






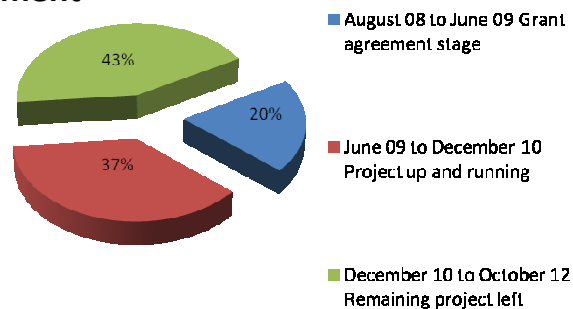
ERDF 114 - Maltese Text to Speech Synthesis

Overview as at December 2010

 	<p>Operational Programme I – Cohesion Policy 2007-2013 <i>Investing in Competitiveness for a Better Quality of Life</i> Project part-financed by the European Union European Regional Development Fund (ERDF) Co-financing rate: 85% EU Funds; 15% National Funds <i>Investing in your future</i></p>	
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

Project Status as at December 2010

The Grant Agreement was signed by managing authority in June of 2009. The project is presently 57% complete.



Who will benefit ?

- Persons with a disability who stand to benefit directly from ERDF-114
 - Blind persons and persons who have low vision
 - People who have intellectual impairment
 - People who have Dyslexia and other print disabilities.
 - Physically disabled persons who cannot manipulate paper based media.

Other beneficiaries

- Mainstream students who will be exposed to the Maltese Language via educational products
- Illiterate persons
- People using equipment which requires their full visual attention
- The Elderly who may tire from reading text
- Industry can integrate a SAPI compatible Maltese speech engine into their products

Project Outline

The components of the Project are:

- Project management [Go To](#)
- Studies and Printing of results. [Go To](#)
- Services to develop a Maltese Speech engine. [Go To](#)
- Publicity [Go To](#)

The Project will run until October 2012

- [Go To End](#)

Project Management

In June of 2009 FITA recruited Roger Davies Barrett , Dip IT, MBA E Business to fill the role of Project manager for ERDF 114. He has now been with the project for the past 19 months



[Back](#)

Studies and Printing

In December 2009 M. Mfsadni & Associates completed a study entitled “A Quantitative Research Survey on the use of a Maltese Speech Engine “

The population targets were :

- 678 Private Households
- 197 Local Private Companies

The results of these studies were printed by Outlook Coop in July of 2010 in the form of 500 Tri fold leaflets in Maltese, 500 Trifold leaflets in English and 1000 bi-lingual 24 page booklets



Studies and Printing

Of the 676 Households surveyed 38% stated that they do not make use of a computer but 62% stated that they did in fact use a computer in the home.

The Business Survey revealed that 78.8% of the respondents identified the Internet as a popular means of sourcing information with 58.4% of these confirming the frequent use of Maltese websites.



Studies and Printing

Home Use

When asked about computer usage 67% of the respondents from the household survey stated that they make use of the computer every day



.....

At Work

From the Business survey it was revealed that 88% of the 197 companies surveyed currently do not presently employ disabled persons and 16.0% specified that physical accommodation is a primary issue.

Studies and Printing

- This Component of the ERDF 114 is now complete and the booklets and leaflets will be distributed over the remaining duration of the project
- The electronic versions of the surveys are available on the FITA Website www.KNPD.org/mittsfita

[Back](#)

Services to develop a Maltese Speech engine

The Contract to Develop a Maltese Speech Engine was assigned on the 22nd of February 2010

FITa

The successful bidder was Crimsonwing (Malta) Ltd.

 **CRIMSONWING** PLC
better people : better business

Services to develop a Maltese Speech engine

The deliverables of the contract are:

A SAPI Compliant Maltese Speech Engine

A Maltese Lexicon inclusive of Audio annotation capabilities.



Services to develop a Maltese Speech engine

Maltese Speech Engine

To Date the 1st Prototype has been completed and delivered on schedule on the 27th August 2010. This was tested and subsequently accepted mid September 2010

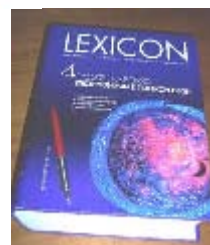


Services to develop a Maltese Speech engine

Work has begun on the production of the Lexicon and the progress of this component will be monitored over the remaining months of the project.



The contract calls for a Lexicon that will allow for an infinite number of entries, easy extraction and addition of data and allow for the creation of an audio corpora on which future research can be based.



Services to develop a Maltese Speech engine

Recording of the Voices (that will be used to cut the Diaphones) began on Friday the 19th November 2010 at Radio Cottonera studios.



A Rainbow text was used in order to get one example of each and every use of the Maltese alphabet and variations of use of vowels within words.

Examples of Rainbow Text

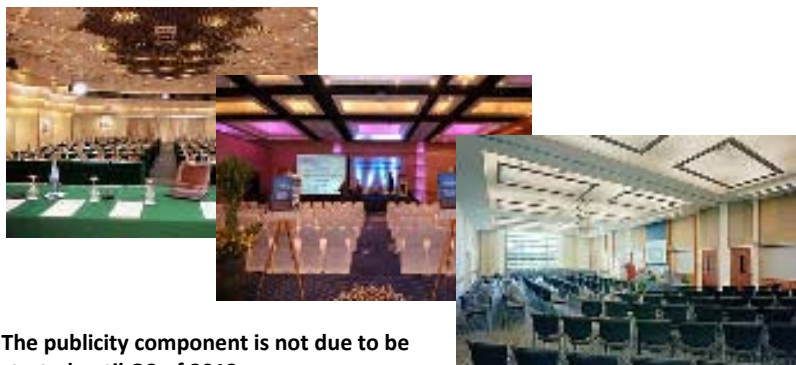
- a_b mort ir-r**aba**' klassi tat-tabib li ħar**ab**
- a_ċ ġbart ra**ċ**anċ ħdejn ta' Ċ**en**ċ
- a_d ħ**ad**em ħdejn ir-r**ad**am
- a_e Il-kap**ae**ologija ġdida ara hemm qiegħda
- a_f rajtlu l-q**af**as safrani li nagħ**raf**

Projected rollout of project

- **Population of DiPhone Database 81.56 days** target date **Mon 17/01/11**
- **Generation of Diphones from recorded transcripts 80 days** target date **Mon 17/01/11**
- **Voice 1 80 days** target date **Mon 17/01/11**
- **Voice 2 80 days** target date **Mon 17/01/11**
- **Voice 3 80 days** target date **Mon 17/01/11**
- **Integration of Speech Engine with DiPhone Set 14 days** target date **Fri 04/02/11**
- **Integrate Speech Engine with new Diphones Set 4 days** target date **Fri 21/01/11**
- **Test Speech Engine with new Diphones set 8 days** target date **Wed 02/02/11**
- **Demo Prototype 1 day** target date **Thu 03/02/11**
- **User Acceptance Testing 1 day** target date **Fri 04/02/11**

[BACK](#)

Publicity



The publicity component is not due to be started until Q3 of 2012.

Closing Comments

- Overall the project is progressing on time with all deliverables meeting their scheduled dates on time.
- Crimsonwing and FITA meet every 14 days in order to address any issues that may arise during the preceding period.



FITa



Thank you

More information regarding this and other FITA projects can be found on the FITA website at www.knpd.org/mittsfita

Project Leader: Stanley M. Debono
Project Manager: Roger Davies-Barrett

	<p>Operational Programme I – Cohesion Policy 2007-2013 <i>Investing in Competitiveness for a Better Quality of Life</i> Project part-financed by the European Union/European Regional Development Fund (ERDF) Co-financing rate: 85% EU Funds; 15% National Funds <i>Investing in your future</i></p>	
-------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------