussions
5 mins	Follow-up survey	§ Brief impact assessment survey (final) § Feedback and contributions to the maturity assessment model

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5. Physical workshops

The second form of events that will be held as part of the community building and knowledge sharing activities is the physical workshops. There will be 4 physical workshops in total, one per priority area (healthcare, agri-food, inspection and maintenance of infrastructure, and agile production) and each one led by the respective appointed partner (NTNU, AFL, CE, Robotex). The majority of the physical workshops will be held within 2022.

The purpose of these events is to serve as a conclusion of the process that will have been launched by the online workshops. The issues, challenges and good practices that will have been identified and elaborated during the online workshops on the non-technological aspects of robotics per priority area will be gathered and further expanded during the physical workshops.

The preparation and the setup process of the physical workshops will follow the same structure as the online ones. The main responsibility of the organization of each physical workshop will be placed upon the contextually leading partner with the assistance of the coordination work group. The same process will be followed in regards to the preparation of the content of the agenda, which will be open to alterations by the leading partners, while the finalized version of it will, as well, be announced preferably at least two months prior the actual event. The leading partner will also be responsible for attracting the necessary experts and keynote speakers, who can be traced amongst the broader network and ecosystem of the Robotics4EU consortium (third-party stakeholders, unassociated external partners, etc.), in order to promote the collaboration amongst relevant but not directly interconnected projects and initiatives. Towards this end, the leading partners are highly encouraged to hold their physical workshops in combination with other relevant events and conferences that might attract similar interested target audiences.

Regarding the practical setup of the physical workshops, unconventional event models are highly encouraged, i.e., hosting the event at a robotics solution demonstration site, in order to promote the interactivity between the participants and the actual robotics industry. The choice of the venues, the necessary equipment, the necessary human resources and all the consumables needed for the physical events will be a responsibility of each leading partner individually.

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6. Stakeholder forum

The third form of events that will be held as part of the community building and knowledge sharing activities is the high-level Stakeholder Forum. The forum is planned as a final face-to-face conference related to all activities performed and events organized under all priority areas under WP3. The forum will present the results and main conclusions of the 20 events organised previously.

All participants of previous events, as well as policy makers and user representatives will be invited. The content of the conference is set up to meet the needs of the priority areas and enable cross-sectorial exchange of good practices on how to tackle non-technological aspects of robotics. Up to 100 participants in total will be partaking in the Forum. Decision on the exact format of the Forum is foreseen in early 2022.

Ideally, the Forum is foreseen as a physical event with all participants meeting onsite. However, due to possible public health concerns or due to the preference expressed by potential expert participants, the Forum could alternatively be implemented as a hybrid event, with part of the event being hosted from a physical event location, while also being streamed as a partially virtual event with some of the participants or experts engaging through online.

The Forum will be held in the period between June and October 2022, once the last events in each 4 priority areas have been finalized. The exact date of the event is also subject to potential cooperation with other similar events. While the Forum could be fully organized by the Robotics4EU partners as a separate and independent event, the option of organizing the Forum as part of a broader and better-known event (conference, summit, expo) will also be explored and pursued. This would attract additional attention to the Forum and the Robotics4EU project, ease the process of communication and participant attraction, and enable wider impact among stakeholders. The downside is that the Forum would need to fit in a particular event date and specificity of the agenda, and thus it might be difficult to find suitable events for collaboration. While events for mid-2022 are yet to be announced, several annually-held events have been identified as potential partners. The currently most relevant identified event is the annual "International Conference on Robot and Human Interactive Communication" (RO-MAN), usually held in August-September each year. This and other announced relevant events will be continually outreached and possible mutually beneficial cooperation discussed.

7. Ethics and compliance

All events (online and physical workshops, the Stakeholder Forum) and activities implemented as part WP3 "Empowerment of responsible robotics community" will be required to follow the ethics and data protection rules and procedures set out in the Robotics4EU project, as well as in compliance with all other relevant and common practices regarding ethics and private data. Specifically, all events and activities will be required to comply with the procedures described in the Robotics4EU ethics-related deliverable D7.1 "Requirement No. 1" (issued) and D7.2 "Requirement No. 2" (to be issued by December 2021).

Participants that will partake in the workshops and the Forum will be required to consent (see Annex 9.1) to the rules and procedure regarding data management and privacy protection, as well as follow the rules set out in the Code of Conduct (see Annex 9.2). Also, all event participants will be required to register for participation in the events following a common registration form (see Annex 9.3).

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8. Conclusions

The aim of this deliverable is to present a practical and efficient methodology regarding the community building and knowledge transfer events that have been scheduled during 2021 and 2022 within the context of Robotics4EU project. This document will serve as a guiding tool to all the involved partners in regard to the organization and implementation of the online and physical workshops, as well as, of the high-level stakeholder forum. It provides the necessary tools that can be deployed by the consortium as a whole and the processes that need to be followed by the leading partners and the coordination work group in order to achieve consistency and uniformity amongst the format and the content of the scheduled events.

This methodology has been developed with the aim of serving the purposes of our project, while achieving the strongest possible impact amongst the European robotics community. Every feature of these events – content-wise and format-wise – is aiming towards that direction and, therefore, the guidelines provided by this document are to be followed only when they are contributing to the abovementioned objective. Especially, since the circumstances that these events will take place within, are still quite unstable, our methodology will, possibly, need to be adapted to the needs and requirements of each specific event and the involved partners are highly encouraged to do so.

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9. Annexes

9.1. Consent form

Presented below is a template of the consent agreement that will be provided to the beneficiaries and participants of events organized as part of the project.

CONSENT FORM
I _____ participating in the project as an _____: I undertake to preserve the reputation of the project and not take any deliberate action that could undermine the image of the project.   I am informed that photos, videos and other recordings taken during the project might be used for the dissemination or for further activities of the project without additional prior consent.   I understand that issues related to confidential information and commercial secrets are regulated by the regulations of _____ (insert the name of the country activity takes place).
The Data Protection Officer, ___ (insert the name of the institution), processes my personal data – name, surname, email address, phone number, LinkedIn contact data, for the purpose of administering the Robotics4EU project contact database. Processed data will be saved and kept for up to 3 (three) years after the project ends and then deleted.   In order to reject, an e-mail must be sent to _____ (insert Data Protection Officer contact).   I understand that I have the right to reject and, in that case, I understand that I lose the opportunity to participate in the project, to receive information about the project activities. I am informed that I can cancel my given agreement at any time. I am informed, that in accordance with the rights and in the manner prescribed by Articles 15, 16, 17, 21 of the EU General Data Protection Regulation (GDPR), I have the right: ● To know (to be informed) about the processing of my personal data.   ● To get acquainted with my personal data and receive a copy.   ● To request to delete my personal data or to suspend my personal data processing operations when the data is processed without complying with the provisions of the GDPR and other legal acts regulating the processing of personal data.   ● To object with the processing of my personal data. I am informed that if I am unable to resolve the issue with the Data Protection Officer, I can contact the relevant supervisory institution.   Personal data is any information related to an identified or identifiable individual (data subject); a physical individual who can be identified, directly or indirectly, in particular

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> by reference to an identificatory data, e.g., given-name and last name, the person's identification number, physical location, IP address or one or more factors specific to his/her physical, physiological, mental, economic, cultural or social identity.
>
> Name: _____
>
> Gender: _____
>
> Email: _____
>
> Field of work: _____
>
> Signature: _____
>
> Date: _____

9.2. Code of Conduct

Presented below is the Code of Conduct, which will be implemented during the community building and knowledge exchange events. All event participants will be required to comply and follow the Code of Conduct.

CODE OF CONDUCT
Robotics4EU aims to offer an event where all attendees feel welcome, included, respected, and safe. All attendees, including participants, speakers, and organisers are, therefore, required to abide by the following code of conduct at all times.

Short Version

Be respectful. Our event is dedicated to providing a harassment-free space for everyone, regardless of gender, age, sexual orientation, ability, physical appearance, race, or religion. Robotics4EU stands for inclusivity.

We do not tolerate harassment in any form. Sexual language and inappropriate imagery are not appropriate for submitted projects or at any time or place during the event, including talks, workshops, receptions, and online media. Attendees violating these rules may be expelled from the event at the discretion of the event organisers. Any occurrences that violate the Robotics4EU Code of Conduct should be reported as specified in the procedures at the end of the document.

Full Version

Harassment includes, but is not limited to offensive verbal comments related to:

- Gender,
- Age,
- Sexual orientation,
- Ability,
- Physical appearance,
- Race,
- Religion,
- Sexual or graphic images in public spaces,

- Deliberate intimidation,
- Stalking, following, harassing,
- Photography or video recording someone without their consent,
- Sustained disruption of talks or other events,
- Inappropriate physical contact,
- Unwelcome sexual attention.

All attendees, including participants, speakers, judges, the general public, and organisers are required to abide by the following code of conduct at all times. Attendees exhibiting any of these harmful behaviours will be asked to stop immediately, and at the discretion of event organisers, any action deemed appropriate may be taken, including warning the perpetrator or expelling them from the event without the right to demo.

Photography is encouraged, but attendees must be given a reasonable chance to opt out from being photographed. If they object to being photographed, please comply with their request. It is inappropriate to take photographs in contexts where people have a reasonable expectation of privacy, for example, in bathrooms or when attendees are sleeping.

If you are being harassed, notice that someone else is being harassed, or have any other concerns, please follow the reporting procedures at the bottom of this document and report the incident immediately. Equity officers will be clearly identified and reachable at all times via the phone numbers below.

Workshops'/forum's staff will be happy to help attendees contact venue security or local law enforcement, or otherwise assist those experiencing harassment to feel safe for the duration of the event.

Reporting Procedures

If you feel uncomfortable or think there may be a potential violation of the code of conduct, please report it by emailing us at: info@robotics4eu.eu

All reporters have the right to remain anonymous. Robotics4EU reserves the right to modify this code of conduct at any time.

9.3. Registration form

Presented below is the registration form that will be used during the recruitment of the participants of the community building and knowledge exchange events. All interested parties will be required to fill out this form in order for them to be able to participate in the events.

REGISTRATION FORM
Robotics4EU Online Workshop

The **Robotics4EU** project aims to identify the greatest challenges in enabling the widespread adoption of (AI-based) robotics in the EU. One of our goals is to **build a maturity assessment model** that will ultimately act as a unified standard to easily provide all the information its user needs in order **to assess the conformity**, **trustworthiness**, **or societal responsibility of a robotics solution**.

To this end, we are organizing an online workshop gathering as many points of view as possible: developers, manufacturers, researchers, policy makers, citizens, etc. **This debate will provide analytical support to the model's validation and improvement.**

The workshop will address the following issues: *(Presentation of the issues and challenges addressed per workshop based on their respective theme)*

Date

Time

Contact us at info@robotics4eu.eu.

* Required

First Name*: _____

Last Name*: _____

Email*: _____

Country*: _____

Organization*: _____

Field of work*: _____

Please let us know what you expect about this event (interests/motivations): _____

This debate session will provide analytical support to the project implementation and identify the greatest challenges, bottlenecks, and needs in enabling wider adoption of (AI-based) robotics in the areas of healthcare, inspection, and maintenance of infrastructure, agri-food, and agile production specifically from the policymaking point of view. Your input is considered very valuable for the Robotics4EU project. Your contribution to the debate will be used for research purposes only. It will not be used in a manner that would allow the identification of your individual responses. All the data will be used in compliance with General Data Protection Regulation (GDPR). *

□ I agree to participate in this event under the conditions set above.

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9.4. Event outcome reporting

All events that will be held as part of WP7 (sectorial online and physical workshops, the cross-sectorial Forum) will be required to follow a similar outcome reporting process. This is due to the need of achieving outcomes that could be adequately compared cross-sectorialy with results other workshops, and thus contribute to the overall activities of the Robotics4EU project (especially to the robotics maturity assessment model development and validation process).

Robotics4EU partners leading organization of the Forum or the events in their particular priority areas will be required to provide descriptions of the outcomes of each event on the following aspects:

EVENT OUTCOME REPORTING
General information about the event: • Event type;   • Priority area related to the event;   • Event theme;   • Organizing partner;   • Other associated parties;   • Date of the event;   • Location of the event;   • Number of participants;   • Description of participant profiles (with numbers by target group);   • Event abstract (up to 100 words).
Key event outcomes and reusable results: • Event agenda;   • Event recording (of full event or of separate event sessions, especially presentations by experts);   • Content presented and used in the event;   • Impact assessment outcomes (consolidated participant inputs);   • Brainwriting session outcomes (identified issues, consolidated participant inputs);   • Break-out room briefs (participant inputs on use case SRL improvement strategies);   • Feedback and suggestions (consolidated participant inputs);   • Other outcomes directly related to the particular event.
For related deliverables overviewing all events held in a priority area: • Overview of the event planning (organization, technical, theme and content) process and event implementation schedule;   • Presentation and overview of the key themes of each event;

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- Qualitative and quantitative analysis of event participant profiles and their relation to stakeholder groups;
- Analysis and overview of the main outcomes of events in the particular priority area (including impact assessment, issue identification, good practice sharing, participant presentations, collected feedback and suggestions);
- Description of key insights per event and lessons learnt when implementing the chosen event format;
- Description of other event outcomes, community building and reusability of event outcomes;
- Description of compliance with Robotics4EU ethics and data privacy policies.

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