



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

Pathway in Enterprise Systems Engineering (PENS)

WP1 status and deliverables progress (SU)

University of Sousse

24/07/2018

ALCALA University



Outline

- WP1 objectives and deliverables
- WP1 Work Plan
- What is realized
- What is remaining
- Lessons Learned
- Obstacles

WP1 objectives and deliverables

Activities		Total duration (number of weeks)	M1	M2	M3	M4	M5	M6	M7	M8
Ref.nr/ Sub-ref nr	Title									
D1.1	Analysis of existing curriculum/guidelines in ESE	10	4x	4x	2x					
D1.2	Review & Market need analysis	12		2x	4x	4x	2x			
D1.3	Develop Program Structure and Course descriptions	12			2x	4x	4x	2x		
D1.4	Program Structure and Course descriptions Workshop	1								1X

WP1 Work Plan

	Market surveys	State of the art about ESE	ESE existing Curricula (Undergraduate, engineers)	Pedagogical approaches	PENS Curriculum	Coordination and reports' preparation and review	Workshop preparation
Tasks' Outcomes		30/04/2018		25/05/2018	15/06/2018	30/07/2018	
	The surveys content (the 4 from sousse)	BSCW Repositories of research papers, technical reports, etc	BSCW Repositories of existing curricula	State of the art about pedagogical approaches for teaching/Learning ESE related skills	PENS ILOS identification	Finalized and revised deliverables	
	07/06/2018		30/05/2018		15/06/2018		
	Enterprises DBs+The surveys publication and data collection	Analysis and synthesis	Analysis and synthesis	Analysis and synthesis	PENS Courses identification		
	15/06/2018				15/06/2018		
	Data analysis				Elaboration of the curriculum		
					15/07/2018		
					Courses descriptions		
					Refinement during the Workshop		

What is realized

Icon	Name	Size	Author	Date	Actions
Folder	D1_3 Develop Program Structure and Course descriptions	0	Yousef.Hassouneh	2018-03-13 22:27	Star
Folder	D1_4 Program Structure and Course descriptions Workshop	1	Yousef.Hassouneh	2018-07-23 12:09	Star, Lock
Folder	Ressource collection	21	maha_khemajayahoofr	2018-05-06 22:48	Star, Lock
Folder	Existing Curricula	12	maha_khemajayahoofr	2018-04-16 10:59	Star, Lock
Folder	Existing Frameworks	0	maha_khemajayahoofr	2018-03-15 21:46	Star
Folder	Existing standards	11	maha_khemajayahoofr	2018-04-17 11:25	Star, Lock
Folder	State of the art and research paper surveys	33	maha_khemajayahoofr	2018-04-18 12:11	Star, Lock
Folder	State of the art Summary This folder aims to host all of the colleagues readings	32	maha_khemajayahoofr	2018-05-16 08:19	Star, Lock
Folder	the e-Competence Framework http://www.ecompetences.eu/it/		maha_khemajayahoofr	2018-03-20 10:20	Star
PDF	A Framework for Enterprise System Engineering Processes.pdf	663 K	Hana	2018-04-14 13:38	Star, Lock
PDF	Applying the Foundations of Enterprise Systems Engineering in Complex Real-world Environments In this paper, we argue and illustrate that value from ESE thinking can be obtained without following the entire ESE	1.2 M	Giorgio.Giacinto	2018-04-14 14:58	Star
PDF	complex adaptive systems engineering presents ESE profiler: IEEE conference 2009	1.3 M	soulefk	2018-04-14 21:00	Star, Lock
PDF	defining entrprise system engineering This article gives an exact definition to ESE and suggests that ESE is an independant discipline	313 K	soulefk	2018-04-14 21:51	Star
PDF	Defining_Enterprise_Systems_Engineering.pdf	313 K	Hana	2018-04-14 13:37	Star, Lock
PDF	Enterprise System Engineering Theory and Practice.pdf	1.1 M	Hana	2018-04-14 13:38	Star, Lock
PDF	Enterprise Systems Engineering (Ziarko, J., Dahmann, J.)_ Johns Hopkins University Engineering for	104 K	Hana	2018-04-14 13:39	Star, Lock
PDF	Enterprise Systems Engineering for Better Operational Interoperability This paper identifies the differences between Enterprise System Engineering and System Engineering, and discusses	488 K	Giorgio.Giacinto	2018-04-14 14:45	Star, Lock
PDF	Enterprise Systems Engineering Key Concepts - SEBoK.pdf	464 K	Hana	2018-04-14 13:37	Star, Lock

BlendedSummary.docx ^

Tout afficher X

What is realized

File Name	Size	Author	Date
complex adaptive systems engineering presents ESE profiler: IEEE conference 2009	1.3 M	soulefk	2018-04-14 21:00
defining entrprise system engineering This article gives an exact definition to ESE and suggests that ESE is an independant discipline	313 K	soulefk	2018-04-14 21:51
Defining_Enterprise_Systems_Engineering.pdf	313 K	Hana	2018-04-14 13:37
Enterprise System Engineering Theory and Practice.pdf	1.1 M	Hana	2018-04-14 13:38
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Enterprise Systems Engineering for Better Operational Interoperability This paper identifies the differences between Enterprise System Engineering and System Engineering, and discusses	488 K	Giorgio.Giacinto	2018-04-14 14:45
Enterprise Systems Engineering Key Concepts - SEBoK.pdf	464 K	Hana	2018-04-14 13:37
EPIC framework for enterprise processes integrativecollaboration This paperpresents a new ESE framework named EPIC (Enterprise Processes Integrative Collaboration),that enables t	1.2 M	Giorgio.Giacinto	2018-04-14 16:08
ESE contribution to acquisition process Presentation at the 10th IEEE/INCOSE conference 2015	1.6 M	soulefk	2018-04-14 20:47
MS in Enterprise Systems Engineering - Regis University.pdf	537 K	Hana	2018-04-14 13:38
Resource_Dispatching_Document.pdf	177 K	maha_khemajayahoofer	2018-04-17 18:57
Transforming the Enterprise using a System Approach.pdf	439 K	Hana	2018-04-14 13:37
References.docx	10.4 K	maha_khemajayahoofer	2018-03-20 10:14
Work on Surveys	1	maha_khemajayahoofer	2018-05-11 21:09
Discussion Forum about the WP1	1	maha_khemajayahoofer	2018-03-20 10:48
WP1_effortsdays_and_plan30-3-2018.xlsx	15.4 K	Yousef.Hassouneh	2018-04-02 16:45
BlendedSummary.docx	537 K	maha_khemajayahoofer	2018-05-22 21:57
SEBOKV3Part 1_2_3_4_5.docx	18.9 K	maha_khemajayahoofer	2018-05-22 21:57
Survey Objectives.docx	17.4 K	maha_khemajayahoofer	2018-05-22 22:01
WP1: Analysis of the existing curriculum in ESE	532 o	Yousef.Hassouneh	2018-03-13 22:35

BSCW 5.0.5 © 1995-2012 FIT and OrbiTeam

BlendedSummary.docx ^

Tout afficher X

What is realized

The screenshot shows a web browser window with multiple tabs. The active tab is displaying a file management interface for a project named 'WP1'. The browser address bar shows the URL: <https://bscw.birzeit.edu/bscw/bscw.cgi/63002>. The interface includes a toolbar with various icons and a search bar. The main content area displays a list of files and folders, organized into a tree view. The list has columns for 'Nom', 'Action', 'Taille', 'Créateur', 'Priorité', 'Dernière modification', and 'Événements'. The files listed include folders for 'D1_1', 'D1_2', 'D1_3', and 'D1_4', as well as documents like 'Survey Final_General_BZU_ASD.docx', 'Survey Final_ITBZU_ASD-ProxymIT.docx', 'Survey Final_ITBZU_ASD.docx', 'SurveyForStudentsFinalVersion.docx', 'Survey for Teachers', and 'Survey Intended for University Faculty Members'. The 'Survey for Teachers' document has a note: 'Balises: teachers survey'. The 'Survey Intended for University Faculty Members' document has a note: '1) Birzeit and Al-Quds Universities from Palestine and the Monastir and Sousse Universities in Tunisia are working o...'. The interface also shows a 'Pas de filtre' button and a 'Tout afficher' button.

Nom	Action	Taille	Créateur	Priorité	Dernière modification	Événements
D1_1 Analysis of existing curriculum/guidelines in ESE	▼	0	Yousef.Hassouneh		2018-03-15 10:24	🌟 🌟
D1_2 Review & Market need analysis	▼	3	Yousef.Hassouneh		2018-06-28 16:11	🌟 🌟
Survey	▼	4	Yousef.Hassouneh		2018-06-28 08:29	🌟 🌟
Survey Final_General_BZU_ASD.docx	▼	371 K	Yousef.Hassouneh	→	2018-06-11 18:36	🌟
Survey Final_ITBZU_ASD-ProxymIT.docx	▼	231 K	maha_khemajayahoofr	→	2018-06-28 08:29	🌟 🌟
Survey Final_ITBZU_ASD.docx	▼	372 K	Yousef.Hassouneh	→	2018-06-11 18:36	🌟
SurveyForStudentsFinalVersion.docx	▼	41.6 K	maha_khemajayahoofr	→	2018-06-28 08:29	🌟 🌟
Survey for Teachers Balises: teachers survey	▼	193 K	Rashid.Jayousi	→	2018-06-28 16:11	🌟 🌟
Survey Intended for University Faculty Members 1) Birzeit and Al-Quds Universities from Palestine and the Monastir and Sousse Universities in Tunisia are working o...	▼	193 K	Rashid.Jayousi	→	2018-06-28 15:09	🌟
D1_3 Develop Program Structure and Course descriptions	▼	0	Yousef.Hassouneh		2018-03-13 22:27	🌟
D1_4 Program Structure and Course descriptions Workshop	▼	1	Yousef.Hassouneh		2018-07-23 12:09	🌟 🌟
Ressource collection	▼	21	maha_khemajayahoofr		2018-05-06 22:48	🌟 🌟
Existing Curricula	▼	12	maha_khemajayahoofr		2018-04-16 10:59	🌟 🌟
Existing Frameworks	▼	0	maha_khemajayahoofr		2018-03-15 21:46	🌟
Existing standards	▼	11	maha_khemajayahoofr		2018-04-17 11:25	🌟 🌟

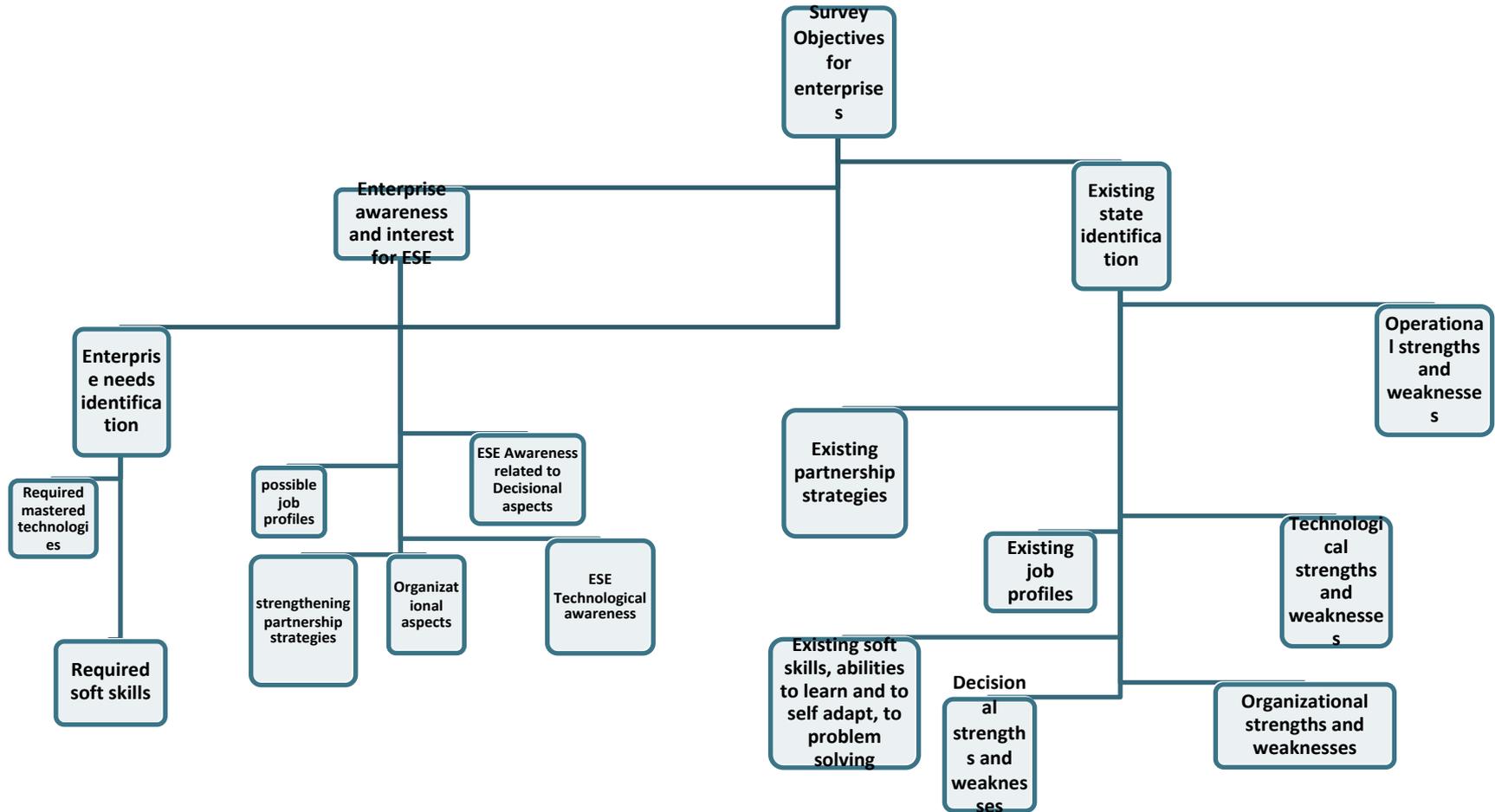
Actors concerned by the survey

- After several meetings, the Palestinian and the Tunisian partners decided to prepare three surveys,
 - one for the intention of Enterprises,
 - one for the intention of students,
 - and the third for the intention of the teaching staff.

Aims of the surveys

- The aims of each survey are :
 - to identify and criticize existing pathways,
 - to measure awareness about ESE
 - and to identify needs.
- Also, the three surveys will allow us to measure *similarities and divergences* between the different actors.

What is realized



Work sharing

- In order to be more functional,
 1. each university was in charge of the preparation of one survey,
 2. a virtual meeting was held in order to discuss version 0.1 of the proposed survey.
 3. once the final version is agreed upon, a Google form was prepared for the launching of the project.

Subdivision of Work Load and state of Progress

Survey	University	State
Enterprises	Beirzeit	Google form is ready
Students	Sousse	Google form ready
Teaching Staff	El Qouds and Monastir	Version 0.1 not discussed yet

The next phases are to launch the survey and to analyze the results.



Enterprises survey

The screenshot shows a web browser window displaying a Google Forms survey. The browser's address bar shows the URL: https://docs.google.com/forms/d/e/1FAIpQLScGlzQnHfir6KRUCQ8tDKv091ef0J5ts0ftvEn5j__JqV64Fw/viewform. The survey title is "Enterprise System Engineering (Tunisia)". Below the title, it says "*Obligatoire". The survey is co-funded by the Erasmus+ Programme of the European Union, as indicated by the European Union flag logo. The Birzeit University logo is also present. The acronym "PENS" is prominently displayed in large, bold letters, with the full name "Pathway in Enterprise Systems Engineering" underneath. Below this, the text reads "ESE: Enterprise System Engineering Pathway within the Undergraduate IT Programs". At the bottom of the survey content, the project reference number is "Proiect Ref. No.: 586301-EPP-1-2017-1-PS-EPPKA2-CBHE-JP". The browser's taskbar at the bottom shows several open files: "Présentation1-sp....pptx", "Survey Objective....docx", "Course Specificat....docx", "Présentation1-sp....pptx", and "BlendedSummary.docx". A "Tout afficher" button is visible in the bottom right corner of the browser window.

Enterprise System Engineering
(Tunisia)

*Obligatoire

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

BIRZEIT UNIVERSITY

PENS
Pathway in Enterprise Systems Engineering

**ESE: Enterprise System Engineering Pathway within the
Undergraduate IT Programs**

Proiect Ref. No.: 586301-EPP-1-2017-1-PS-EPPKA2-CBHE-JP

Présentation1-sp....pptx ^ Survey Objective....docx ^ Course Specificat....docx ^ Présentation1-sp....pptx ^ BlendedSummary.docx ^ Tout afficher X

Enterprises survey

The screenshot shows a web browser window with multiple tabs. The active tab is a Google Form titled "ESE: Enterprise System Engineering Pathway within the Undergraduate IT Programs". The form includes the following text:

ESE: Enterprise System Engineering Pathway within the Undergraduate IT Programs

Project Ref. No.: 586301-EPP-1-2017-1-PS-EPPKA2-CBHE-JP

www.pens.ps

Survey Intended to Industrial Stakeholders

Birzeit and Al-Quds Universities from Palestine and the Monastir and Sousse Universities in Tunisia are working on developing a pathway in Enterprise System Engineering (ESE) within a bachelor degree in IT. This is all an aspect of a project funded by the European Union and in collaboration with three prestigious European universities in this field from Britain, Spain, Italy and two local companies from Palestine and Tunisia. Therefore, we would be grateful if you would help us in filling out this questionnaire, which will be taken into consideration when developing our material and content.

Contact person

Company/Institute name *

Votre réponse

The browser's taskbar at the bottom shows several open applications, including PowerPoint, Word, and Excel. The system tray on the right indicates the date as 24/07/2018 and the time as 00:52.

Students survey

(2 357 non lus) - soulefk2 x Survey Objectives for Stu x Soulefk

Sécurisé | https://docs.google.com/forms/d/e/1FAIpQLSeOdHRm_priU3SHIIEZ5aM-jPZkenh4KMVRmGpiOd0IHVe8oQ/formResponse

Survey Objectives for Students: Part I Existing state identification

*Obligatoire

Student Personnel Data

Gender *

Male

Female

High School (BAC) *

scientific domain

Economics

Informatics

Current Studies *

Engineering

FR 23:33 23/07/2018

Staff Survey

The screenshot shows a web browser window with two tabs labeled 'Enterprise System Engine'. The address bar shows a Google Docs form URL: <https://docs.google.com/forms/d/1qSA6CmE-eGzvgGHTVNV7qcvHPd48ZhvZkQYa6JULEY/edit?ts=5b56be45>. The form is titled 'ESE: Enterprise System Engineering Pathway within the Undergraduate IT Programs' and is identified as 'Rubrique 1 sur 7'. Below the title, the project reference number '586301-EPP-1-2017-1-PS-EPPKA2-CBHE-JP' and the website 'www.pens.ps' are listed. The form includes a 'Question' section with 'Option 1' and a survey description for university faculty members. The description states that Birzeit and Al-Quds Universities from Palestine and the Monastir and Sousse Universities in Tunisia are developing an ESE pathway within a bachelor degree in IT, funded by the European Union and in collaboration with three prestigious European universities (Britain, Spain, Italy) and two local companies from Palestine and Tunisia.

What is remaining

	Market surveys	State of the art about ESE	ESE existing Curricula (Undergraduate, engineers)	Pedagogical approaches	PENS Curriculum	Coordination and reports' preparation and review	Workshop preparation
Tasks' Outcomes	The surveys content (the 4 from sousse)	BSCW Repositories of research papers, technical reports, etc	BSCW Repositories of existing curricula	State of the art about pedagogical approaches for teaching/Learning ESE related skills	PENS ILOS identification	Finalized and revised deliverables	
	Enterprises DBs+The surveys publication and data collection	Analysis and synthesis	Analysis and synthesis	Analysis and synthesis	PENS Courses identification		
	Data analysis				Elaboration of the curriculum		
					Courses descriptions		
					Refinement during the Workshop		

30/04/2018

25/05/2018

15/06/2018

30/07/2018

07/06/2018

30/05/2018

15/06/2018

15/06/2018

15/06/2018

15/07/2018

Lessons Learned

Following learning objectives or intended learning outcomes could be addressed by PENS:

- **Learn about Systems and how the Systems Approach is Applied to Engineered Systems**
- **Explore and apply the Methodologies of Systems Engineering**
- **Learn how to deal and identify Enterprise Systems' Context**
- **Learn to identify and manage Stakeholders' needs that have to be transformed to requirements**
- **Learn to prepare and position one's enterprise in such a way that it will be able to perform SE activities.**

Questions ?



email@provider.com

Thank you for your attention!

