ROBO TT NET

robot
technology
transfer
network

PILOT APPLICANT GUIDE

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Change control table

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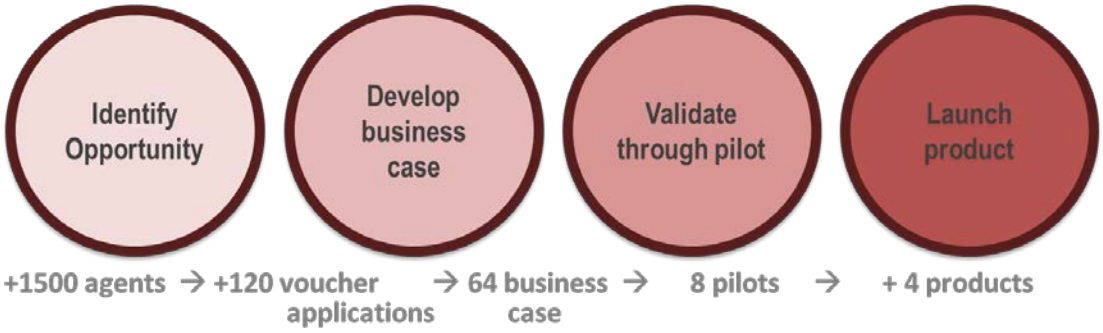
1. ROBOTT-NET VISION AND THE PILOT CALL

The goal of ROBOTT-NET is to accelerate the path to market for new robotics technologies, increasing the competitiveness of Europe's manufacturing sector and giving rise to multiple new business opportunities in industrial and service robotics.

ROBOTT-NET will develop and test mechanisms for sharing expertise and physical research infrastructures, and a unique multidisciplinary approach that enhances cross-fertilisation of ideas between academia and industry. Through ROBOTT-NET, four major European Research and Technology Organisations (RTOs) join forces to offer a unique opportunity to develop business ideas to their full potential, based on innovative robot technology. DTI, Tecnalia, Fraunhofer IPA and the MTC offer their aggregated capabilities in technology, infrastructure, relationships and business development for entrepreneurs, start-ups, SMEs and corporations, being either robot Technology Developers or End Users. We transform successful national structures and mechanisms used by RTOs in Denmark, Germany, Spain and the UK; merging them into a Europe wide, composite, technology transfer system.

ROBOTT-NET PROCESS

ROBOTT-NET seeks to accelerate the path to market for new robotic technologies (see Figure below).



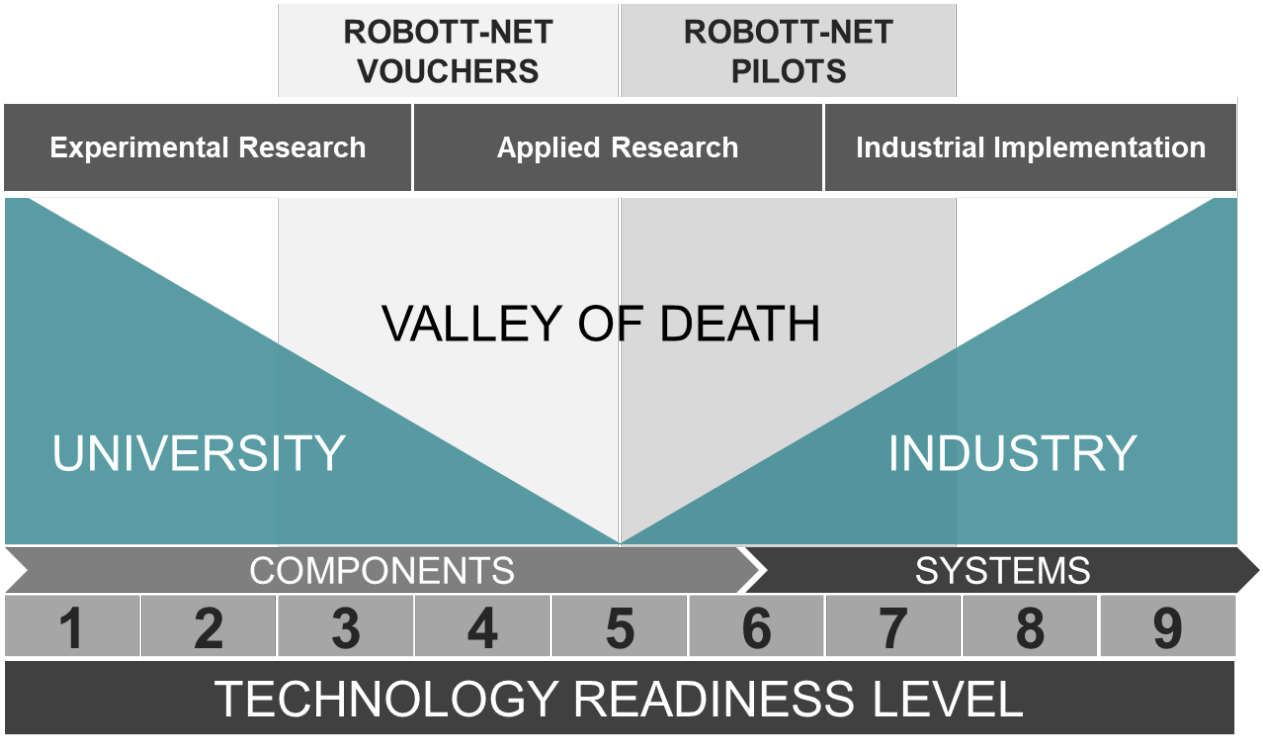
In the first place this involves identifying and promoting state-of-the-art industrial and professional service robot technologies to over 1,200 robot Technology Developers (from industry and academia), and End Users in a bidirectional exchange of views and opinions about robotic research trends, needs and technology developments, and soliciting participation in ROBOTT-NET. The second stage involves developing a business case to assess the feasibility for business opportunities coming from both Technology Developers and End Users. The third stage consists of Pilot validation, implementing first field trials and producing complete robotic automation solutions at End User sites. The final stage is the completion to a product launch, facilitated within ROBOTT-NET but happening outside project control.

Through the ROBOTT-NET initiative and the outlined four-step development process Europe is directly tackling the challenges of the "Valley of Death" and push promising robot technologies into industry.

CROSSING THE "VALLEY OF DEATH"

The "Valley of Death" exists because the goal of university research is normally satisfied (the scientific questions have been answered) once a technology functions well enough to produce measurable results in the lab. However, industry cannot deploy a technology unless it has a convincing business case and it is sufficiently proven; involving criteria such as robustness, reliability under the full range of normal factory conditions, meeting worker safety regulations, usability, ability to integrate with the existing production system, and having known performance criteria.

ROBOTT-NET aims to provide and test a set of sustainable Europe-wide structures and mechanisms for crossing the "Valley of Death", primarily by: finding the perfect match between market opportunities and new technology, developing a good business case and putting together a comprehensively skilled team, and getting the field trial started. The first step towards this goal has been through the Voucher work. This will be enhanced further by starting consortium led medium-scale experiments in industrially relevant scenarios taking novel state-of-art technologies into technology demonstration systems at End User sites, what ROBOTT-NET calls Pilots.



ROBOTT-NET TRL

The Technology Readiness Level (TRL) scale provides a method to estimate the maturity of technology on its journey to full commercial readiness. The European Commission's definition of the scale starts at TRL 1 where basic principles are observed and concludes at TRL 9 where the actual system is proven in an operational environment. The Voucher work within ROBOTT-NET was based around TRL4 where technology was validated in the lab environment, without exposure to the conditions of an operational environment. The Pilot work aims to develop the technologies identified and explored in the Voucher stage by a further two TRL steps to at least TRL6, applying them to an industrially relevant environment on End User applications at near desired specification in terms of performance, volume, speed etc.

2. ROBOTT-NET PILOT CALL

The application process described in this guide is designed to help you create a successful application for a ROBOTT-NET Pilot. The Pilot will help you to develop your Voucher work through proof of concept level and accelerate it towards commerciality. All enterprises that have made sufficient progress within their Voucher work are encouraged to apply for a Pilot.

ROBOTT-NET PILOT

A ROBOTT-NET Pilot will be a medium-scale research prototype installation, lasting for up to 18 months, developing the technology and business case explored in the Voucher stage and applying it to an industrial application demonstration at the End User's site. A Pilot could include new disruptive robotics technology applied to an existing commercial sector, or established robotics technology applied to a new application field.

Each Pilot will demonstrate the feasibility of the novel technology or new application by building and developing a prototype robot/automation system, improving the technology by at least two TRL steps and achieve a minimum TRL6. TRL6 is defined as a prototype demonstration of a technology system/subsystem in a relevant environment that is near the desired specification in terms of performance, volume, speed etc. It is not expected that a Pilot will achieve full commercial implementation or production reliability during the project duration but higher TRL levels are desirable to aid the End User's application and the further exploitation of the technology.

ROBOTT-NET is looking for Pilots that will scale well across new applications and create high impact on markets through enhanced productivity, competition and disruption. Both scalability and market impact are key measures in the Pilot application.

PILOT CONSORTIA

A defining purpose of the ROBOTT-NET Pilots is to develop long-term relationships between European organisations that outlast the Pilots and provide future development opportunities to the consortium members. Pilot leaders can build their consortium in a number of ways depending on their preference and past experience, any organisation registered within the EU member states or associated countries are eligible and there is no limit to the number of organisations that can join a consortium, however to qualify Pilots require a minimum of two organisations. ROBOTT-NET RTOs can have a role of Technology Developer but they cannot receive the grant funding available to third parties.

If you are an End User, you will need to find a Technology Developer, most likely in the form of a system integrator or machine builder that will be able to support you and the technology you need during and after the Pilot has finished. If you are a Technology Developer, you will need to find a potential customer who can provide you with the business need and a demonstration site during the Pilot.

Applicants can approach organisations new to ROBOTT-NET from their own networks. Alternatively, the ROBOTT-NET web page is a good place to start looking for companies that match your consortium needs and your coordinating RTO can facilitate initial contact.

CONSORTIUM ROLES

A Pilot application must include a consortium of the following roles to be considered for selection;

- **End User:** An individual or company with the business need who defines the commercial application and is willing to host the prototype system for the duration of the Pilot stage
- **Technology Developer:** An individual or company that can lead or support the technological development of the prototype system during and after the Pilot stage work is complete
- **Exploitation Manager:** An individual or company that will continue to commercialise the technology developed during the Pilot stage into new markets for new End Users.

A company may take on more than one role but the consortium must consist of at least two companies, applications with consortium involving more partners are considered stronger during assessment.

Each Pilot application must identify a single Voucher holding company to lead the consortium and act as the lead point of communication. Only one Pilot application can be submitted per Voucher. Any European company, including Voucher holders, may participate as a third party in multiple Pilots, but the grant funding is capped per third party, see *Pilot Funding* section.

TECHNOLOGY STRANDS

Technology Strands are a method for ROBOTT-NET to classify the dominant robotic technologies used within a Pilot, they are intended to be industry agnostic and can be applied across many applications in many fields, i.e. pick and place technology, such as 3D bin picking, is suitable in manufacturing, healthcare and logistics applications. Similarly, mobile robots can provide logistics services in manufacturing, healthcare and many other industries.

Applicants, under guidance from their partner RTOs should choose up to two Technology Strands that represent the dominant and secondary technology category required in the problem they are trying to solve.

We have distinguished 7 category strands:

- **Assembly and manipulating** is defined as the controlled movement and specific orientation of component parts into manufacturing assemblies, tooling or other processes
- **Pick and place** is defined as the movement parts from structured and unstructured storage to a new desired location, not requiring any additional process steps.
- **Automated processes** are defined as any physical process, manufacturing or otherwise, that have been automated, requiring less human intervention and less time to complete, and specifically excludes pick and place, manipulating and assembly tasks.
- **Mobile robotics** is defined as any automated platform with a mobility within its location, which includes the functional features of sensing, perception and reacting to changes within the environment.
- **Inspection and checking** is defined as the use of robotics and automation to perform measurement task and comparisons of target parts against nominal data models.
- **New generation of robotics** is defined as the creation of novel robotics or the use of robotics in new applications, outside of the traditional established markets, such as collaborative robotics, service and healthcare robotics.

- **Sensing and mapping** is defined as the specific use of technology to sense, perceive, model and localise a robot or automated system within a dynamic and changing environment.
- **Other** – This category is for robotics technologies that do not fit within the other strands.

ROBOTT-NET's aim is that no one Technology Strand should dominate any other during Pilot selection and the Steering Committee will use the Technology Strands identified in the application to decide the fair balance of Pilots during the final selection.

PILOT FUNDING

Each Pilot will receive up to 3,500 person-hours from their partner RTOs. The actual amount of time, effort and level of resourcing required will be dependent on each Pilot and will be determined by the RTOs involved during the planning stage of a successful Pilot application.

The Pilot consortium i.e. system integrators, machine builders, End Users, and any other Technology Developers needed - are financed as third parties, up to a maximum of €60,000 per third party to a total of €150,000 per Pilot. The maximum grant funding available for equipment is set at 10% of the Pilot total, €15,000, and is not meant to be used for large capex purchases, such as robots and machines. As an example, Pilot winner can use the money to procure components and sub-assemblies such as grippers, sensors and consumables or purchase software licenses. Third party funding is expected to be used for the development of Pilot systems which includes the installation, test and commissioning of the system including:

- Design (based on End User Voucher work if available)
- Software development
- Manufacture & Installation
- Test & commissioning
- Project management
- Travel (guidance
- Consumables
- Purchases (small items only, max 10% of funding provided)

The End User or Technology Developer company should add their own funding if the Pilot requires large capex items (e.g. major equipment) or if the company wishes to continue development to higher TRLs. Everything purchased, including hardware, purchased within a Pilot from grant funding belongs to the companies of the consortium.

Whilst the RTOs will be highly involved in developing and maturing the Pilot technology, the funding is limited to €60,000 per third party as an incentive to build consortia and to encourage lasting commitment and engage members in a Pilot at the relatively high-risk stage. A company participating as a third party in multiple Pilots is limited to a total of €60,000.

CLAIMING FUNDING

Pilot grant funding will be paid as reimbursement for hours and equipment which can be documented and is reasonable and required for the progress of the Pilot according to project plan. Funding is claimed by consortium partners on a quarterly basis, at the end of each financial quarter, for milestones completed in the period. Payments for successful claims will be made to each partner

according to their Coordinating RTO's standard payment terms. Start-up companies with limited cash reserves should discuss their options with their coordinating RTO.

Companies may only claim funding through the completion of project milestones, as declared in the project plan submitted with the Pilot application. Ideally, a Pilot should have a **minimum** of 6 milestones over the 18 month duration, at least one per quarter. Each Pilot's coordinating RTO is responsible for verifying and recording the successful completion of each milestone to allow consortium partners to claim their funding.

All pilots will be managed as individual development projects, with a project manager, milestone plan and IPR agreements. Each Pilot requires a high-level task-based plan and it is expected that most projects will include a main phase of development up until an initial proof of concept, followed by a final involvement at the End User sites.

3. HOW TO APPLY

The application pack, including examples, will be sent to all Voucher winners through email, alternatively it can be downloaded by ROBOTT-NET's website: https://robott-net.eu/. An application pack includes; the Pilot Application Form, Pilot Applicant Guide and Excel plan template. Submit your completed pack at ***robott-net@the-mtc.org.***

Use the guidance below to help complete the Pilot Application Form:

Part A: Administrative question

- Provide administrative information to support the Pilot application including project name, public summary of the project, consortium details and the relevant Technology Strands.

Part B: Voucher Capabilities

- This section is your opportunity to explain how you used your voucher work, what results and TRL level you achieved. Discuss any issues, delays, lessons learnt as well as the positives and any impact on your business plans.

Part C: Pilot Business Case

- This section contains multiple questions to be answered by the End User, Technology Developer and/or Exploitation Manager where indicated. This is your opportunity to explain to the evaluators how your project meets the scope of the ROBOTT-NET programme, why there is a problem that should be solved, what the Pilot solution might be and its commercial value to the End User and Technology Developer in terms of both production/operations and competitive advantage. Pilots need to have strong commercial justification, discuss in the profitability question the Pilot's financial implications to your business. Make sure to cover the technical and resource based risks and challenges to the project.

Part D: Pilot Work Planning

- This section should contain an overview explanation of the Pilot work; including the work packages and related activities, owners and RTO assistance required; based on the information provided in the Excel project plan in addition to details on the Pilot financing, expected Pilot results and further market impact.
- Excel project plan: Mandatory document. Applicants are required to complete the provided template as per the guidance in the Project Plan section of this guide. The provided example should be used as a guide to the level of detail required.
- Explain how the Pilot consortium will use the grant funding available and meet any shortfalls in funding for items such as large Capex in addition to financial support after the Pilot is complete. Use the Team question to sell your consortium's capabilities to deliver a successful, sustainable and scalable Pilot.
- Product launching and market impact are of key importance in a Pilot's score; evaluators want to see full consideration given to the future exploitation and scalability of the technology beyond the Pilot and End User's application.

Part E: Pilot Pitch Presentation

- The presentation is mandatory, its purpose is to help the evaluators gain a better understanding of your project. Please make sure you include clearly labelled diagrams and images to support your application.
- The video is optional and applicants can submit any footage that best supports their application.

PROJECT PLAN

An applicant is expected to complete the Excel Project Plan template as per the provided example. Plans shall include a minimum of three work packages with at least one deliverable and milestone per work package. The key project plan elements highlighted A-L are discussed below:

A Pilot Project: Robotic Stone Sorter		Roles Required					Financial Support	Month	1	2	3	4	5	6	7	8	9
		End User: Rock Mining Ltd	Technology Developer: Robotics Intergrator	Exploitation Manager: Robo-seller	Coordinating RTO:	Supporting RTO:	Predicted Milestone Value Claimed per Quarter	C Date	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Work Package	Activities	D Milestone Cost (€)			Person Months		F	Milestone Quarters	Quarter 1			Quarter 2			Quarter 3		
										M1,2	M3			M4	M5	M6	
	Total partner spend:	€ 65,000	€ 60,000	€ 21,000	E		€ 146,000										
	Total claim per partner:	€ 60,000	€ 60,000	€ 21,000	15.65	8.35	€ 141,000										
G WP1:	Activity 1				0.25	0.25	€ -										
	Activity 2				0.25	0.25	€ -										
	M1: Milestone 1	€ 5,000	€ 5,000	€ 2,500	0.25	0.25	€ 12,500			M1							
	Activity 3				0.25		€ -										
	Activity 4				0.1		€ -										
	M2: Milestone 2	€ 1,500	€ 1,500	€ 5,000	0.5		€ 8,000			M2							
	D1: Deliverable 1 I						€ -			D1							
H WP2:	Activity 5		K		1	1	€ -					L					
	Activity 6				0.25	0.25	€ -										
	Activity 7				0.5		€ -										
	M3: Milestone 3 J	€ 3,000	€ 3,000	€ 5,000	0.25	0.25	€ 11,000				M3						
	Activity 8				0.25	0.25	€ -										
	D2: Deliverable 2						€ -					D2					
	Activity 9				0.35		€ -										
	Activity 10				0.25	0.25	€ -										
	Activity 11				0.25	0.25	€ -										
	Activity 12				0.25	0.25	€ -										

A. Pilot Project Title – Please provide a project title that can be made public.

B. Roles Required – The blank template has space for up to 5 consortium members and two supporting RTOs. Columns that are not required can be hidden.

C. Project Months – The timing plan is only required per month at this stage. Use the provided row to reference when your milestones are due.

D. Milestone Cost – The milestone costs are shown across two cells, the upper is the total partner costs and the lower is the maximum claim permitted per partner. *See funding section.*

E. Person Months – The person months allocated between the RTOs should total up to 24.

F. Financial Support – The upper Grey cell shows the total Pilot spend by the consortium, the lower Yellow cell shows the total permitted claim for the Pilot, up to €150k. A Red dot indicates when there is consortium spend that is not fully recoverable (anything over €150k). The column below contains the consortium spend per activity.

G. Work Package – Work Packages can look like projects themselves, a Pilot work package consists of related activities (**H**), milestones (**J**) and deliverables (**I**) that contribute toward the work package delivery. You may name a work package and colour the cells to enhance readability as you see fit.

H. Activities – A group of tasks that contribute towards the objective of the work package, can be defined with a clear definition of 'done' and accomplished in a defined period of time (**L**).

I. Deliverables - A tangible or intangible result of project work that can be demonstrated or communicated to a customer or stakeholder. Only one per work package is required.

J. Milestones - Used to mark specific points of progress along a project timeline. Milestones signal the need for external review and enable financial compensation to partners.

K. Partner Activity Spend – The anticipated spend for each consortium partner per activity.

L. Timing Plan – Activity durations, captured in months, communicated through shading of the cells in the corresponding row. Indicate milestones and deliverables with the relevant cells.

APPLICATION SUPPORT

The Voucher holder is responsible for the Pilot application and its submission. Some parts of the application will require input from the other consortium Parties, including the ROBOTT-NET RTOs. Contribution from the RTOs should be limited to the effort provided as part of the Voucher work. RTOs are able to provide mentoring for the Pilot application process, mentoring includes providing advice, discussions, reviewing and suggesting changes to an application in order to ensure that all key questions are answered and evaluators have sufficient information to fairly score an application.

Timing plans should be completed in conjunction with the Voucher work RTOs, who will also provide feedback on the progress, issues and general experience of the Voucher work.

For additional support and answers to any questions which have not been answered in this guide, applicants are encouraged to contact their coordinating RTO.

More details regarding the call can be also found in the following links:

ROBOTT-NET Website: http://robott-net.eu

ROBOTT-NET LinkedIn page: https://www.linkedin.com/company/robott-net

APPLICATION DATES

There are two Pilot calls, the first call for submission opens on 3rd July 2017 and will remain open until 30th September 2017. The second call for submission opens on 1st December 2017 and will remain open until 28th February 2018. Applications can be submitted any time during the call periods.

All the applications submitted before the first cut-off date will be evaluated and the results communicated to the applicants on 15th December 2017. The approved applications will be able to start their Pilot work shortly after the results are announced and they have signed the Pilot Agreement. The rejected applications will be able to re-submit an improved version before the second cut-off date.

The schedule and deadlines for Pilot application submission are as follows:

- First Call open: 3rd July 2017
- First cut-off date: 30th September 2017, 24h00 Brussels Time
- **Second Call open: December 2017**
- **Communication of first round results: 15th December 2017**
- **Second cut-off date (and call closing): 28st February 2018, 24h00 Brussels Time**
- **Communication of second round results by 1st of May 2018**

ROBOTT-NET's goal is to select a maximum of 5 winning Pilots at the evaluation after the first cut-off date. However, based on the expert evaluation of Pilot applications, the Steering Committee reserves the right to select less than 5 Pilots. As a total of 8 Pilots will be selected for the entire call, the number of winning Pilots at each of the two cut-off dates may not be the same. Applicants are therefore encouraged to submit their application before the first cut-off date, rather than waiting until the second cut-off date.

SUBMISSION PROCESS

The submission of Pilot applications will consist of a single-step email process. The submission email must contain;

- **Completed application template (PDF format)**
- **Excel based project plan (PDF format)**
- **Presentation pack (PDF format)**
- Supporting videos or web link (optional)

Please aim to adhere to the specified word limits, as per the instructions in the Pilot Application Form. **The total length of your application should not exceed the 35 pages.**

The email size limit is 20MB. Emails larger than 20MB will be automatically rejected by the system. If larger files are required, such as the supporting video, applicants are encouraged to use any cloud storage system of their choosing and submit a download link in the submission email.

If your application is successfully submitted, you will receive an acknowledgement receipt within 48 working hours. This acknowledgement receipt does not imply that the application has been accepted as eligible for evaluation.

You may submit multiple versions of the same application. Only the last submitted version before the cut-off date is considered for evaluation.

IMPORTANT NOTE ON CONFIDENTIALITY

The information requested for the application is securely stored on a server and will be treated as CONFIDENTIAL INFORMATION. It will only be accessed by the assigned expert evaluators and a reduced project team in charge of the evaluation process. The ONLY PUBLIC information of the application is the Project Summary, consisting up to a 3000-character description that will be used for promotional purposes, as a way to promote cross-fertilisation of ideas among applicants, in particular between academia and industry, which is one of the key objectives of ROBOTT-NET project. Please make sure that no confidential information is included as part of the project summary.

In addition, take into account that the application should not disclose any details regarding how the technology works. The relevant aspect for Pilot application concerns the technology features from the perspective of the problem, not the solution.

APPLICATION EVALUATION

All eligible applications will be evaluated by independent experts. The evaluation criteria and procedure are described in Section 4 of this Guide.

ROBOTT-NET consortium needs to verify that all applications have received a fair evaluation. The final decision on which applications are accepted for Pilot work is taken by the Steering Committee (SC), which is responsible for ensuring that the final portfolio of applications is balanced according to ROBOTT-NET's objectives.

Once this process is completed, official notice will be sent to all individual applicants, containing information on the results of the evaluation, including the evaluation summary report with the opinion of the experts on the application and any other information decided by the entities taking part in the selection process.

4. EVALUATION CRITERIA AND EVALUATION PROCESS

EXPERT EVALUATORS

Expert evaluators will assess the Pilot applications. These evaluators will have expertise in both commercial robotic applications and in robot technologies and will not be employees of ROBOTT-NET Consortium. At least three different evaluators will assess each pilot application.

The whole evaluation process follows these principles:

- Independence: The evaluation must demonstrate impartiality on its merits, irrespective of the origin or identity of the applicants. Evaluators sign a declaration of conflict of interest saying that they do not have any interest or benefit in the evaluated applications.
- Confidentiality: Evaluators are kept anonymous (their identity is kept unknown to the applicants) and they also sign a confidentiality declaration with the commitment of not revealing to any third party any details of the application, neither during the evaluation, nor afterwards.
- Fairness: Each application is evaluated by at least three evaluators to ensure broad experiences and viewpoints are considered for each application.

ELIGIBILITY CRITERIA

Once the call is closed, the ROBOTT-NET consortium will first check the eligibility criteria for applications.

Eligibility criteria assess that all compulsory requirements are fulfilled by the application, such as:

1. Voucher applicant: ROBOTT-NET voucher awarded to at least one of the companies in the pilot application consortium.
2. Application within deadline: The application must be submitted within the deadline established. No applications will be accepted after the deadline has expired.
3. Consortium established: For each Pilot application the consortium needs to consist of at least two companies and all roles must be fulfilled as outlined in the Pilot section.

Applications that fail any of the eligibility criteria will not be evaluated and this will be communicated to the applicants.

EVALUATION FORM

The application form is divided into multiple sections: Parts A, B, C, D and E. Section A and E are not scored, sections B, C, D are evaluated and represent 25%, 25% and 50% of the total score respectively. For each question within sections B, C and D, the evaluator will assign a score as described below:

- **0 Fail** The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information;
- **1 Poor** The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses;
- **2 Fair** While the proposal broadly addresses the criterion, there are significant weaknesses;
- **3 Good** The proposal addresses the criterion well, although improvements would be necessary
- **4 Very good** The proposal addresses the criterion very well, although certain improvements are still possible;

- **5 Excellent** The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

If an evaluator requires clarification on any part of the application, ROBOTT-NET will request more information from an applicant via email with a deadline for the response.

SECTION WEIGHTING

The application score is calculated for each evaluation using the table below. The average score is calculated for each section as per $\sum S_n/Tp_n$,, where S_n is the score for each question. Each section's average is multiplied by its corresponding weighting and the three scores are summed to give a total application score out of 100.

Application	Total Points Available (Tp_n)	Application Weighting	Weighted Score (WS_n)
Part A	n/a	0%	n/a
Part B Voucher Work	5	25%	WS1 = ∑S1/Tp1 x 25
Part C - Pilot business case	25	25%	WS2 = ∑S2/Tp2 x 25
Part D - Pilot Planning	25	50%	WS3 = ∑S3/Tp3 x 50
Scoring	**OVERALL SCORE**		**WS1+WS2+WS3**

APPLICATION RANKING AND SELECTION

The evaluators that have each independently scored an application will then decide and agree on a final common score for each section and provide feedback at a consensus meeting held by ROBOTT-NET. Applications are then ranked according to their overall score.

The Steering Committee shall decide which applications will be granted with a Pilot based on the ranking, whilst ensuring the portfolio of selected Pilots is balanced across the Technology Strands, applications, industries and geographical regions of Europe. Feedback provided from ROBOTT-NET consortium will also be considered by the Steering Committee during selection.

In particular, the following criteria are used:

- Balance across European countries/regions
- Balance among Technology Strands
- Balance across different European industries
- Feedback from ROBOTT-NET Voucher partners
- Alignment with the impact goals of ROBOTT-NET

5. WHAT HAPPENS NEXT

If your application is successful and a Pilot is granted, ROBOTT-NET will assign at least two RTOs that will be actively involved in further planning and conducting the Pilot work. We aim to assign the same RTOs that were involved in the Voucher phase.

If you applied in the first round and your Pilot application is unsuccessful we encourage you to liaise with your coordinating RTO to improve your application and resubmit in the second call. If your application is unsuccessful in the second round, we encourage you to discuss alternative funding, development and exploitation opportunities with your coordinating RTO.

PILOT AGREEMENT

Before the actual Pilot work can start, a Pilot Agreement between the winning applicant, their consortium and the assigned ROBOTT-NET RTOs involved in the specific Pilot must be signed. The Agreement regulates the execution of Pilot work, its financing, the allocation of rights, confidentiality and dissemination obligations. The Parties agree to collaborate on the execution of the project, subject to the terms and conditions set out in the Pilot Agreement. Should the consortium not sign the Pilot Agreement for any reason, within the assigned timeframe, the Pilot will be reallocated to another Applicant. The Pilot Agreement will also include the project activities and responsibilities of the Parties and a plan for the execution of the tasks. The submitted project plan may be modified from the Pilot application based on consortium consensus, feasibility and resource availability.

Each Party has ownership of the knowledge it generates in the course of the collaboration on the project, and knowledge generated jointly by the Parties is jointly owned by the Parties in accordance with the Parties' intellectual contribution to the knowledge. The Parties must treat all confidential information received before, during, or in connection with the project as strictly confidential, so that no confidential information is disclosed to a third party.

EARLY PILOT TERMINATION

The ROBOTT-NET consortium will monitor Pilot progress throughout, if any issues and delays occur that cannot be resolved the ROBOTT-NET consortium can intervene to rectify problems. Should a Pilot's progress be unsatisfactory the ROBOTT-NET consortium reserves the right to terminate the Pilot work and withhold any remaining grant funding.

DISSEMINATION

To fulfil the ROBOTT-NET consortium's goal of ensuring technology transfer and impact in industry, it is crucial that aspects of each Pilot's results are made available for dissemination to the general public, predominantly through videos and material on the official ROBOTT-NET website. At all times the information is subject to the duty of confidentiality defined in the Pilot Agreement. It is the expectation that no commercially sensitive information will be released. Company secrets and other sensitive information will be kept strictly confidential and only general information about the new concepts and their implications for production, cost savings and improved efficiencies should be available for public communication of the ROBOTT-NET project activities.

6. GLOSSARY

Activity – A task that needs to be accomplished within a defined period of time or by a deadline to work towards work-related goal or deliverable.

Coordinating RTO – Research and Technology Organisation (RTO) that has lead The Voucher delivery and will be subsequently leading the Pilot delivery.

Definition of done – An agreed way to measure a task as complete i.e. for a task of designing a robot tool, the definition of done is to have complete set of drawings for the robot tool.

Deliverable – Term used in project management to describe a tangible or intangible result of a project that is intended to be delivered to a customer at the end of each work package.

End User - An individual or company with the business need who defines the commercial application and is willing to host the prototype system for the duration of the Pilot stage.

Expert evaluators – External reviewers of the ROBOTT-NET Pilot applications specialising in both commercial robotic applications and in robot technologies who are not employees of the ROBOTT-NET consortium.

Exploitation Manager - An individual or company that will continue to commercialise technology developed during the Pilot stage into new markets for new End Users.

Milestone – A tool used in project management to mark specific points along a project timeline. Milestones signal end of phase, a need for external review. Successful milestone delivery will form a basis of interim quarterly payments.

Party – Any organisation that forms part of ROBOTT-NET Pilot Agreement.

Pilot - A ROBOTT-NET Pilot will be a medium-scale research prototype installation, lasting for up to 18 months, developing the technology and business case explored in the Voucher stage and applying it to an industrial application demonstration at the End User's site.

Pilot Agreement – Legal agreement between the Coordinating RTO and the ROBOT-NET Pilot winner. The Agreement regulates the execution of pilot work, its financing, the allocation of rights, confidentiality and dissemination obligations.

R&D – Research and Development

ROBOTT-NET consortium – Members of 4 Research and Technology Organisations: Danish Technological Institute (DTI), Fraunhofer Institute for Production Engineering and Automation (IPA), TECNALIA and the Manufacturing Technology Centre (MTC).

Steering Committee (SC) – Consists of one selected member from each of the companies within the ROBOTT-NET consortium. Their mission is to ensure that ROBOTT-NET is executed in accordance with the agreed work plans, of high scientific quality and that the results will be useful to the European robotics community from both academia and industry.

Supporting RTO – The Research and Technology Organisation that was will support the delivery of the Pilot.

Technology Developer - An individual or company that can lead or support the technological development of the prototype system during and after the Pilot stage work is complete.

Technology Strands - A method for ROBOTT-NET to classify the dominant robotic technologies used within a Pilot, they are intended to be industry agnostic and can be applied across many applications in many fields, i.e. pick and place technology, such as 3D bin picking, is suitable in manufacturing, healthcare and logistics applications.

TRL - The Technology Readiness Level scale provides a method to estimate the maturity of technology on its journey to full commercial readiness. The European Commission's definition of the scale starts at TRL 1 where basic principles are observed and concludes at TRL 9 where the actual system is proven in an operational environment.

Valley of death – Challenging technology development phase between academia and industry where funding is difficult to obtain.

Voucher Holder – Applicant who has participated in the first stage of the ROBOTT-NET programme and won the Voucher.

Work Package – A group of related activities within a project. Work Packages can look like projects themselves, therefore they are often thought of as sub-projects within a larger project.

ANNEX 1 PROJECT PLAN TEMPLATE

Please use example provided in Section 3 for further guidance on how to complete this document.

Pilot Project: *Project title*		Roles Required							Financial Support	Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		Consortium Partner 1: *End-User*	Consortium Partner 2: *Technology Developer*	Consortium Partner 3: *Exploitation Manager*	Consortium Partner 4:	Consortium Partner 5:	Coordinating RTO:	Supporting RTO:	Predicted Milestone Value Claimed per Quarter	Date	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Work Package	**Activities**	**Milestone Cost (€)**					**Person Months**			**Milestone Quarters**	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Quarter 5			Quarter 6		
	Total partner spend:	€ -	€ -	€ -	€ -	€ -			€ -																			
	Total claim per partner:	€ -	€ -	€ -	€ -	€ -	0.00	0.00	€ -																			
WP1:									€ -																			
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