

South Mediterranean Tunisian Maintenance Centre of Excellence

South Mediterranean Tunisian Maintenance Centre of
Excellence – SM-TMC

Project No. 618718-EPP-1-2020-TNEPPKA2-CBHE-JP

TABLE OF ACHIEVED / PLANNED RESULTS

COORDINATOR



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WP1 PREPARATION SM-TMC Framework
development and educational and training
specifications

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Development of Maintenance Engineering
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WP3 DEVELOPMENT
Development of Maintenance Engineering
Training Programme – TMC-VET

WP4 QUALITY PLAN
Quality Assurance, monitoring and control

WP5 DISSEMINATION & EXPLOITATION
Dissemination and TMC-Knowledge
Maintenance Platform

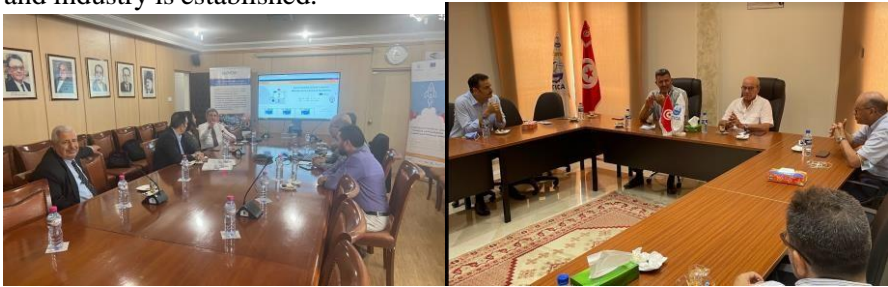
WP6 DISSEMINATION & EXPLOITATION
Exploitation and TMC-ORG

WP7 MANAGEMENT
Project Coordination and Administration



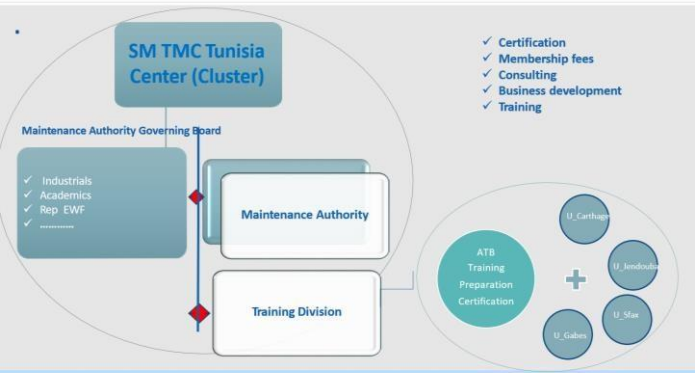










TABLE OF ACHIEVED / PLANNED RESULTS

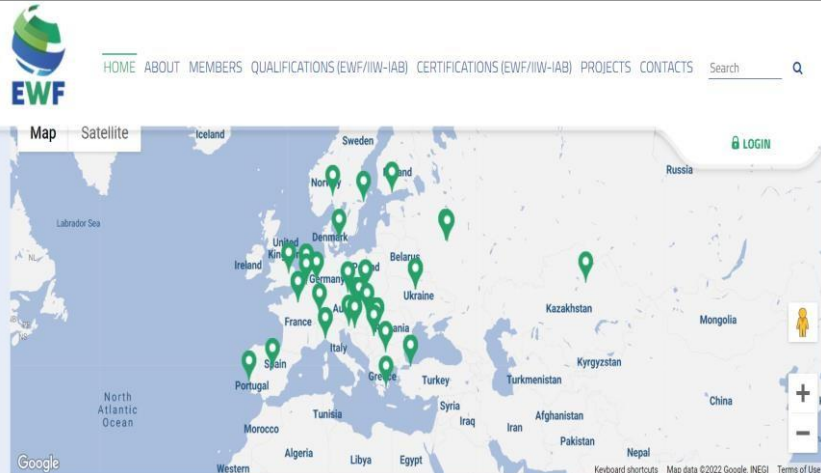
<u>Title and reference number of the work package (WP)</u>	<i>WPI PREPARATION</i> <i>SM-TMC Framework development and educational and training specifications</i>
<u>Indicators of achievement and or/performance as indicated in the project proposal</u>	<i>Database for the stakeholders developed</i> <i>Curricula review of technological programmes at PC universities .</i> <i>Structure of the training programmes</i> <i>Structure of the TMC-ORG</i>

Activities carried out to date to achieve this result:

Activity N°	Activity Title	Start date	End date	Place	Description of the activity carried out	Specific and measurable indicators of achievement
1.1	Structure of the TMC-ORG	15/03/2021	30/05/2021	Tunisia	<p>This activity aims at providing a model for the Tunisian Maintenance Centre and developing Instruments to implement it in the Tunisian academic and industrial environment. The national conditions will be carefully considered. Working groups with participation from academy and industry is established.</p> 	<p>Database for the stakeholders is developed: About 200 stakeholders are included in the database</p> <p>agreements with employers' structures: 6 agreements are signed</p>



					<p>the STMTMC, Stakeholder database has been established in the first year of the project. The link is below https://docs.google.com/spreadsheets/d/1PSz05dAIgWvrGij5SVJTaZNMFSVo9Gdh/edit#gid=85242791</p> <p>Framework agreements with employers' structures in Tunisia have been signed:</p> <ul style="list-style-type: none"> UTICA (Union tunisienne de l'industrie, du commerce et de l'artisanat) UMPI (union des petites et moyennes industries) CONNECT (Confédération des Entreprises Citoyennes de Tunisie) CRNS Centre de recherche en Numérique de Sfax Sfax Industrie 4.0 Center Mecadev (cluster Mécanique) <p>The SMTMC center will be also accredited by our partner EWF as ANB. The center can deliver training and certification in Maintenance and Additive manufacturing.</p> <div style="text-align: center;">  Centre accrédité : ANB  </div>  <div style="float: right; margin-top: 20px;"> <ul style="list-style-type: none"> ✓ Certification ✓ Membership fees ✓ Consulting ✓ Business development ✓ Training </div> <div style="margin-top: 20px;"> <p>Dr Mohamed BELHAJ Université de Sfax</p> <div style="display: flex; justify-content: space-around; align-items: center;">        </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 5px;">    </div> </div>
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1.2	Educational and Training maintenance programme structure	15-04-2021	15-10-2021	Tunisia	<p>Educational maintenance programme structure has been established</p> <ul style="list-style-type: none"> • University of Sfax: Higher Institute of Industrial management: Master in management and maintenance of industrial systems (accreditation accepted by the ministry on September 2022 Courses Started on September 2022) • University of Gabès: The Higher Institute of Applied Sciences and Technology of Gabès (ISSATG): Master in electromechanics (accreditation accepted by the ministry on September 2022 Courses Started on September 2022) • University of Jendouba: Engineering cycle in Vehicle and Machinery Technology (Ongoing) • University of Cartage: National Engineering School of Bizerte: Master in Maintenance Engineering new creation accepted by the ministry in October 2022. <p>The training maintenance programme structure has been established according to the table below. European partners have ensured the training for the Tunisian partners</p>	<p>Curricula review of technological programmes at PC universities . Structure of the training programmes</p> <p>One new master created</p> <p>Two master programs re-accredited</p> <p>One engineering program updated</p>



					<table><tr><th></th><th>Course</th><th>Mode</th><th>Day/hour</th><th>Partner</th></tr><tr><td>1</td><td>Workshop related topics in maintenance</td><td>Online</td><td>2 March, 12 CET</td><td>Galati - Romania</td></tr><tr><td>2</td><td>CNC Metrology FEM in structural mechanics</td><td>Online</td><td>17 March</td><td>Galati- Romania</td></tr><tr><td>3</td><td>CNC Metrology FEM in structural mechanics</td><td>Online</td><td>24 March</td><td>Galati- Romania</td></tr><tr><td>4</td><td>Maintenance I</td><td>Online</td><td>22 Mars</td><td>Vigo - Spain</td></tr><tr><td>5</td><td>Maintenance II</td><td>Online</td><td>25 Mars</td><td>Vigo – Spain</td></tr><tr><td>6</td><td>Mechatronics</td><td>Online</td><td>25 Mars</td><td>Vigo – Spain</td></tr><tr><td>7</td><td>Industry 4.0 & Big Data</td><td>Face to face</td><td>28-31 Mars</td><td>Vigo – Spain</td></tr><tr><td>8</td><td>Introduction to thermography</td><td>Presential at Tunis</td><td>December 2022</td><td>Plasmatrix</td></tr><tr><td>9</td><td>Introduction to water treatment</td><td>Presential At Sfax</td><td>December 2022</td><td>Plasmatrix</td></tr></table>		Course	Mode	Day/hour	Partner	1	Workshop related topics in maintenance	Online	2 March, 12 CET	Galati - Romania	2	CNC Metrology FEM in structural mechanics	Online	17 March	Galati- Romania	3	CNC Metrology FEM in structural mechanics	Online	24 March	Galati- Romania	4	Maintenance I	Online	22 Mars	Vigo - Spain	5	Maintenance II	Online	25 Mars	Vigo – Spain	6	Mechatronics	Online	25 Mars	Vigo – Spain	7	Industry 4.0 & Big Data	Face to face	28-31 Mars	Vigo – Spain	8	Introduction to thermography	Presential at Tunis	December 2022	Plasmatrix	9	Introduction to water treatment	Presential At Sfax	December 2022	Plasmatrix	
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1.3	Workforce competence and skill profile for maintenance jobs	15-04-2021	15-10-2021	Tunisia	The actual workforce skills and the present situation and the future progress are the prerequisite for the development of the TMC-VET programme. Industrial needs are reflected by the various qualification types and levels that will be selected in this activity. Summary of requirements for maintenance certification. A survey is prepared for systematic data collection and processing. The survey and its results are presented in the report D1.3 (see below)	Content of the maintenance training courses for three levels of maintenance personnel: managers, engineers and technicians																																																		



					<div style="text-align: center;">    </div> <p style="text-align: center;"> Project : South Mediterranean Tunisian Maintenance Centre of Excellence (SM-TMC) 2021 – 2024 </p> <p style="text-align: center;">FICHE 1 : INFORMATIONS GENERALES</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">1. Raison sociale :</td> <td style="width: 50%;"></td> </tr> <tr> <td>2. Ville :</td> <td></td> </tr> <tr> <td>3. Adresse :</td> <td></td> </tr> <tr> <td>4. Contacts (Tél, Courriel, site web) :</td> <td></td> </tr> <tr> <td>5. Secteur / domaine d'activité :</td> <td> <input type="checkbox"/> Industries Agro-alimentaires <input type="checkbox"/> Industries des matériaux de construction céramique et verre <input type="checkbox"/> Industries mécaniques et métallurgiques <input type="checkbox"/> Industries électriques, électroniques et de l'électroménager <input type="checkbox"/> Industries chimiques <input type="checkbox"/> Industries textiles et habillement <input type="checkbox"/> Industries diverses </td> </tr> <tr> <td>6. Nom du contact auprès de l'Entreprise :</td> <td></td> </tr> <tr> <td>Coordonnées :</td> <td></td> </tr> </table> <div style="text-align: center;">   </div> <p style="text-align: center;"><i>D1.3. Enquête sur la maintenance et l'industrie 4.0 en Tunisie</i></p> <p>1. Introduction</p> <p>Dans ce rapport, nous allons exposer le résultat de l'enquête qui a été menée auprès de 68 entreprises Tunisiennes. Puis, nous étudions les variables prédominantes dans l'application de la maintenance et de l'industrie 4.0 réalisé par le logiciel MICMAC (Matrice d'Impacts croisés-Multiplication Appliquée à un Classement). Enfin, nous allons définir des conclusions et des recommandations à travers les relations directes et indirectes des variables clés.</p> <p>2. Méthodologie</p> <p>2.1. Cadre de l'approche</p> <p>La méthode retenue pour déterminer les variables clés qui influent directement sur le besoin en matière de maintenance passe par la collection des données à travers des questionnaires élaborés dans le cadre du projet Européen Erasmus + SM-TMC.</p> <p>La deuxième étape sert à faire une analyse statistique descriptive à fin d'obtenir une vision globale sur notre échantillon.</p>	1. Raison sociale :		2. Ville :		3. Adresse :		4. Contacts (Tél, Courriel, site web) :		5. Secteur / domaine d'activité :	<input type="checkbox"/> Industries Agro-alimentaires <input type="checkbox"/> Industries des matériaux de construction céramique et verre <input type="checkbox"/> Industries mécaniques et métallurgiques <input type="checkbox"/> Industries électriques, électroniques et de l'électroménager <input type="checkbox"/> Industries chimiques <input type="checkbox"/> Industries textiles et habillement <input type="checkbox"/> Industries diverses	6. Nom du contact auprès de l'Entreprise :		Coordonnées :	
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Activities to be carried out to achieve this outcome (before the end of the project)



Click a button below to learn more.

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<u>Indicators of achievement and or/performance as indicated in the project proposal</u>	<i>Updating of the programs for the 3 universities: Sfax, Gabes and Jendouba</i> <i>Creation of a new master for the University of Cartage</i>

Activities carried out to date to achieve this result:

Activity N°	Activity Title	Start date	End date	Place	Description of the activity carried out	Specific and measurable indicators of achievement
2.1	Outline and fulfilment of the curriculum	1/05/2021	30/11/2021	Tunisia	The curricula has been developed according to the methodology formulated at D1.3 and to Tunisian needs and taking into consideration European standards for education in maintenance. The curriculum contain basic subjects, competence maintenance courses and general courses in culture and business. The curricula has been adapted for each university needs. In addition, modernization of curricula to take into account the progress made in industry.	Updating of the programs for the 3 universities: Sfax, Gabes and Jendouba Creation of a new master for the University of Cartage
2.2	Syllabuses and Educational material development	30/05/2021	30/11/2021	Tunisia	Syllabuses and Educational material has been established and published on the websites of each university. Sfax university (14 students enrolled) https://isgis.rnu.tn/fra/pages/125/Management-et-Maintenance-des-Syst%C3%A8mes-Industrielles Jendouba university (22 Students enrolled, 9 women) http://www.uj.rnu.tn/Fr/page2.php?code=1247 Gabes university (26 students enrolled) https://issatgb.rnu.tn/fra/pages/117/mecatronique Cartage university (30 students enrolled, 18 women)	Syllabuses Educational material Sfax university (14 students enrolled) Jendouba university (22 Students enrolled, 9 women) Gabes university (26 students enrolled)



					https://ucar.rnu.tn/2022/12/06/mastere-professionnel-ingenierie-de-la-maintenance/	Cartage university (30 students enrolled, 18 women)
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Activities to be carried out to achieve this outcome (before the end of the project)

Activity N°	Activity Title	Start date	End date	Place	Description of the activity to be carried out	Specific and measurable indicators of progress
2.3	TMC- Project scenarios and Guidelines for Implementation	1/3 2023	31/9 2023	Sfax University	"The activity for deveopemnt and implementation of the TMC project scenarios will start at Sfax University and then will be extended to all partner universities in Tunisia.	1/3 2023
2.4	Pilot course and Maintenance programme evaluation	1/2 2023	1/4 2023	Partner universities in Tunisia	TMC-Project Scenarios is a case-based teaching combined with practical project work. TMC-Project Scenarios consists in 7 stages, as described in the project proposal. All universities will start this activity in the autumn semester 2023.	Number of programmes where the guidlines are implemnted.
2.5	Organize Pilot course	1/10 2023	1/12 2023	Partner universities in Tunisia	A pilot course for evaluation of the maintenace programme will be organized with the participation of selected students and teachers from partner university in Tunisia	"Number of student participating

Changes that have occurred in this result since the original proposal:

With respect to the project proposal, the accreditation has been delayed due to the specific window for applications set by the Tunisian Government. Therefore, accreditation of the masters (Ministerial level required) and courses (internal accreditation required) has been achieved on September 2021.

Please add as many tables as necessary



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<u>Title and reference number of the work package (WP)</u>	<i>WP3DEVELOPMENT</i> <i>Development of Maintenance Engineering Training Programme – TMC-VET</i>
<u>Indicators of achievement and or/performance as indicated in the project proposal</u>	TMC-VET curricula development modular training courses TMC-Project Scenarios

Activities carried out to date to achieve this result:

Activity N°	Activity Title	Start date	End date	Place	Description of the activity carried out	Specific and measurable indicators of achievement				
3.1	TMC-VET curricula development	15-09-2021	15-12-2023	Tunisia/Europe	Curricula and Syllabus for three levels of qualification are developed. The training forms and tools are established in this deliverable. Test, examination and evaluation mechanisms are formulated. Training programmes are defined. The essential part of training curricula is the comprehensible specification of learning outcomes for theoretical and practical courses. The preparation for qualification tests is also part of curricula.	TMC-VET curricula				
					10		Additive manufacturing processes overview	Online	Mai 2023	EWf - Portugal
					11		Design Metal AM parts for DED Processes	Online	Mai 2023	EWf - Portugal
					12		Welding General Overview	Online	Mai 2023	EWf - Portugal
					13		PBF-LB Process, level Independent	Online	Mai 2023	EWf - Portugal



Activities to be carried out to achieve this outcome (before the end of the project)

Activity N°	Activity Title	Start date	End date	Place	Description of the activity to be carried out	Specific and measurable indicators of progress
3.2	Development of modular training courses	1/1 2023	31/12 2023	Tunisian industrial companies	Development of learning resources for theoretical education and fundamental practical skills. The training material will be available on the TMC Knowledge Platform	"Number of courses developed
3.3	TMC-Project Scenarios and Pilot course and TMC-VET programme evaluation	1/9 2023	31/12 2023	Tunisian industrial companies	Courses in three subject will be organized for staff for industry. Staff from several companies will be requited for theses courses	"Number of companies participating in courses.

Changes that have occurred in this result since the original proposal:

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Please add as many tables as necessary



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<u>Title and reference number of the work package (WP)</u>	<i>WP4 QUALITY PLAN</i> <i>Quality Assurance, monitoring and control</i>
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<u>Indicators of achievement and or/performance as indicated in the project proposal</u>	Analysis of Risk and development of the contingency plan Assessment of the quality of the project and its results
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Activities carried out to date to achieve this result:

Activity N°	Activity Title	Start date	End date	Place	Description of the activity carried out	Specific and measurable indicators of achievement
4.1	Analysis of Risk and develop of the contingency plan	15-04-2021	15-12-2022	Tunisia/Europe	The quality plan has been set including the different methods that will be deployed to check the status of the project. The external quality evaluator has been appointed.	Risk Analysis contingency plan
4.2	Assess internally the quality of the project and its results	15-06-2021	updating every 6 month.	Tunisia/Europe	Surveys have been done for the training and meetings. Quality and Evaluation Plan The work illustrates the main methods used for quality checks.	Quality internal report

Activities to be carried out to achieve this outcome (before the end of the project)

Activity N°	Activity Title	Start date	End date	Place	Description of the activity to be carried out	Specific and measurable indicators of progress
4.3	Assess externally and monitor the SM-TMC project activities and its outcomes Quality assessment of Education and Training	15-11-2022	15-11-2023	Tunisia	An external expert has been recruited for assessing externally and monitor the SM-TMC project activities and its outcomes	Quality external assessment report



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<u>Title and reference number of the work package (WP)</u>	<i>WP5 DISSEMINATION & EXPLOITATION</i> <i>Dissemination and TMC-Knowledge Maintenance Platform</i>
<u>Indicators of achievement and or/performance as indicated in the project proposal</u>	<ul style="list-style-type: none"> - Social Media accounts -Numbers of social media posts -Views of video promo -Access to website -Number of papers and conferences

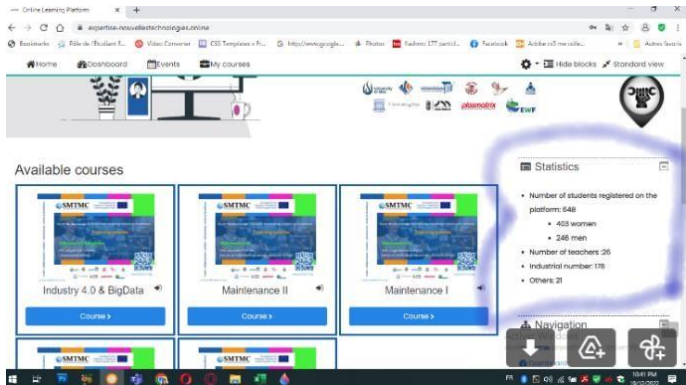
Activities carried out to date to achieve this result:

Activity N°	Activity Title	Start date	End date	Place	Description of the activity carried out	Specific and measurable indicators of achievement
5.1	WEB page and Dissemination Plan	15-03-2021	updating 15-03-2022; 15-03-2023; 10-01-2024	Tunisia/Europe	WEB page has been established: https://smtmc.org/ 	WEB page Dissemination Plan
5.2	Dissemination workshops & seminars	10-07-2020; 15-04-	10-01-2023	Tunisia/Europe	Workshop industry 4.0, Hammamet 19, 2022 https://www.facebook.com/1112861428/videos/1219869772211135/	Workshop Video Seminars



		2021; 15-09-2021; 15-05-2022; 15-10-2022;			 <p>The image shows a workshop poster on the left and a man speaking at a podium on the right. The poster is titled 'Contributions of the ERASMUS+ programme to the development of industry 4.0 in Tunisian universities' and mentions 'WORKSHOP CO-ORGANIZED BY National Erasmus+ Office Tunisia and FIN-HANCE, NFPREV, SMTMC and MS@CPS ERASMUS+ projects'. The man is standing at a podium with a microphone, and a screen behind him displays the SMTMC logo and 'Avancement des activités'.</p>	
5.3	Promotional activities and publications	10-01-2021	10-01-2024	Tunisia/Europe	<p>✓ Creation of project video (done) https://fb.watch/hH2V7yH43H/</p>  <p>The image is a screenshot of a Facebook video post. It features a central image with logos of several institutions: CCIT, SOCOMENIN, Universida de Vigo, plasmatrix, Université de Jendouba, Université de Sfax, EWF, UNIVERSITÉ LYON III, JEAN MOULIN, GALATIENSIS, and Université de Carthage. The video is titled 'South Mediterranean Tunisian Maintenance Centre of Excellence' and is published by Mohamed Belhaj. The post shows 0 likes, 0 comments, and 0 shares.</p> <p>✓ Creation of Social media accounts (done) ✓ publication at us news of the University of Sfax (done) ✓ Participation in the Medibat exhibition from 06 to 09 October 2021 (done)</p>	Workshop Video Seminars



					<ul style="list-style-type: none"> ✓ Participation on EDUCON2022 - IEEE World Conference on Engineering Education (done) ✓ Participation in the business fair in Sfax – june 2022 (done) ✓ participation@ Univexpo 2022 (planned) 	
5.4	TMC-Knowledge Platform	10-01-2022	10-01-2024	Tunisia/Europe	<p>TMC-Knowledge Platform has been performed. About 894 people are enrolled in the platform until 27 December 2022. The link of the platform is below :</p> <p>https://ent.smtmc.org/</p>  <p>The screenshot shows the TMC-Knowledge Platform interface. It features a navigation bar with links like Home, Download, Events, and My courses. Below the navigation bar, there are logos of various institutions. The main content area displays 'Available courses' with three course cards: 'Industry 4.0 & BigData', 'Maintenance II', and 'Maintenance I'. To the right, a 'Statistics' box provides the following data:</p> <ul style="list-style-type: none"> Number of students registered on the platform: 848 403 women 245 men Number of teachers: 26 Industrial number: 178 Others: 21 <p>At the bottom, there is a 'Navigation' section with icons for download, share, and other functions.</p>	<p>Content of the maintenance training courses.</p> <p>Number of student registered 648</p> <p>Number of teachers : 26</p> <p>Number of industrials : 178</p>

Activities to be carried out to achieve this outcome (before the end of the project)

Activity N°	Activity Title	Start date	End date	Place	Description of the activity to be carried out	Specific and measurable indicators of progress

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<u>Indicators of achievement and or/performance as indicated in the project proposal</u>	<ul style="list-style-type: none"> - Social Media accounts -Numbers of social media posts -Views of video promo -Access to website -Number of papers and conferences

Activities carried out to date to achieve this result:

Activity N°	Activity Title	Start date	End date	Place	Description of the activity carried out	Specific and measurable indicators of achievement
6.1	SM-TMC exploitation strategy and exploitation plan	1/2 2023	31/12 2023	Tunisian industrial companies	<p>The strategy during and after the end of the project will be defined. The business plan considers the organization and the activities in the Maintenance centre</p> <p>Two papers have been published in international conferences : Title: The SM-TMC (South Mediterranean Tunisian Maintenance Centre of Excellence) project Author(s): Lastra Cid, René; Diaz-Cacho, Miguel; Pereira Domínguez, Alejandro; Marcos Acevedo, Jorge; Garea Oya, Eva; Belhaj, Mohamed</p> <p>Title: PBL strategy for Learning Maintenance Engineering Author(s): Alejandro Pereira Domínguez, René Lastra Cid, Jorge Marcos Acevedo, Miguel Diaz-Cacho</p>	<p>Number of companies members in the maintenance centre</p> <p>2 scientific articles published</p>
6.2	TMC-Org structure and	15-11-	15-11-2023	Tunisia/Europe	The TMC-ORG is an important component of the SM-TMC project. The organization is formed during the first period of the project. The	



	activity	2021		<p>TMC-ORG is responsible to organize and control all educational and training resources in maintenance engineering. In TMC-ORG, university staff will work together with company staff to develop and implement curricula for education and training.</p>  <p>21 décembre 2022-journée nationale Erasmus+ pour la formation professionnelle Témoigne du South Mediterranean Tunisian Maintenance Centre of Excellence</p>  	
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6.3	TMC Infrastructure and Equipment	15- 12- 2021	15-12- 2022	Tunisia	<p>The deliverable is concerning the selection, commissioning and installation of the equipment at PC Universities. The equipment will provide the necessary infrastructure reflecting the high level of manufacturing technology. Equipment for technology and industrial equipment will be acquired. Technicians and teachers will be trained. The equipment will be used in the future for both teaching and research works. Students will perform their projects according to curricula.</p> <p>The activity has involved a deep analysis of lab equipment for the Master and new courses developed within SMTMC project. The analysis has been complex since project partners belong to different scientific background areas and SMTMC is a new topic at international levels with small companies that are able to supply proper equipment. With respect to the initial plan of equipment, in terms of typologies, the final choice has been fully in line. All partners have launched and closed the tenders. The purchase procedure is concluded before the end of December 2022. All the invoices are received and paid. The equipment are received by the 4 Tunisian universities.</p> <p>The list of equipment is presented in the table below :</p>	



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Activities to be carried out to achieve this outcome (before the end of the project)

Activity N°	Activity Title	Start date	End date	Place	Description of the activity to be carried out	Specific and measurable indicators of progress

Changes that have occurred in this result since the original proposal:



Click a button below to learn more.

WP1 PREPARATION SM-TMC Framework
development and educational and training
specifications

WP2 DEVELOPMENT
Development of Maintenance Engineering
Specialization – TMC-EDU

WP3 DEVELOPMENT
Development of Maintenance Engineering
Training Programme – TMC-VET

WP4 QUALITY PLAN
Quality Assurance, monitoring and control

WP5 DISSEMINATION & EXPLOITATION
Dissemination and TMC-Knowledge
Maintenance Platform

WP6 DISSEMINATION & EXPLOITATION
Exploitation and TMC-ORG

WP7 MANAGEMENT
Project Coordination and Administration



With respect to the project proposal, the equipment purchase has been delayed. A high effort in the first project phase has been devoted to administrative issues for equipment purchase, management, etc... Therefore, all tenders were finalized on December 2022 and purchasing of equipment is done.

TABLE OF ACHIEVED / PLANNED RESULTS

<u>Title and reference number of the work package (WP)</u>	<i>WP7 MANAGEMENT Project Coordination and Administration</i>
<u>Indicators of achievement and or/performance as indicated in the project proposal</u>	<i>-Number of meetings -Attendees to the meeting -Budget and timing of activities</i>

Activities carried out to date to achieve this result:

Activity N°	Activity Title	Start date	End date	Place	Description of the activity carried out	Specific and measurable indicators of
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						achievement				
7.1	Project coordination	10-01-2021	10-01-2024	Tunisia	<p><i>Project Management ensure that the project objectives and deliverables are fulfilled within the contractual time, budget and quality standards. D7.1 organise meetings; monitor progress of the project; prepare reports for submission to EC.</i></p> <p><i>The grant agreement has been signed on June 21, 2021. The final rules of the project has been first explained during a virtual meeting</i></p> <p><i>The partnership agreement is a multi-lateral document that was signed by the latest partner on July 2021.</i></p> <p><i>Preparation of tools and supports for the management and monitoring of project results</i></p> <p><i>Setting up a bi-monthly meeting by videoconference between the different partners and the SMTMC project coordination</i></p> <ul style="list-style-type: none">- <i>Preparation of report and meeting outlines</i>- <i>Design of an annual timeline</i>- <i>Creation of an Intranet space for the consortium of SMTMC partners</i>	Program of the meetings presentations, letters of invitation, signed attendance list, photos, minutes.				
7.2	Project coordination	10-01-2021	10-01-2024	Tunisia	<ul style="list-style-type: none">•<i>Establish the project administration and methodologies for integrating academic-exploitation-training activities.</i>• <i>Plan, organise and record project meetings.</i>•<i>Monitor progress of the project from financial points of view to enable efficient reporting/updating of the working plan.</i> <p><i>In 2021, Sfax university organized all the meetings as virtual meeting as detailed above.</i></p> <table><tr><td><i>kick-off-meeting</i></td><td><i>Online, 23-24 March 2021</i></td></tr><tr><td><i>Pedagogical committee meeting</i></td><td><i>Online, 15 April 2021</i></td></tr></table>	<i>kick-off-meeting</i>	<i>Online, 23-24 March 2021</i>	<i>Pedagogical committee meeting</i>	<i>Online, 15 April 2021</i>	
<i>kick-off-meeting</i>	<i>Online, 23-24 March 2021</i>									
<i>Pedagogical committee meeting</i>	<i>Online, 15 April 2021</i>									





Steering committee meeting

Online, 17 September 2021

Pedagogical committee

Online, 20 October 2021

Steering committee meeting

Online, 13 December 2021

Steering committee meeting

Online, 1 Mars 2022



In 2022, Sfax university organized the meetings in face to face and as virtual meeting as detailed above.

<i>Type of meeting</i>	<i>Place, date</i>
<i>Steering committee meeting</i>	<i>Tunis, 28-29 Mars 2022</i>
<i>Steering committee meeting</i>	<i>Online, 8 November 2022</i>
<i>Steering committee meeting</i>	<i>Hammamet, 20 December 2022</i>



Activities to be carried out to achieve this outcome (before the end of the project)

Activity N°	Activity Title	Start date	End date	Place	Description of the activity to be carried out	Specific and measurable indicators of progress
7.3	Project Management Handbook	10-01-2021	10-01-2024	Tunisia	Development of the project Management Handbook	Project Management Handbook

Changes that have occurred in this result since the original proposal:

Major change has been due to the fact that COVID Pandemia has canceled all presence meetings of the first year and this has brought a necessary re-alignment of working activities and methodologies. Furthermore, COVID 19 has brought some delays especially at the administrative level.

Please add as many tables as necessary

