



## South Mediterranean Tunisian Maintenance Centre of Excellence SM-TMC 2021 – 2024

# **SM-TMC Project**



University of Sfax Université de Sfax

مسامعة صف

Co-funded by the Erasmus+ Programme of the European Union



SM-TMC is a capacity building project in higher education co-funded by the Education, Culture and Audiovisual Executive Agency (EACEA) from the European Union under the Erasmus + KA2.





## **SM-TMC Background**

- Tunisian Universities need a radical modernization of the curricula with concrete actions for implementing a strong cooperation with industry and other economic sectors at education, training and research levels.
- There are 65000 graduates leaving every year HEIs in Tunisia. Many of them will never enter the job market.
- Today HEIs in Tunisia are buffers for unemployment and a source for high educated graduates staying outside the job market.



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## **SM-TMC** specific objectives

- **Objective 1:** To implement curricula in maintenance engineering in Tunisian HEIs and to adapt it to the needs and structure of Tunisian industrial companies.
- **Objective 2:** To create a national organization Tunisian Maintenance Centre of Excellence, TMC, and a TMC-Expert Group with member universities and companies for coordinating the activities regarding maintenance education and training and active collaboration university-industry.

**Objective 3:** To strongly involve the industrial companies to the development of curricula in maintenance engineering.





### **SM-TMC** specific objectives

**Objective 4:** To develop the TMC-Knowledge Platform for education and training. Effect: A unified system for OERs (Open Educational Resources) and E-learning resources and communication between, students, teacher, staff in companies and stakeholders.

**Objective 5:** Overall improvement of the company climate, performance and quality in education and training in maintenance engineering. Access of female students and unemployed individuals to maintenance field.





# **SM-TMC strategy**

SM-TMC proposes an unified strategy at three levels:

- HEI level: establishing specialization programmes in maintenance engineering and management with courses at bachelor and master levels. Part of graduates will work as maintenance technicians, engineers and managers in Tunisian companies, others as trainers in training centres.
- 2. **VET level**: establishing a unified training and certification programme to improve and harmonize the skills of operators, technicians and engineers in maintenance.
- 3. **Organizational level:** establishing the Tunisian Maintance Centre of Excellence for coordinating all activities concerning education, training and certification and distribution of resources for this purpose. The Centre will be created to colaboratively support interaction between university and industry, and knowledge transfer.



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### **Project partners**

| Country  | Partner name   |  |  |
|----------|--|--|--|
| Tunisia  | University of SFAX (USFAX)                                 |  |  |
| Tunisia  | University of GABES (UNIVGB)                               |  |  |
| Tunisia  | University of CARTAGE (UCAR)                               |  |  |
| Tunisia  | University of JENDOUBA (UJEN)                              |  |  |
| Tunisia  | CHAMBRE DE COMMERCE ET D'INDUSTRIE DE TUNIS (CCIT)         |  |  |
| Tunisia  | SOCOMENIN  |  |  |
| France   | University of LYON 3 Jeans Moulin (ULYON)                  |  |  |
| Spain    | University of VIGO (UVIGO)                                 |  |  |
| Romania  | University of DUNAREA DE JOS GALATI (UDJG)                 |  |  |
| Sweeden  | Plasmatrix Materials (PLAS)                                |  |  |
| Portugal | European Federation for Welding, Joining and Cutting (EWF) |  |  |

February 28th, 2021



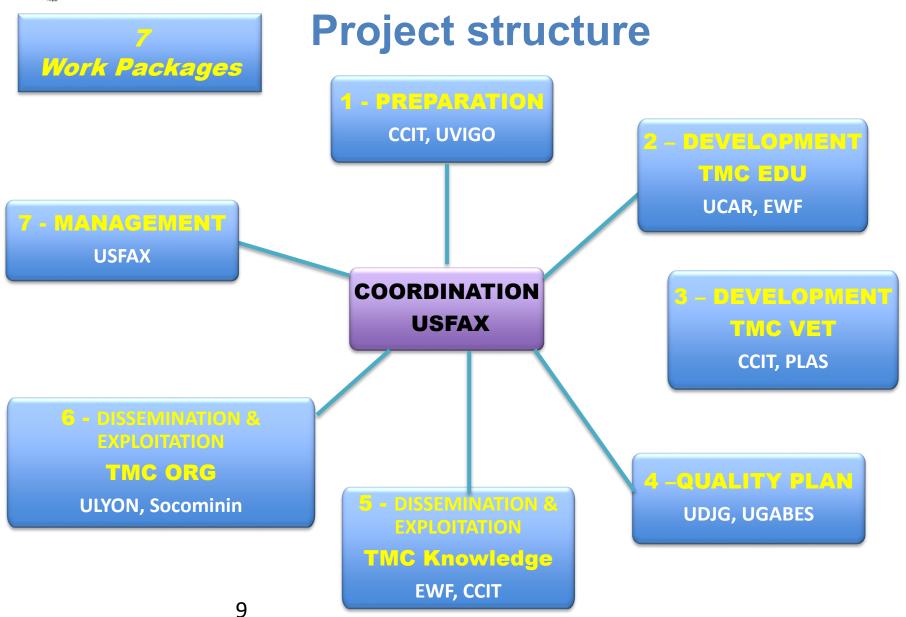


### **Affiliated partners**

| Country | Partner name   |  |
|---------|--|--|
| Sweeden | Swedish Maintenance Association  |  |
| Italy   | Association of Mediterranean Universities                              |  |
| Tunisia | ICAR, Société les Industries de Carrossage Automobile                  |  |
| Tunisia | Management Procurement Engineering Construction (MPEC)                 |  |
| Tunisia | Agence de la promotion industrielle et d'innovation API                |  |
| Tunisia | SFAX Chamber of Commerce& Industry (CCIS)                              |  |
| Tunisia | TECHNOPREST SARL   |  |
| Tunisia | THE UNION OF SMALL AND MEDIUM INDUSTRIES OF TUNISIA (UPMI)             |  |
| Tunisia | Union tunisienne de l'industrie, du commerce et de l'artisanat (UTICA) |  |













#### **Project structure**

| Workpackage | Туре  | Title  |
|-------------|---|--|
| WP1         | Preparation<br>CCIT, UVIGO                                    | SM-TMC Framework development and educational and training specifications |
| WP2         | Development TMC-EDU<br>UCAR, EWF                              | Development of Maintenance Engineering<br>Specialization – TMC-EDU       |
| WP3         | Development TMC-VET<br>CCIT, PLAS                             | Development of Maintenance Engineering Training<br>Programme – TMC-VET   |
| WP4         | Quality plan<br>UDJG, UGABES                                  | Quality Assurance, monitoring and control                                |
| WP5         | Dissemination and<br>exploitation TMC-Knowledge<br>EWF, CCIT  | Dissemination and TMC-Knowledge Maintenance<br>Platform                  |
| WP6         | Dissemination and<br>exploitation TMC-ORG<br>ULYON, Socominin | Exploitation and TMC-ORG   |
| WP7         | Management<br>USFAX   | Project Coordination and Administration                                  |





## **Project milestones**

Milestone 1.1: The workplan and work packages with the tasks are revised. Milestone 1.2: LFM (Logical Frame Matrix) reviewed

Milestone 2.1: Maintenance specialization framework is defined. Milestone 2.2: Maintenance specialization curricula and syllabuses are finalized

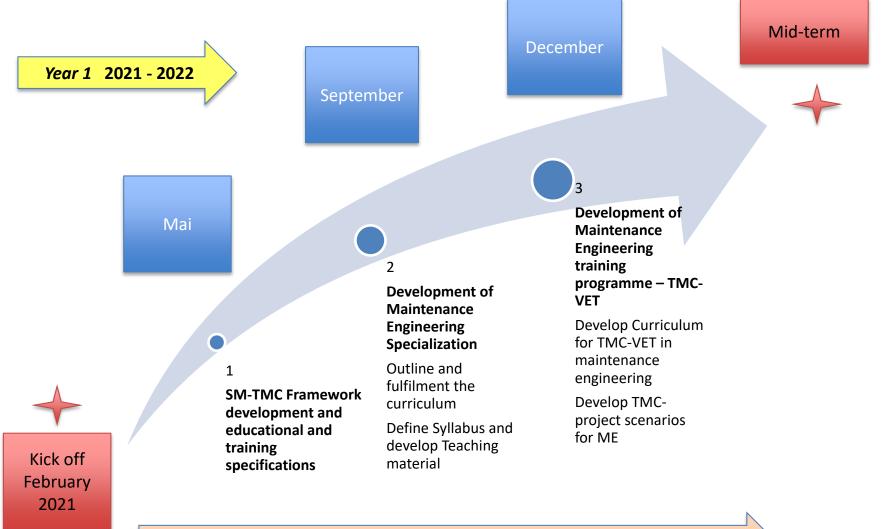
Milestone 3.1: Teaching material developed Milestone 3.2: VET material developed Milestone 3.3: TMC-ORG business plan developed

Milestone 4.1: Speciaization programmes start in all PC universities Milestone 4.2: TMC-ORG is implemented Milestone 4.3: TMC-Knowledge Platform in operation

Milestone 5.1: Evaluation of specialization programmes completed Milestone 5.2: Evaluation of VET programme completed Milestone 5.3: Evaluation of TMC-ORG completed Milestone 5.4: Evaluation of the management activity completed







Quality Control + Diffusion + Management





