

Mobile dual arm robotic workers with embedded cognition for hybrid and dynamically reconfigurable manufacturing systems

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Summary:

As stated in the project's ANNEX "*Promotion via Internet: Under Work-package 8 a public web portal will be designed and implemented in for this purpose. Modern channels for dissemination such as social networks (LinkedIn, Twitter, Facebook, YouTube) provide enormous capabilities for worldwide dissemination*". The purpose of this document is to describe the content available in the public portal and to provide a user's manual for the THOMAS Public Portal.

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2. MANAGEMENT BRIEF

As stated in the project's ANNEX "*Promotion via Internet: Under Work-package 8 a public web portal will be designed and implemented in for this purpose. Modern channels for dissemination such as social networks (LinkedIn, Twitter, Facebook, YouTube) provide enormous capabilities for worldwide dissemination*". The purpose of this document is to describe the content available in the public portal and to provide a user's manual for the THOMAS Public Portal. The user's manual is separated into four parts:

- An introduction to the purpose of the public website and the current manual.
- The requirements for interacting with the THOMAS website.
- Information regarding the structure of the public portal
- Information and instruction on how to use the functionality provided by the portal.

All the instruction details are presented with the help of illustrative figures in order to be easier for the user to understand them.

3. INTRODUCTION

3.1. What does the Public Web Portal do?

The THOMAS Public Web Portal has been primarily developed for any user who wants to be informed for the content and the achievements of the THOMAS project. The main objective of the portal is to promote the THOMAS project via Internet. The main aim is to achieve worldwide dissemination of the knowledge of the project, to publish news and information and to enable the communication between the project coordinator and everyone who is interested in the project.

3.2. About Public Web Portal

At the moment of the writing of this deliverable access to the public web portal is provided by the link: <http://lms.mech.upatras.gr/thomas/>. This is however only for the development stage and in the near future a migration will be performed to the official project domain: www.thomas-project.eu.

The THOMAS public web portal is based on the open-source WordPress. WordPress is a flexible Content Management/Portal solution that is easy to install, use, extend and maintain. It fosters the creation and maintenance of sophisticated content without requiring extensive technical knowledge using only a web browser. It is used for web sites or intranets and offers superior security without sacrificing extensibility or ease of use.

THOMAS Public Web Portal has been developed and maintained by the Laboratory for Manufacturing Systems and Automation (LMS) of University of Patras in Greece.

3.3. About this manual

This manual is a help assistant for everyone who wants to use the Public Web Portal for THOMAS. Initially, an introduction takes place so that the users understand what exactly this web portal is and how it can be useful.

4. GETTING STARTED

This manual is a step by step guide to know the Public Web Portal for THOMAS and its functionalities.

4.1. Requirements

In order to access the functionalities provided by the portal only a web-browser is required that can support the requirements of WordPress. At the moment of writing, most browsers can successfully visualize the content of all sites created by Wordpress.

Nevertheless, it must be noted that the portal has been tested and works efficiently with:

- *Microsoft Internet Explorer v11.0* [IE 2016]
- *Mozilla Firefox v17*. [Firefox 2016]

Other known browsers such as *Safari*, *Opera* and *Chrome* are also supported.

5. USE OF THE PUBLIC WEB PORTAL FOR THOMAS

This is a guide for using the Public Web Portal for THOMAS.

5.1. Menu and welcome page

Initially the 'Home' page appears with a short introduction and the objectives of the THOMAS project (see Figure 1).

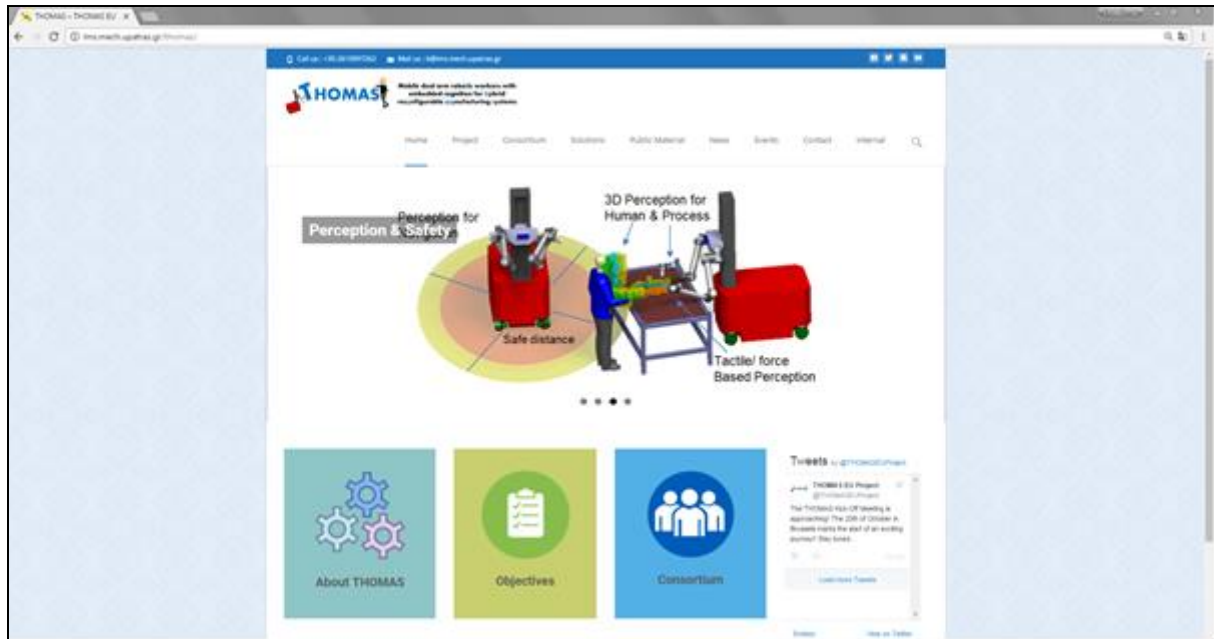


Figure 1: 'Home' page of the portal

The menu of the portal consists of the following Tabs:

5.1.1. Home

This tab is the homepage and depicted at Figure 1. In the homepage, there is a number of pictures which describe the main approach of the THOMAS project (see Figure 2).

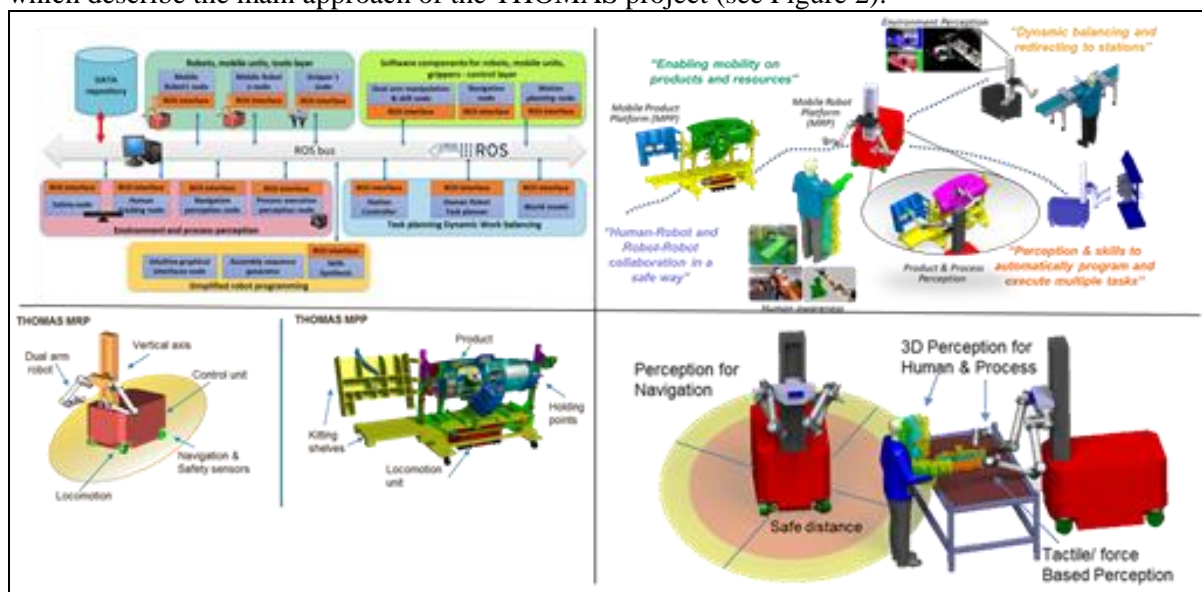


Figure 2: Figures of portal homepage

5.1.2. Project

This tab consists of four sub-tabs which are described below:

- **Concept**

The main concept of the THOMAS project is described in this sub-tab. In addition, the characteristics of the mobile dual arm robots are briefly presented.



Figure 3: Main concept of THOMAS project

- **Objectives**

The objectives of the THOMAS project is described in this sub-tab. THOMAS project consists of the following objectives:

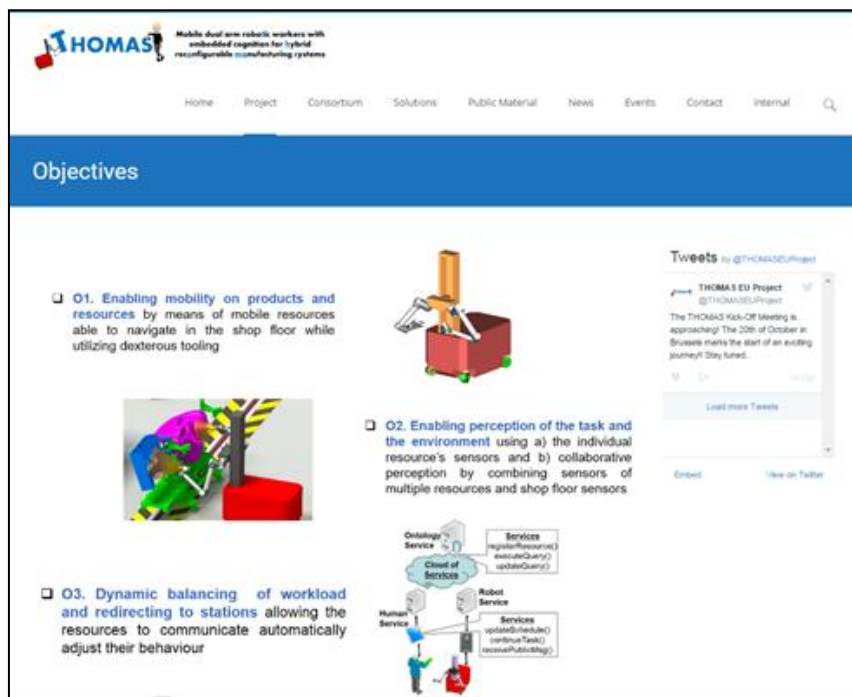


Figure 4: Objectives of THOMAS project

- **Structure**

The definition of THOMAS project’s Work Packages is the main content of this sub-tab. THOMAS project consists of nine Work Packages which are mentioned in the next figure.

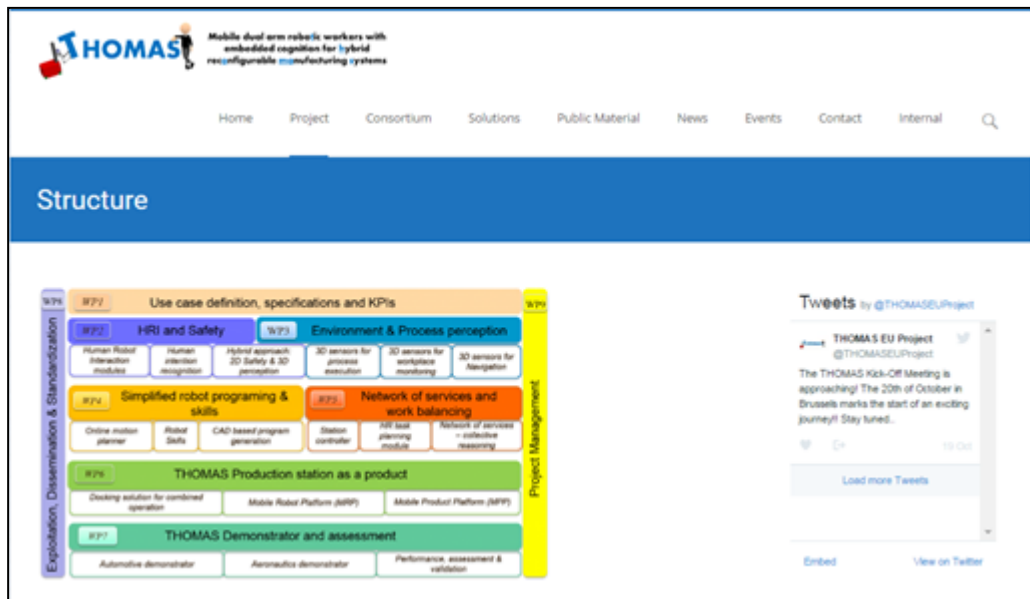


Figure 5: Work Package definition

- **Pilot Cases**

Through this tab, the THOMAS pilot cases will be introduced. The challenges, the objectives as well as THOMAS overall vision for both the automotive and the aeronautics pilot cases is described thus communicated to the public

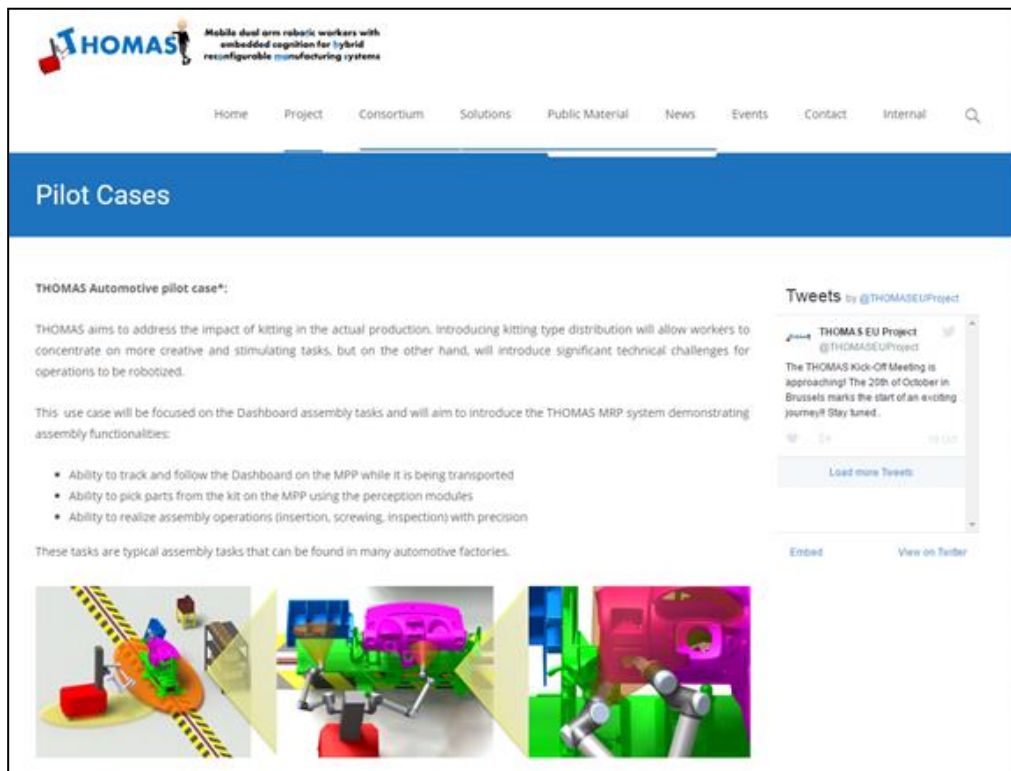


Figure 6: THOMAS Pilot cases

5.1.3. Consortium

This tab consists of four eight sub-tabs which refer to each partner of THOMAS project.



Figure 7: Consortium of THOMAS project

5.1.4. Solutions – Overall Solution

In this tab, the main components of THOMAS platform are analyzed.

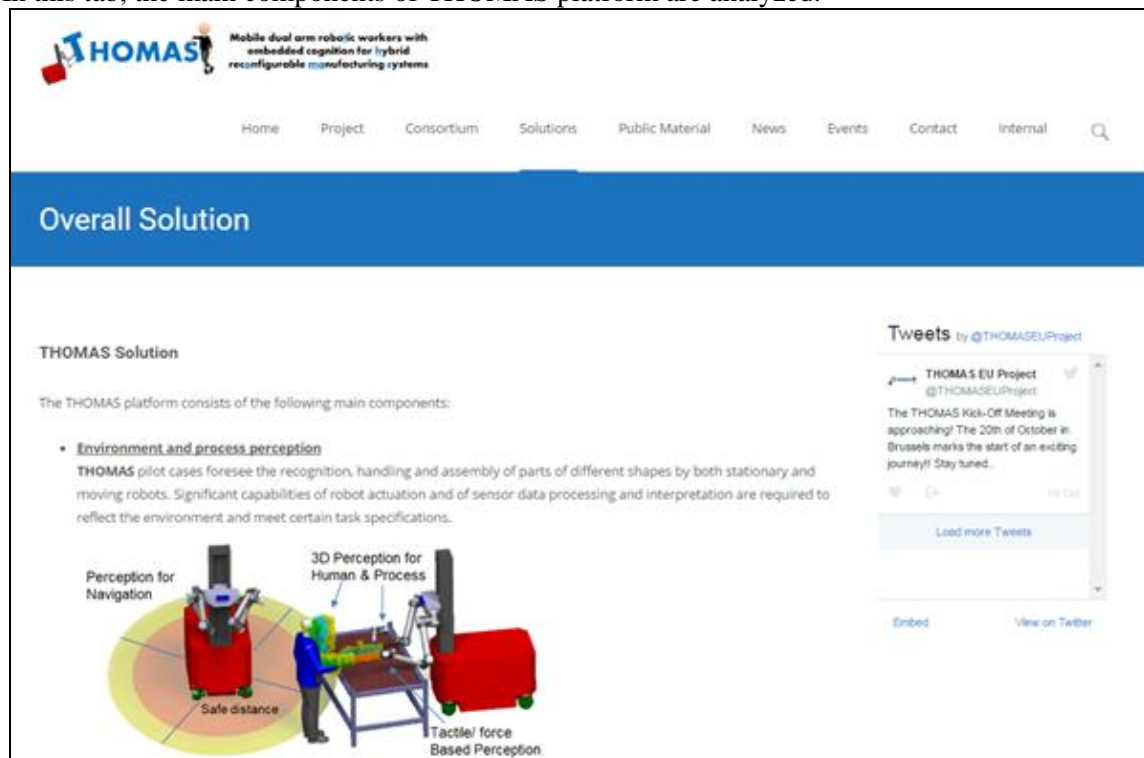


Figure 8: Overall Solution Tab

In short these components involve:

- Environment and process perception
- Skills for automatically programming and performing multiple tasks
- Mobile robotic resources and products
- Dynamically reconfigurable shopfloor – Network of services
- Safe Human – Robot and Robot-Robot collaboration

5.1.5. Public Material

This tab consists of three sub-tabs which are described below:

- **Press Material**

On this page materials such as brochures, flyers and posters will be uploaded so as to spread the THOMAS objectives, activities and achievements.

- **Publications**

On this page, the publications derived by the project partners will be uploaded after they are published.

- **Deliverables**

The public deliverables as well as the delivery date of each one are presented on this page.

THOMAS Mobile dual arm robotic workers with embedded cognition for hybrid reconfigurable manufacturing systems

Home Project Consortium Solutions Public Material News Events Contact Internal

Deliverables

Show 10 entries

Search:

DEL. NO.	DELIVERABLE NAME	WP NO.	DELIVERY DATE (MONTH)
2.3	Human detection and tracking -Initial Prototype	2	18
2.4	THOMAS safety system - Initial Prototype	2	18
2.5	THOMAS H-R safe interaction modules-Final Version	2	36
2.6	THOMAS safe collaboration systems – Final Version	2	36
3.3	Environment and process reasoning modules- initial prototype	3	18
3.4	Perception enabled navigation and docking for mobile robots: Initial prototype	3	24
3.5	Perception skills for process execution – Final Version	3	36
3.6	THOMAS mobile robot navigation and docking modules – Final Version	3	36

Showing 1 to 8 of 8 entries

Previous Next

Tweets by @THOMASEUProject

THOMAS EU Project @THOMASEUProject

The THOMAS Kick-Off Meeting is approaching! The 20th of October in Brussels marks the start of an exciting journey! Stay tuned.

19 Oct

Load more Tweets

Embed View on Twitter

Figure 9: Deliverable's table

5.1.6. News

On this sub-tab, the relevant news about THOMAS project will be published. Any news will be available on this sub-tab.

5.1.7. Events

On this sub-tab, all the scheduled events will be posted. The users will be informed about the plan, the location and the organizational data of each event.

5.1.8. Contact

On this sub-tab, a list with the contact details is available. The users who are interested to learn more information about this project can come in contact with the coordinator of the project.

5.1.9. Internal

A link which leads to the internal web portal of the THOMAS project is available on this sub-tab.

5.2. Promotion via Internet

At the top right corner of the 'Home' page appears a number of shortcuts aims to connect the THOMAS project with the created social networks (LinkedIn, Twitter, Facebook, YouTube).

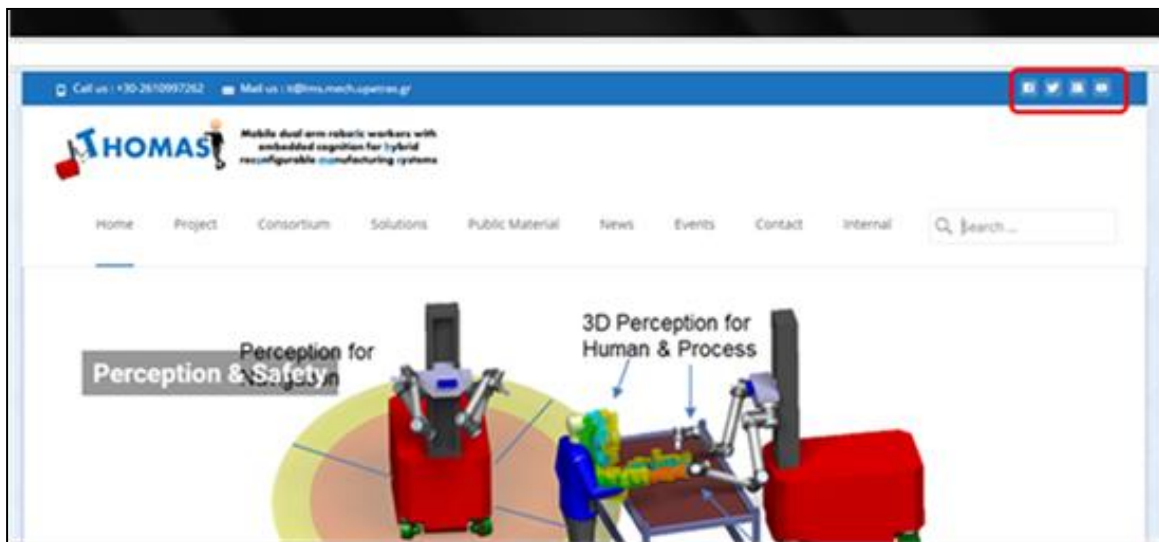


Figure 10: Promotion using social networks



Figure 11: Promotion via Facebook

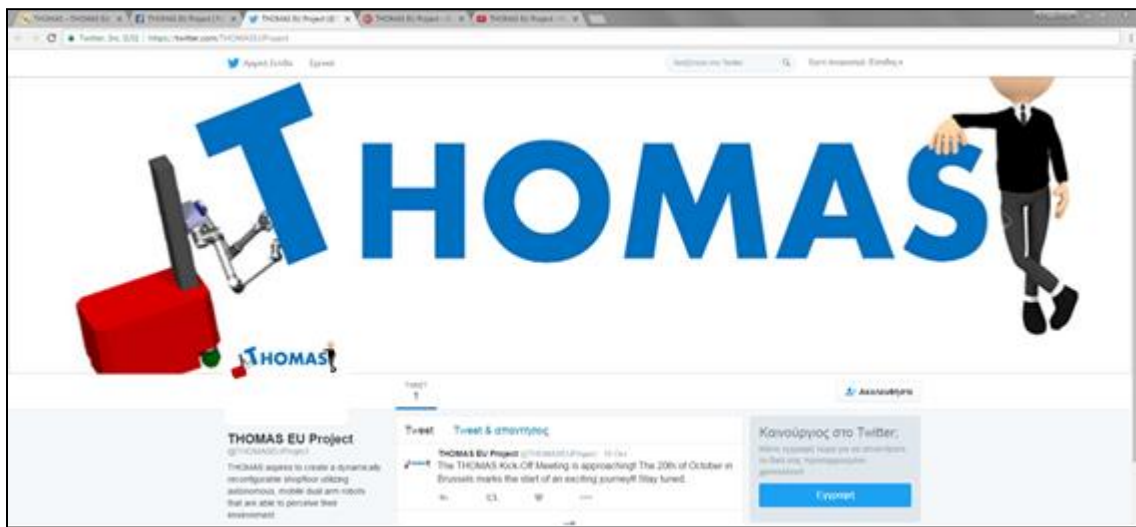


Figure 12: Promotion via Twitter

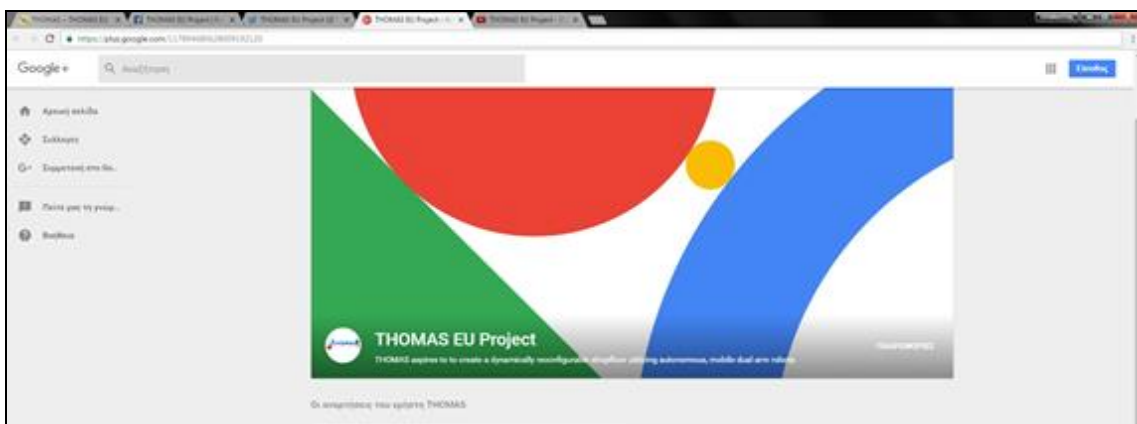


Figure 13: Promotion via Google Plus

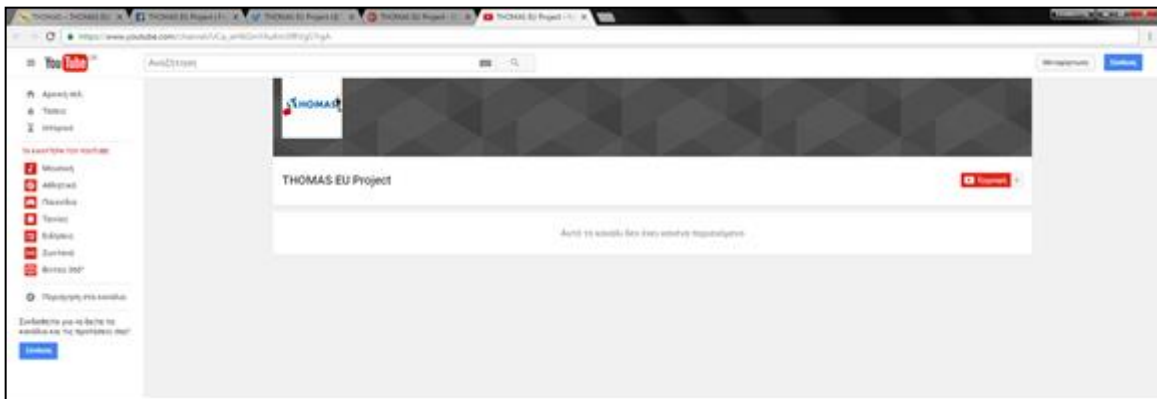


Figure 14: Promotion via Youtube

5.3. Search for information into the portal

The user could type a word or a phrase in the circled field of Figure 31, in the upper and right side of the screen of the portal, for finding an existing file or folder in the portal.

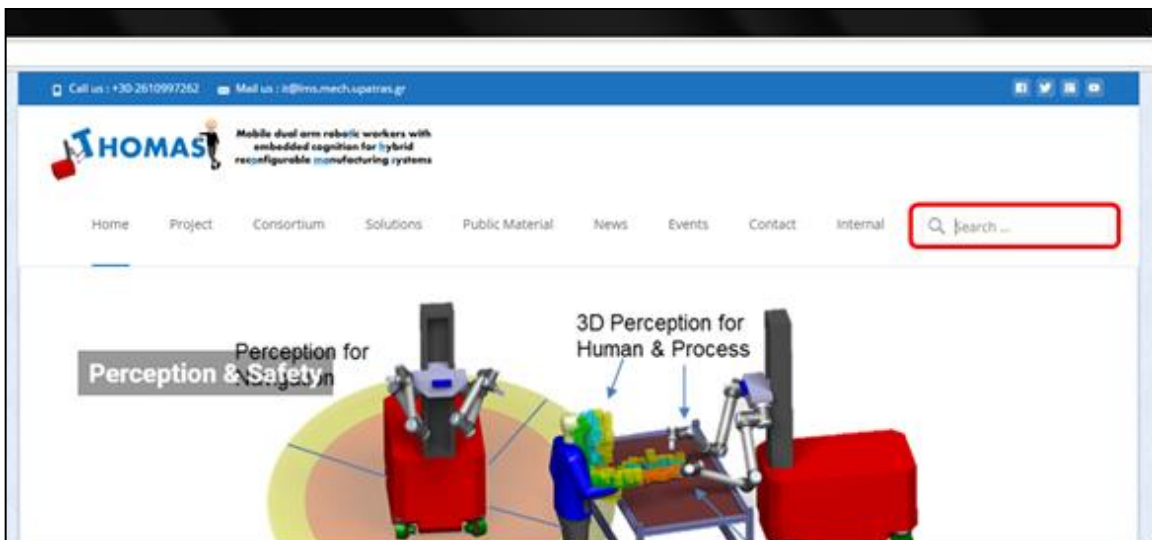


Figure 15: Search for information

5.4. Shortcuts on Homepage

On the homepage of the Public Web Portal, some shortcuts have been added with aim to help the users to take an overview of THOMAS project easily and quickly.



Figure 16: Shortcuts of homepage

5.4.1. About THOMAS

This shortcut leads to the ‘**Project**’ tab of the main menu. In this link, an overview of the THOMAS project details is presented.

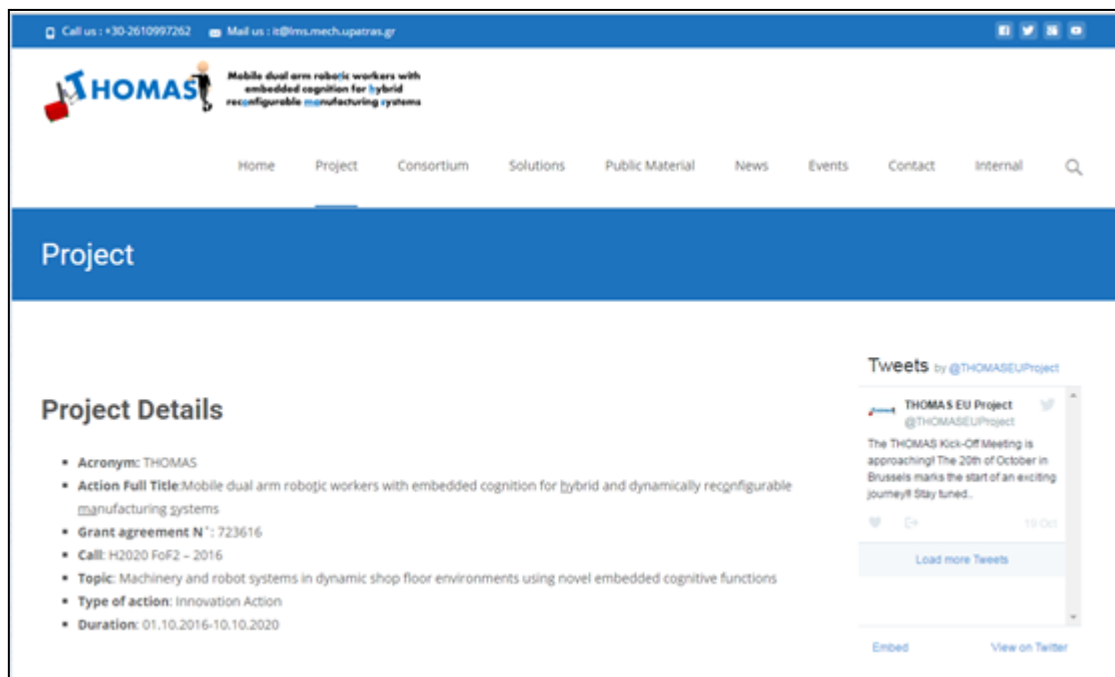


Figure 17: THOMAS project Details

5.4.2. Objectives

This shortcut leads to the ‘**Objectives**’ sub-tab, which is a member of ‘**Project**’ tab of the main menu.

5.4.3. Consortium

This shortcut leads to the ‘**Consortium**’ tab of the main menu. On this page a list with the partners of the THOMAS project is presented. The logo of each partner is a hyperlink to the corresponding company web page.



Figure 18: Consortium of THOMAS project

5.4.4. Tweets by THOMAS

As far as the shortcut of the Tweets, it works as a link which lead the user to the Twitter account of THOMAS project. In the window of the shortcut, the most recent tweets by the official project account are made visible.

5.5. Additional information

As it has already been mentioned the THOMAS Public Web Portal has been developed upon the WordPress platform. Consequently the users of the portal may find additional information regarding the use of WordPress based sites in different sources freely available in the Internet. Some sources are indicated below:

- *WordPress User Manual*, <https://easywpguide.com/wordpress-manual/>

At this point it is envisaged that the THOMAS Public Web Portal will be migrated to using the Plone platform. This website migration aims to increase the robustness of the THOMAS Public Web Portal and to reduce the management efforts as only a single platform will be used for both the public and internal web portal (see also D9.1)

6. REFERENCES

[WordPress 2016] WordPress, <https://wordpress.com/>

[IE 2016] Microsoft Internet Explorer, <http://windows.microsoft.com/el-GR/internet-explorer/download-ie>, accessed online in December 2016

[Firefox 2016] Mozilla Firefox, <http://www.mozilla.org/en-US/firefox/new/>, accessed online in December 2016