SWE 523

PROJECT PROPOSAL FORM

Translated and modified from TÜBİTAK TEYDEB AGY 101 TEMPLATE FOR EDUCATIONAL PURPOSE ONLY

PROJECT NAME: AIRP: AI-based domain-specific business solutions for SMEs

PROJECT ACRONYM: AIRP

COMPANY NAME: AIERP Custom Solutions

DATE: 01.01.2024

SWE 523 - Project1 Proposal Form (translated & modified from GRANTING ORGANIZATION/SWE523 TEYDEB Template)

Initial Technological Readiness Level- (start): 1-9

Target Technological Readiness Level (end): 1-9

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A. FOUNDATION AND PROJECT INFORMATION

A.0. Comparison with Related Project(*)

(*)If the new project proposal presented is the re-submission of a project that was previously submitted to GRANTING_ORGANIZATION/SWE523 and was rejected / withdrawn or abolished, or if it is the continuation of a project that was previously carried out with the support of GRANTING_ORGANIZATION/SWE523, the information requested in this section must be prepared and submitted.

Description: Your new project proposal presented in this section;

- Re-submission of a project that was previously submitted to GRANTING_ORGANIZATION/SWE523/SWE523 and was rejected / withdrawn or abolished; By comparing it with the project in question, the differences of the new project compared to the previous one in terms of features of the targeted outputs, innovative aspects, methods to be applied, project plan, budget and collaborations,
- If it is a continuation of a project previously carried out with the support of GRANTING_ORGANIZATION/SWE523/SWE523; By comparing it with the project in question, the differences and advantages of the new project compared to the previous one in terms of the features of the targeted outputs, innovative aspects and the methods to be applied.

Prepare a document containing relevant information and upload it in pdf format (The file size you will add can be maximum 5 MB).

Comparison with Related Project

A.1 - PROJECT PRELIMINARY INFORMATION

A.1.1.

A.1.1.				
Project number	1			
Project name	AIRP: AI-based domain-specific business solutions	for SMEs		
Project Start Date	10.03.2024 Proj	ect End Date 10.03.2025		
Support Start Date	Sup	port End Date		
Project Duration	52 Weeks Sup	port Period		
Technology Group				
Legal/special	O Project studies require legal/special permission (Ethics Committee, etc.).			
permission:	O Project studies do not require legal/special permission (Ethics Committee, etc.).			
Project information	I hereby approve the information provided in the Proj	ect Name and Project Purpose section to be		
sharing	published in promotional activities, analysis and repo	rting studies, such as success stories, etc.		
	O After the project support process is completed, I ap	prove the name and purpose of the project to		
	be published on the GRANTING ORGANIZATION	/SWE523/SWE523 website. (Note to		
	PRODİS: If the first option is selected in this section,	*		
Sector in which R&D	With its domain specific nature, the initial project All	•		
Studies will be carried	sectors: Food Production			
out	sectors. Food Froduction			
Sector Where Project	Food Production, Textile Manufacturing, Dairy and Dairy Product Manufacturing, Furniture			
Outputs Will Be Used	Manufacturing, Electronics Manufacturing, Construction Materials Manufacturing (Hardware),			
	Footwear Manufacturing, Packaging and Food Processing, Giftware Manufacturing, Automotive			
	Parts Manufacturing, Household Appliances Manufacturing, Optical Product Manufacturing,			
	Sports Equipment Manufacturing, Publishing (Book), Chemical Product Manufacturing, Plastic			
	Product Manufacturing, Metal Processing and Manufacturing, Glass and Ceramic Product			
	-	<u> </u>		
	Manufacturing, Technological Device Manufacturing	,		
iii)				
Scientific and Technolo	gical Fields Included in the Project Proposal			
Economic Activity Clas	s of Project Output (NACE Code)	62.01.01		
GTIP Code of Project C	1	8523		
Project Beginning Tech	nology Readiness Level	3		
Technology Readiness I	Level Targeted to be Reached at the End of the Project	8		

A.1.2.

Project manager			
Name and surname	Mehmet Eyupoglu	TC	17342183964
Title/Duty	Software Developer		
Correspondence			
Telephone	5531731991	Fax	
Email	mehmeteyupoglu2@gmail.com	Secondary Email	

A.2 - ORGANIZATION INFORMATION

<u>A.2.1 – Applicant Organization Information</u>

A.2.1.1.	
Establishment Official	
Organization Type/Scale/Balance	
Tax Administration	
Tax Registration Number	
Establishment Registration Date	
trade register number	
Location of the Project:	
(Technocity/R&D	
Center/OIZ/Other)	

A.2.1.2. Project Person Information

A.Z.1.Z. Troject reison informat	1011	
Establishment Official		
Name and surname	TC Identification number	
Title/Duty		
Telephone	Fax	
Email		

A.2.1.3.

Organization Person	nel Distribution					
Unit of	Doctorate	Degree	Licence	Technical/Vocatio	Othe	Total
Production						
R&D						
Other						
					Total	

A.2.1.4.

	Year/Period	
Financial Information	Annual Number of Employees (YIB)	
of the Organization for	Net Sales Revenue	
the Previous Year or	R&D Expenses	
Last Interim	Total Foreign Sales	
Accounting Period	Paid-in capital	
(TL)	Total Financial Balance Sheet (Total of	
	Total Grant Support Amount Provided from	
	the Public in the Last Three Years (TL)	
	Equity	
	Last Three Years Net Sales Average	
Partner Organization	Information	<u>.</u>

Organization Name:	
Tax Office and Registration Number:	
Address:	
Tel/Fax/E-mail/Web Address:	
Establishment Official:	
TC Identification number:	
Title/Duty:	
Tel/Fax/E-mail:	
Organization Type/Scale:	

A.2.1.5 Other R&D Projects of the Company:

Other R&D I	Other R&D Projects of the Organization Completed and Ongoing in the Last Five Years (*)				
Project Number and Name	Institution from which support is received	Support Amount	Start-End Dates	Economic Values	Explanation
				Export Amount: Number of Patents: License Revenues: TEYDEB Support?: Total Sales Amount:	

^(*) In PRODIS, the organization's previous GRANTING_ORGANIZATION/SWE523 Project information comes automatically from the database. Editing can be done regarding the project information in question, and project information carried out with the support of different institutions can be added. (It will be listed automatically.)

A.2.1.6. Questions for your company's projects previously supported by GRANTING_ORGANIZATION/SWE523 (if any):

1. What is the market share of the supported project outputs and the turnover achieved? (Indirect income for projects other than product development

Detailed explanation of the benefits such as increased productivity, cost reduction, and quality increase that enable it to be achieved.

- 2.Does your company provide after-sales support for the outputs of supported projects? Is the product being sold continued to be developed?
- 3. Are the supported project outputs a component of a main exported product? (For example, the rim of an exported car)
- 4. Have applications been made for international R&D support programs (EU Framework Programs, etc.)? Have you taken part in an international project? If yes, please briefly state what your role is in the project.

A.3. PROJECT DESCRIPTION - BRIEF DESCRIPTION

Explanation: In this section, it is expected to provide information that can be shared with people other than those evaluating the project - without commercial sensitivity. The written and visual material you will prepare in this section will be submitted to the Executive Board where the decision for your project proposal will be made. It will be presented unchanged at the meeting. It is recommended that this section be prepared after all other parts of the project proposal form are filled in. In this section, the focus should be directly on the purpose of the project, concrete goals, R&D content, innovative aspects and technology level. Texts should be written that clearly summarize the project team structure, the project-specific methods to be applied, the unique contributions of your organization, and the technical / economic benefits of the project output to be obtained. Considering that the prepared summary will be presented to people who have expertise in the basic technological fields to which the project is related, general (book) concepts related to the subject should not be repeated, and the focus should be on the technical details to be worked on. General subject and history narratives that are not specific

to the project and its content and will not contribute to the evaluation, and explanations such as general project management methodologies, work package ranking, etc. that may be valid for every project should be avoided.

1 - Brief Introduction of the Establishment and Reason for Initiating the Project

Give brief information about your organization's main field of activity, its main products and services, your core competencies that give your organization a competitive advantage (areas you are best at), and your organization's future vision, and explain how the proposed project is related to all of these (the strategic importance of the project for your organization). (Up to 1,500 characters)

The AIRP project addresses inefficiencies in SMEs, aiming to prevent management crises and bankruptcy threats by providing an AI-based assistant. Our core values of innovation, efficiency, and foresight drive this initiative, aligning with our vision of leveraging technology to foster sustainable growth within the SME sector. This strategic endeavor reinforces our commitment to innovation and our position as leaders in AI-driven solutions, while also creating tangible value for businesses navigating an ever-evolving landscape.

2 – Aim of the Project

AIRP aims to offer an affordable ERP solution tailored specifically for SMEs, integrating built-in features that strengthen their operations. Leveraging advanced AI through smart suggestions from Large Language Models (LLMs), it provides intuitive recommendations to enhance decision-making processes. This cloud-based ERP system ensures accessibility on mobile devices, enabling SMEs to manage their operations seamlessly from anywhere. Additionally, our domain-specific setup streamlines processes, making day-to-day tasks easier for SMEs, ultimately empowering them to thrive in competitive markets.

Keywords:

ERP, SME, AI, LLM, Business, B2B, Generative AI, Mobile

3 – Innovative Aspects

This project boasts several innovative aspects that set it apart in the realm of SME-focused ERP solutions. Firstly, our domain-specific setup ensures tailored functionality, addressing the unique requirements of various industries and niches, thereby streamlining operations for SMEs. Secondly, we leverage advanced AI capabilities, such as smart suggestions from Large Language Models (LLMs) trained on company-specific data, enabling personalized and contextually relevant insights to drive decision-making. Lastly, our emphasis on mobile access ensures flexibility and convenience, empowering users to manage their businesses anytime, anywhere, and on any device.

4 - Techniques and Technologies to be Used/Developed and Original Contributions

Prototype level:

• Backend: Express.js, MySQL

• Frontend: React

• Generative AI: Llama 2

Enterprise level: TBD

5 – Economic Benefits & Business Value to the Nation

Considering the large majority of economies in most of the countries rely on SMEs, the immediate effect will be through nationwide sales. Within a few years, AIRP is expected to be used by the 10% of all SMEs in Turkiye, that makes about 20000 SMEs. This is expected to produce around 150M TL (5M USD) out of the money wasted due to inefficient resource planning and lack of strong data-driven management.

Project Visual

At least one visual material (photo, technical drawing, layout drawing or draft drawing, table, graph, circuit diagram, system architecture, conceptual model diagram, flow diagram, etc.) that you think will best reflect your project to the evaluators should be uploaded to this section. (You can upload documents in image (JPG, JPEG, GIF, PNG), PDF or Microsoft Word Document format. 1 attachment can be a maximum of 5 MB, and the total size of your attachments can be a maximum of 10 MB.)



™Visual	3

Presentation Material (YOU WILL PRESENT YOUR PROJECTS FOR SWE523 COURSE, 10 slides max.)

Project owner companies/project managers who wish can prepare one of the following presentation options and add it to the Project Proposal Form (Do not upload videos only for organization promotion in this section. Your video clip can be a maximum of 10 MB. The videos to be uploaded to the system must be in "flv" format. You can upload your videos in different formats. You can convert it to "flv" format with programs such as Format Factory etc. The presentation file size to be uploaded can be maximum 5 MB):

Project Presentation (must be in MSPowerPoint format, not exceed 10 slide pages) Project Promotion Video (must be in flv format, should not exceed 5 minutes)

THIS WILL BE SUBMITTED WITH YOUR PROPOSAL AS PPT FILE

B. INDUSTRIAL R&D CONTENT, TECHNOLOGY LEVEL AND INNOVATIVE ASPECTS OF THE PROJECT

B.1 -RELATIONSHIP OF THE PROJECT WITH THE CALL TOPIC AND OBJECTIVES

1 -Explain the relationship of the project to the subject of the call.

%100 in aggreement with the call for project.

2 - Explain the general purpose of the project. Identify the problem that is intended to be solved by the project.

SMEs often struggle to manage their data effectively due to resource constraints and limited IT expertise. This is particularly challenging because:

- Lack of control: Disorganized data makes it difficult for SME owners to get a holistic view of their business, hindering their ability to make informed decisions.
- Inefficiency: Manual data entry and isolated processes can waste time and resources, especially for businesses with limited human resources.
- Financial vulnerability: Poor data management can lead to errors in accounting, inventory control, and other critical areas.
- Data entry burden: SMEs with limited staff often find data entry a cumbersome task, leading to delays and potential inaccuracies.

3- Describe the proposed solution to achieve the project objectives.

This project tackles the data management challenges faced by Small and Medium-sized Enterprises (SMEs) by developing a user-centric Enterprise Resource Planning (ERP) system. This system offers several key features designed to empower owners:

- Centralized Data Hub:

 The system acts as a central repository for all business data, accessible through both desktop and mobile devices. This eliminates data silos and ensures all departments and employees have access to the most up-to-date information.

- Domain-Specific Efficiency:

- The system incorporates domain-specific functionalities tailored to the unique needs of different industries within the SME landscape. This streamlines common tasks like inventory management, customer relationship management, or project tracking.
- Customizable forms further enhance data collection by allowing users to capture industry-specific data points relevant to their operations.

- Leveraging LLMs:

- The project integrates Large Language Models (LLMs) trained on company-specific data. These LLMs can act as intelligent assistants by:
- Facilitating Data Collection: LLMs can automate data entry tasks by extracting information from documents, emails, or voice commands, reducing manual work and improving accuracy.
- Supporting Decision-Making: Trained on historical data and industry trends, LLMs can provide insights and generate reports to aid informed decision-making by SME owners.

- Web Intelligence with LLMs:

 The system utilizes LLMs to scrape the web for domain-specific news and industry developments relevant to the company's operations. This allows owners to stay informed about market trends, competitor activity, and potential opportunities. Overall, this project proposes a comprehensive ERP system that combines centralized data access, domain-specific functionalities, and the power of LLMs. It aims to streamline data management, enhance decision-making capabilities, and provide SME owners with valuable real-time insights to navigate the dynamic business landscape.

4 -Explain the goals planned to be achieved with the proposed solution.

This project aims to develop an ERP system that empowers SMEs by achieving the following goals:

o Enhanced Operational Efficiency:

 By streamlining data collection through built-in functionalities, customizable forms, and LLM automation, the system aims to reduce manual data entry tasks. This translates to a measurable increase in employee productivity, allowing them to focus on higher-value activities.

o Reduced Resource Redundancy:

 The centralized data platform and domain-specific functionalities will eliminate the need for siloed data and redundant processes across departments. This will be measured by tracking the number of processes streamlined and the reduction in duplicate data entry instances.

Improved Data Quality and Availability:

 By automating data entry and offering user-friendly data capture methods, the system aims to achieve a measurable increase in data accuracy. Additionally, the centralized platform ensures data availability for all authorized users, fostering better decisionmaking.

Data-Driven Decision Making:

 The project leverages LLMs trained on company data and industry trends to generate reports and insights. The goal is to increase the utilization of these AI-powered insights by SME owners within a defined timeframe.

o Strengthened SME Competitiveness:

O By achieving the aforementioned goals, the system aims to contribute to a measurable improvement in key performance indicators (KPIs) relevant to SMEs, such as increased sales, improved customer satisfaction, and reduced operational costs. Tracking these KPIs will demonstrate the overall impact of the ERP system on strengthening SME competitiveness

5 -Identify the ultimate beneficiaries of the proposed project and justify the reasons for selecting this target group.

This project prioritizes SMEs due to:

Resource Constraints: Limited financial resources often hinder investment in complex ERP systems or data management expertise. This project offers a user-centric, cost-effective solution.

Data Management Challenges: Inefficient data collection and silos impede control and informed decision-making. The proposed ERP system tackles these challenges through a centralized repository, streamlined collection tools, and functionalities tailored to SME needs.

Enhancing Efficiency: Automation features and data-driven insights aim to bolster overall business efficiency for SMEs.

While broadly applicable, manufacturers may see specific benefits due to their data-intensive operations. The system can be tailored to their industry-specific needs.

6 -Explain in detail the methods to be applied and the reasons for choosing these methods.

This project proposes a flexible approach to empower SMEs with data management capabilities:

Ubiquitous Data Collection (Mobile & Desktop):

 Rationale: SMEs require flexible data entry options. Mobile access caters to field workers and remote operations, ensuring real-time data capture (e.g., field sales recording). Desktop access facilitates data entry for administrative staff and decisionmakers

Domain-Specific Data Organization and Functionalities:

Rationale: One-size-fits-all solutions often fail to capture the unique needs of different industries. The system will offer pre-built functionalities and industry-specific forms that cater to data points relevant to each SME's operations (e.g., inventory management tools for manufacturers, customer relationship management features for service providers). This streamlines data collection and organization according to industry best practices.

o Leveraging Open-Source LLMs for Company-Specific Insights:

O Rationale: State-of-the-art AI technologies offer significant potential for SMEs. By utilizing open-source LLMs trained on a company's specific data sets, the system can generate more relevant and actionable insights. This empowers decision-makers to make informed choices based on tailored data analysis and avoid generic recommendations that may not apply to their specific industry or business context.

/ -Examine the phority areas link in the can text and indicate whether your project has been developed for the Phority
R&D and Innovation Topics" in these areas. (It is recommended to take into account the explanations under the Priority
Products and Technologies headings and the Technology Readiness Level (THS).)
YES or NO
Explanation:

B.2 TECHNOLOGY LEVEL OF THE PROJECT

Current State of the Technology ("State-of-the-Art")		
Explain the current national/international level regarding the project subject. (Up to 3,000 characters)		
(Up to 3,000 characters)		
(Op to 0,000 dilardotors)		

Techniques and Technologies Covered by Project Activities and Original Contributions

List the techniques and technologies that will be developed or used in the project, especially during the design/development processes, in the table below. Please also indicate your organization's unique contributions to the technical/technological content of the project and the areas of expertise that will receive support from outside your organization:

Name/descripti on of technique/tech nology	To Be Used / To Be Developed	Why is it needed in the project?	Which phase of the project does it concern (work package)	Project personnel who will carry out the work	Persons or organizations to receive consultancy/service from outside the organization
" analysis"					
"Newproducti on technique"					
"tests"					

Technical/	Techno!	logical	Uncertai	inty and	l Challenges

Taking into account your organization's current knowledge and capabilities gained from past projects, describe the technical/technological uncertainties and difficulties you will encounter for the first time and that you will have to overcome during the development of the proposed project, with which you have no experience. (Up to 3000 characters)

$\mbox{B.3}$ PROMOTION OF THE PROJECT WITH CONCRETE / MEASURABLE OBJECTIVES AND SOLUTION APPROACHES (R&D SYSTEMATICS)

neasure of			,	target value the targeted outputs of the starget value	
oiect Pren	aration Studies				
		elow the inform	ation obtained be	fore the project application regarding the	litera
d patent res	search on the project subject	et, technical feas	sibility studies an	d the standards / specifications to be followed	
	earch results, if any, that w			1	
ublication	name	Date	Writers)	Summary information that will fo	rm
				input to the project:	
ent / utility	model research results, if	any, related to t	the project subjec	t:	
patent	Patent office where it	Year (applica		ap Summary information that wil	
number	is registered (TPE,	year if at the	1	input to the project	
	EPO, USPTO, JPOetc)	application st	tage)		
	31 0()				
nmary find	dings of technical pre-feasi	bility studies - i	if conducted: (Ma	ximum 1500 characters)	
•					
•					
ndards / sp	pecifications to be followed	I regarding the r	project output: (M	aximum 1500 characters)	
				,	
•					
	oe Used in the R&D Proce	ess			
ethods to b			hat will be applie	d to achieve the project objectives define	ed abo
ecify the ar	is section, it should be expl	lained which tec	ennicai / scientific	approaches and their stages will be folk	owcu

B.4. INNOVATIVE ASPECTS OF THE PROJECT

Innovations

After briefly summarizing the innovative aspects of the output targeted in the project, its anticipated differences, advantages and superiorities compared to its counterparts in the market and sector (within the company, at home or abroad), please state it by comparing it with concrete/numerical and measurable values as much as possible in the two tables below.

- a) Comparison of the proposed project output with your organization's existing products/processes and the outputs of previously completed R&D projects (Table Y.1):
- There is no similar product/process in our organization that can be compared with the proposed project output.
- o Comparison of our organization with similar products/processes is made in the table below.

Technicial Specifications	Project Output	Other Product/Process Available in the Organization (1)	(If any) Other Product/Process Available in the Organization (2)	•••••
Feature-1				
Feature-2				

- b) Comparison of the proposed project output with existing or potential similar ones in the domestic/foreign market (Table Y.2):
- o In the project, a new product/process that has no comparable counterpart in the market will be developed.
- Comparison of the project output with its current or potential counterparts in the domestic/international market is made in the table below.

Technicial	Project Output	Similar	(If any) Similar	•••••
Specifications		Product/Process (1)	Product/Process (2)	
Feature-1				
Feature-2				
Feature-3				

INFORMATION RELATED TO THE PARTNER PROJECT (*)

(*)(This section will be activated for applications within the scope of projects carried out with national partnerships.)

Explain the division of labor between the partners in the project. State your duties and responsibilities in the project by associating them with the work packages. Provide information about the complementarity of the project partners' skills to be used in the project.

If technology transfer is planned from the partners of the project, please provide information about the efforts to ensure the permanence of technology transfer in the project.

Explain how the intellectual and industrial property rights that will arise as a result of the project will be shared among the partners.

C. PROJECT PLAN AND ESTABLISHMENT INFRASTRUCTURE

C.1. BUSINESS PLAN

Detailed Work-Time Bar Chart	
Detailed Job Time Bar Chart	

List of Work Packages							
Sequence No.	Code	Work Package Name	Start-End Dates				
1	0001						
2	0002						
3	0003						

Work Package Identification Form(A separate form will be prepared for each work package)						
Work Package Number:						
Work Package Name:						
Starting date:						
End Date:						
Related Organizations(In joint p	projects, please	tick the ones included in th	is work			
package from the project partners	s)					
List work package activities (Maximum 3,000 characters):						
Describe the methods to be used i	in the work pac	kage and your unique contr	ributions to them,	and list the parameters to be		
examined (Maximum 3,000 characters):						
List the experiments, tests and ana						
experiments and tests will be carr	ried out, give de	etailed justification for the o				
experiments and tests will be carr / tests / analyzes will be performe	ried out, give de	etailed justification for the opackage, specify):	ones to be carried	out abroad. If no experiments		
experiments and tests will be carr / tests / analyzes will be performe Experiment / Test / Analysis	ried out, give de ed in this work p Reason	etailed justification for the opackage, specify): Where it will be carri	ed out (in the	out abroad. If no experiments (If it will be held abroad)		
experiments and tests will be carr / tests / analyzes will be performe	ried out, give de ed in this work p	etailed justification for the opackage, specify):	ed out (in the	out abroad. If no experiments		
experiments and tests will be carr / tests / analyzes will be performe Experiment / Test / Analysis	ried out, give de ed in this work p Reason	etailed justification for the opackage, specify): Where it will be carri	ed out (in the international	out abroad. If no experiments (If it will be held abroad)		
experiments and tests will be carr / tests / analyzes will be performe Experiment / Test / Analysis	ried out, give de ad in this work p Reason for	etailed justification for the opackage, specify): Where it will be carri company, domestic or	ed out (in the international	out abroad. If no experiments (If it will be held abroad)		
experiments and tests will be carr / tests / analyzes will be performe Experiment / Test / Analysis	ried out, give de ad in this work p Reason for	etailed justification for the opackage, specify): Where it will be carri company, domestic or	ed out (in the international	out abroad. If no experiments (If it will be held abroad)		
experiments and tests will be carr / tests / analyzes will be performe Experiment / Test / Analysis Name	ried out, give de d in this work p Reason for Making	etailed justification for the opackage, specify): Where it will be carri company, domestic or organizatio	ed out (in the international ns)	(If it will be held abroad) Materials		
experiments and tests will be carr / tests / analyzes will be performe Experiment / Test / Analysis	ried out, give de din this work particular Reason for Making	etailed justification for the opackage, specify): Where it will be carri company, domestic or organization	ed out (in the international ns)	(If it will be held abroad) Materials		
experiments and tests will be carr / tests / analyzes will be performe Experiment / Test / Analysis Name Specify the measurable/concrete to	Reason for Making technical internetic completion:	etailed justification for the opackage, specify): Where it will be carri company, domestic or organization	ed out (in the international ns)	(If it will be held abroad) Materials		
experiments and tests will be carr / tests / analyzes will be performe Experiment / Test / Analysis Name Specify the measurable/concrete to package activities and indicate the	Reason for Making technical internetic completion:	etailed justification for the opackage, specify): Where it will be carri company, domestic or organization	ed out (in the international ns)	(If it will be held abroad) Materials conitoring of this work		
experiments and tests will be carr / tests / analyzes will be performe Experiment / Test / Analysis Name Specify the measurable/concrete to package activities and indicate the Definition of Intermediate	Reason for Making technical internetic completion:	etailed justification for the opackage, specify): Where it will be carri company, domestic or organization	ed out (in the international ns)	(If it will be held abroad) Materials conitoring of this work for Which Output Will Be		

List of Interim Outputs (Milestones) (*)							
Search Output	Work package to be achieved	Expected realization date	Work package from which the output will be used				
Intermediate Output-1							
Intermediate Output-2							

^(*)This section is automatically created by PRODIS using the Intermediate Output information given in the work packages.

C.2. PROJECT MANAGEMENT AND ORGANIZATION

Explanations About Project Management	

Project Personnel List In this form, information about the personnel working on the project will be added. For each project personnel, Fill out the Personnel Resume Form, convert it to PDF format from the "Add Personnel" screen and attach it.							
Personnel Name Title TR ID/Passport Number Education nal Status Undergradu ate Graduation Date Date of start Principles of Start Opinionato Resume							
GDPR: Use Fake names		GDPR: Use Fake numbers					<u> </u>
							<u> </u>

C.3. ORGANIZATION INFRASTRUCTURE (*)

(*)This section will be filled out separately for each organization in collaborative projects offered by more than one organization.)

R&D Opportunities of the Organization

Describe your organization's R&D opportunities and experience under the following headings:

- a) Your organization's current R&D structure (R&D unit, laboratory and test environments, tools-equipment and software tools, library facilities, dedicated platform for R&D purposes, etc.),
- b) Consultancy services received from outside your organization and joint work with other organizations.
- c) Explain the measures you have taken to make the knowledge that will emerge as a result of the project permanent in your organization.
- d) Provide information about your new product development and design ability.

D. CONVERTERABILITY OF THE PROJECT INTO ECONOMIC BENEFIT AND NATIONAL GAIN D.1 ECONOMIC FORECASTS

Potential for Commercial Success By evaluating the potential of the project output to be commercialized / transformed into economic benefit; a) Provide information about the targeted areas of use, the size of the domestic and international markets, the strategy to access these markets, potential customers and the current market shares of competitors. (Up to 3,000 characters)						
b) If there is a need for additional investment to commercialize the significant cost items and how these costs will be covered / fina commercialization process and their experiences on the subject.	nced. Summarize (Up to 3,000 cha	e who and how w				
In order for the project output to become commercialized / provide e There is NO Need for Additional Investment. THERE IS A NEED FOR THAT ADDITIONAL INVESTM	,					
Economic Return Estimate						
(NOTE: If the project output is a "product" that will be marketed by (a) is included. If it is a product or process that will be developed in I specific), part (b) is part (b) only. If it is a new or improved process complete part (c).)	ine with a single	customer deman	d (customer			
O a) It will be offered to the market.						
O b) To be developed for a single customer.						
O b-1) Customer demand is NOT expected to be repeated.						
O b-2) Continuity of customer demand is expected. O c) To be used within the organization.						
a) Please indicate your numerical predictions regarding the econor	nic return that th	a project output v	vill provide to your			
organization in the table below. Please explain below your calc						
predictions. (Up to 3,000 characters)	arations/approact	ies that form the	ousis of your			
O i) The project output will be offered to the domestic market	only.					
O ii) It is aimed to present the project output to foreign marke						
Time to enter the domestic market from the beginning of t	he project (Mont	ns):				
			3.5 4. × 4. ×			
Time to enter the foreign market from the beginning of the	project		(Months)(*):			
After the project is completed, your organization;	end of 1st	end of year 3	Year 5 and			
	year		beyond			
Expected total domestic sales revenue (TL)						
Expected total foreign sales (export) revenue (TL) (*)						
Expected increase in domestic sales revenue (%)						
Expected increase in foreign sales revenue (%)(*)						
Expected increase in domestic market share (%)						
Expected increase in foreign market share (%)(*)						
(*)It will be filled in if the project output is intended to be	e presented to for	eign markets.				
b) Provide information about the customer of the project output (d						
the potential to provide import substitution to our country, the e	xpected profit fro	om the sale of the	e project output, and			
the potential to receive new orders on subjects similar/related to	the project outp	ut after the projec	et. (Up to 3,000			
characters)						

b-1) Total sales revenue expected to be obtained with the project output	ıt (TL):							
b-2	2)								
	O i) The project output will be offered to the domestic market of	only.							
	O ii) It is aimed to present the project output to foreign markets.								
	Time to enter the domestic market from the beginning of the project (Months):								
	Time to enter the foreign market from the beginning of the	project	(N	Months)(*):					
	After the project is completed, your organization;	end of 1st	end of year 3	Year 5 and					
	After the project is completed, your organization,	vear	clid of year 3	beyond					
	Expected total domestic sales revenue (TL)	year		ocyona					
	Expected total foreign sales (export) revenue (TL) (*)								
	Expected increase in domestic sales revenue (%)								
	Expected increase in foreign sales revenue (%)(*)								
	Expected increase in domestic market share (%)								
	Expected increase in foreign market share (%)(*)								
	(*)It will be filled in if the project output is intended to be	presented to for	eign markets.						
		1 00 :	. 1 .:	11.					
c)	State the expected contributions of the project output to organization		cost reduction, qu	iality increase					
	and competitiveness, using numerical data. (Up to 3,000 character	S)							
<u> </u>									
Tra	nsition Point to Profit								
Exp	lain how and how long it will take to recover the resources spent on	the project. Spe	ecify the time to pr	rofit from the					
begi	nning of the project - together with your calculations. (Up to 3,000	characters)							

D.2 NATIONAL ACHIEVEMENTS

Please indicate the national gains that the project can provide, taking into account the following headings that you deem relevant:

- a) Contribution to national knowledge and technological development,
- b) The potential to initiate new applications or R&D projects in the same or different technology areas, within or outside the organization,
- c) Anticipation of obtaining patents and licensing/know-how sales (outputs of the project that may be subject to patent, utility model and industrial design registration),
- d) Creating new business areas and employment impact,
- e) Sectoral contribution (contribution of the project to the creation and development of sub-industry, the relevant sector and other sectors),
- f) The impact of the project and its outputs on socio-cultural life, the potential to provide improvements in issues such as education, health, and reducing the development gap between regions,
- g) Positive effects of project activities and output on the environment and living things
- h) Outputs of project studies that can be subject to scientific publication.

(Up to 5,000 characters)

E. RISK AND FINANCIAL STRUCTURE

Risks That May Encounter and Precautions to be Taken During the Execution of the Project Indicate the technical, financial, administrative and legal risks that may be encountered during the execution of the project and what kind of measures you plan to take to minimize them ("your Plan B(s)").

Risk	Precautions Taken to Prevent the Risk from Realizing	What is the probability of the risk occurring despite the measures taken, and what is the impact it might have if it occurs? Possibility Effect (High / Medium / Low) (High / Medium / Low)		What to do if a risk occurs despite the precautions taken ("Plan B")

Risks that may be encountered and precautions to be taken during the commercialization phase of the project output

State the possible obstacles your organization may encounter during the commercialization phase (technical, financial, legal, intellectual property rights, etc.) and your plans to overcome these obstacles. In addition, if the project activities and project output have negative effects on the environment and living things, indicate the precautions you plan to take against them.

Risk	Precautions Taken to Prevent the Risk from Realizing	What is the probability of the risk occurring despite the measures taken, and what is the impact it might have if it occurs? Possibility Effect (High / Medium / Low) (High / Medium / Low)		What to do if a risk occurs despite the precautions taken ("Plan B")
-				

Financial N	Anagement
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In the projects supported by the support program you are applying for, the project expenses are submitted to TUBITAK/SWE523 after they are made by the organization, and at the end of the evaluation, a certain percentage of the expenses related to the project is paid to the organization by TUBITAK/SWE523. Provide information about the adequacy of your equity and other financial resources and the measures you plan to take to carry out the project. (Up to 3,000 characters)

F. PROJECT BUDGET

F.1 - PERSONNEL EXPENSES ESTIMATED COST FORM (M011)

Project name							
Work Package Number/Name							
Name and surn	ame	Role in the Work Package	Title in the Company	Man/Month Ratio	Moon	Total Man-Moon	
							Ī
			WORK PACKA	AGE MAN-MONT	H TOTAL =		

F.2 - TRAVEL EXPENSES ESTIMATED COST FORM (M012)

of lill Title in the Company	Travel Description	Relationship of Travel to Project Activities	C
	ill Company	Ill Company Travel Description	Travel Description Relationship of Travel to Project

F.3 - ESTIMATED COST FORM FOR TOOLS/EQUIPMENT/SOFTWARE/PUBLISHING PURCHASES (M013)

Proje name								
seque nce num	Software/Publication	Piece	ece Capacity	Technical specification	Purpose of Use in Project Activities	Place/Purpose of Use After urpose of Use in the Project Use	Unit Pri (USD)	
ber	Name				·	R&D	Production	,
one								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11th								
12								

F.4 - ESTIMATED COST FORM FOR WORKS PERFORMED BY R&D AND TESTING ORGANIZATIONS (M014)

Project name				
Organization car	from which R&D is ried out	Description of the Work Done	Relationship with Project Activities	Reason
		•		

F.5 - SERVICE PROCUREMENT ESTIMATED COST FORM (M015)

Project name				
Organization from	m which the service ceived	Description of the Service	The Relationship between Service Procurement and Project Activities	Justifica Pr
•				

F.6 - MATERIAL PURCHASES ESTIMATED COST FORM (M016)

Projec	et name					
Sequ ence No.	Produ	ct name	Purpose of Use in Project Activities	Quantity and Unit	Justification of Amount	Unit Price (USD)

F.7 - PERIODICAL AND TOTAL ESTIMATED COST FORM (TL) (M030)

Cont Mann	2	0	2	20	20	
Cost Item	I	П	I	II	I	II
Employee						
Trip						
Tool/Equipment/Software/Publication						
Works Outsourced to Domestic R&D and Testing Organizations						
Works Outsourced to Foreign R&D and Testing Organizations						
Domestic Service Procurement						
Foreign Service Procurement						
Material						
TOTAL COST						
CUMULATIVE COST						

G.ANNEXES