

Task O3/A4

TECHNICAL IMPROVEMENTS OF OER AND ICT BASED TOOL



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Contents

1. INTRODUCTION	3
2. SafeCrobot WEBSITE.....	4
2.1. DEVELOPMENT OF SafeCrobot WEBSITE	4
2.2. PRESENTATION OF SafeCrobot WEBSITE	5
2.2.1. MAIN PAGE.....	5
2.2.2. NEWS	6
2.2.3. PROJECT.....	7
2.2.4. ABOUT US	8
2.2.5. REPORTS	9
2.2.6. OER	10
2.2.7. VR TOOLS.....	13
2.2.8. CONTACT	16
3. Technical improvements	17
3.1.1. Technical improvements in the OER	17
3.1.2. Technical improvements in the VR tool	17
3.1.3. Improved products	17

1. INTRODUCTION

This report is included in the task “O3-A4. *Technical improvements of OER and ICT based tool*”, corresponding to Intellectual Output 3 “*OER for training and raising awareness*” of the SafeCRobot project.

Based on activities A2 and A3 of this Intellectual Result 3, the OER and the ICT-based tool have been improved and the beta version of the OER has undergone several modifications with the improvements identified in the evaluation carried out by the external evaluators of the project, as well as those identified in the pilot courses by the attendees.

This report and all the information about the project are available in the following url:
<https://safecrobot.pwr.edu.pl/en/>

2. SafeCRobot WEBSITE

2.1. DEVELOPMENT OF SafeCRobot WEBSITE

This website of the SafeCRobot project was created by PWR during the first period of the project and it is used as a common place to share the products of the project and base of the dissemination activities.



Once all the graphic details of the website, the menu and the logos were decided, designed and implemented, basic information about the project, such as the summary, the objectives, the list of reports developed during the project, etc., started to be included. Subsequently, the finalised documents resulting from the research and studies carried out by the project partners have been uploaded.

The SafeCRobot website includes the main intellectual outputs of the project. It should be noted that the entire website is available in all the languages of the project partners. For the translation of the available contents, all project partners participated by providing translations into their mother tongues.

Link to SafeCRobot project web: <https://safecrobot.pwr.edu.pl/en/>

2.2. PRESENTATION OF SafeCROBOT WEBSITE

In the following picture, it should be seen the different section in which the SafeCROBOT project website is divided and the links to each of these sections.

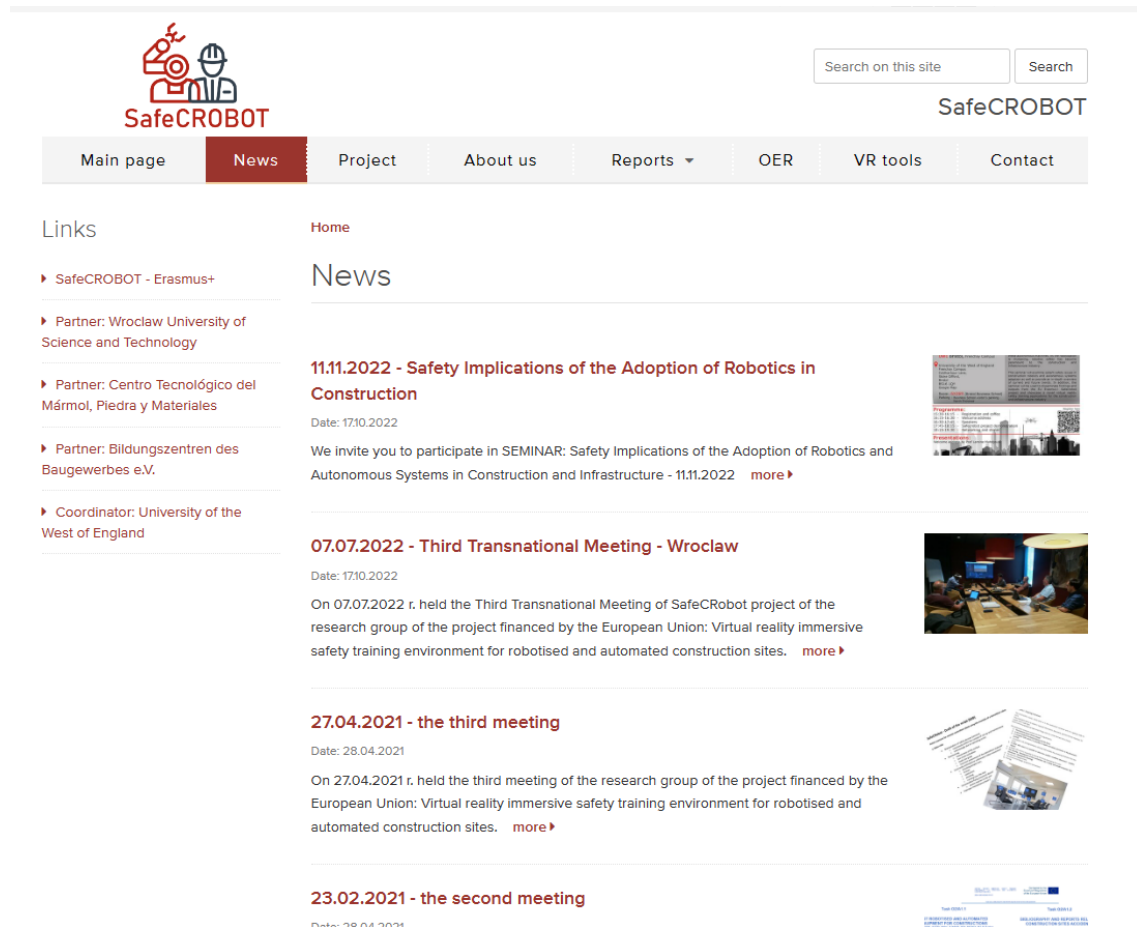
2.2.1. MAIN PAGE

Link: <https://safecrobot.pwr.edu.pl/en/>



2.2.2. NEWS

Link: <https://safecrobot.pwr.edu.pl/en/news>



The screenshot shows the SafeCROBOT website's news section. The header includes the SafeCROBOT logo, a search bar, and navigation links: Main page, News (active), Project, About us, Reports, OER, VR tools, and Contact. The left sidebar lists links to the Erasmus+ project page and partner information. The main content area is titled 'News' and lists four recent news items, each with a date, title, brief description, and a 'more' link. The news items are: 11.11.2022 - Safety Implications of the Adoption of Robotics in Construction; 07.07.2022 - Third Transnational Meeting - Wroclaw; 27.04.2021 - the third meeting; and 23.02.2021 - the second meeting. Each item includes a small thumbnail image related to the news.

SafeCROBOT

Search on this site Search

Main page News Project About us Reports OER VR tools Contact

Links

- ▶ SafeCROBOT - Erasmus+
- ▶ Partner: Wroclaw University of Science and Technology
- ▶ Partner: Centro Tecnológico del Mármol, Piedra y Materiales
- ▶ Partner: Bildungszentren des Baugewerbes e.V.
- ▶ Coordinator: University of the West of England

Home

News

11.11.2022 - Safety Implications of the Adoption of Robotics in Construction
Date: 17.10.2022
We invite you to participate in SEMINAR: Safety Implications of the Adoption of Robotics and Autonomous Systems in Construction and Infrastructure - 11.11.2022 [more ▶](#)

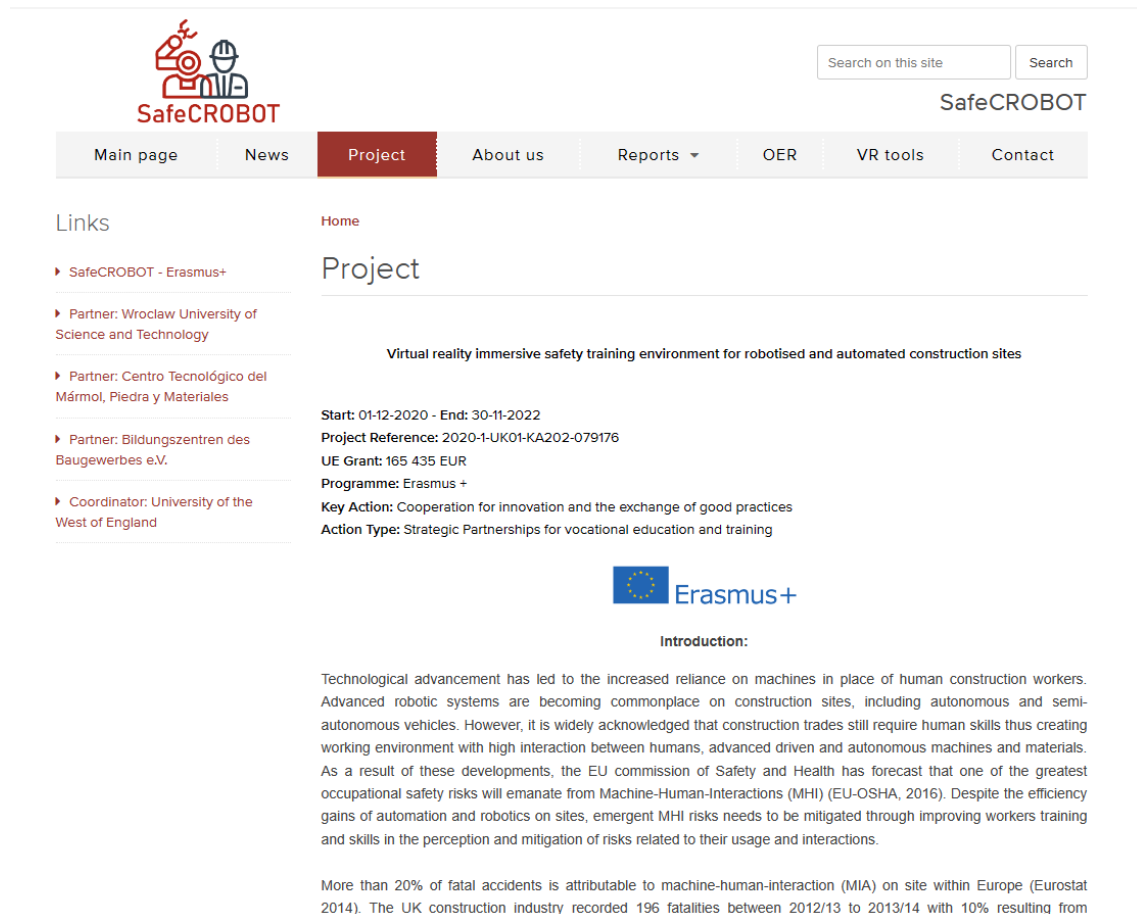
07.07.2022 - Third Transnational Meeting - Wroclaw
Date: 17.10.2022
On 07.07.2022 r. held the Third Transnational Meeting of SafeCROBOT project of the research group of the project financed by the European Union: Virtual reality immersive safety training environment for robotised and automated construction sites. [more ▶](#)

27.04.2021 - the third meeting
Date: 28.04.2021
On 27.04.2021 r. held the third meeting of the research group of the project financed by the European Union: Virtual reality immersive safety training environment for robotised and automated construction sites. [more ▶](#)

23.02.2021 - the second meeting
Date: 28.04.2021

2.2.3. PROJECT

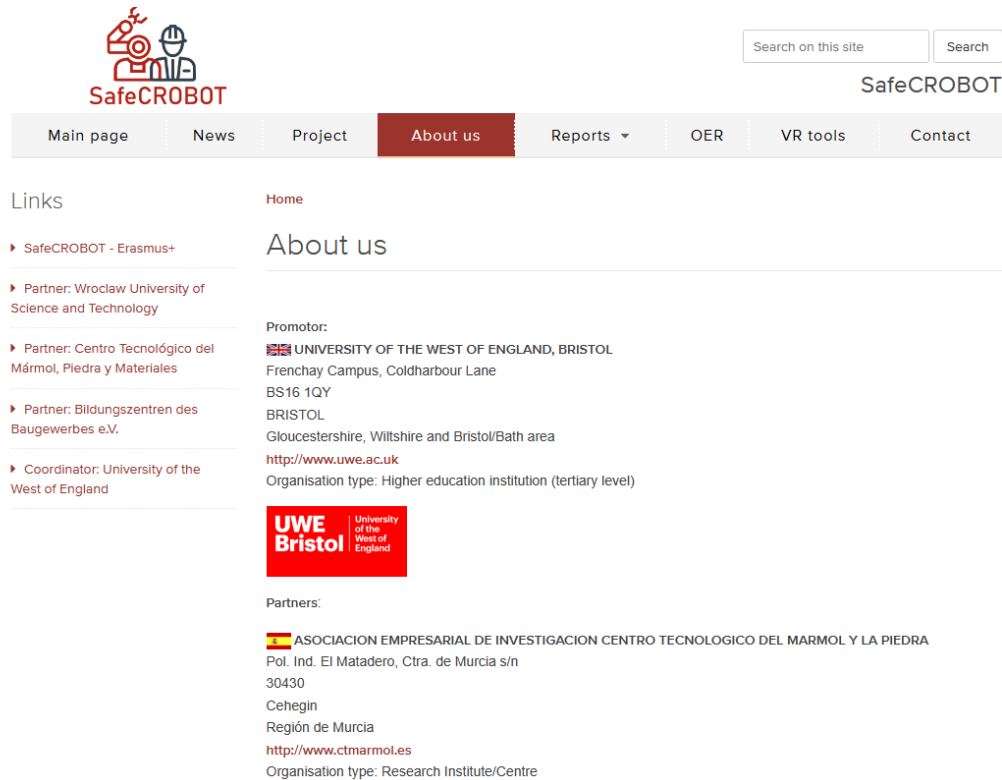
Link: <https://safecrobot.pwr.edu.pl/en/project>



The screenshot shows the SafeCROBOT project website. The header includes the SafeCROBOT logo, a search bar, and a navigation menu with links to Main page, News, Project (highlighted), About us, Reports, OER, VR tools, and Contact. The main content area is titled 'Project' and describes the project as a 'Virtual reality immersive safety training environment for robotised and automated construction sites'. It provides key information: Start: 01-12-2020 - End: 30-11-2022, Project Reference: 2020-1-UK01-KA202-079176, UE Grant: 165 435 EUR, Programme: Erasmus +, Key Action: Cooperation for innovation and the exchange of good practices, and Action Type: Strategic Partnerships for vocational education and training. The website also features a list of links, including SafeCROBOT - Erasmus+, and an introduction section discussing the challenges of machine-human interaction in construction.

2.2.4. ABOUT US

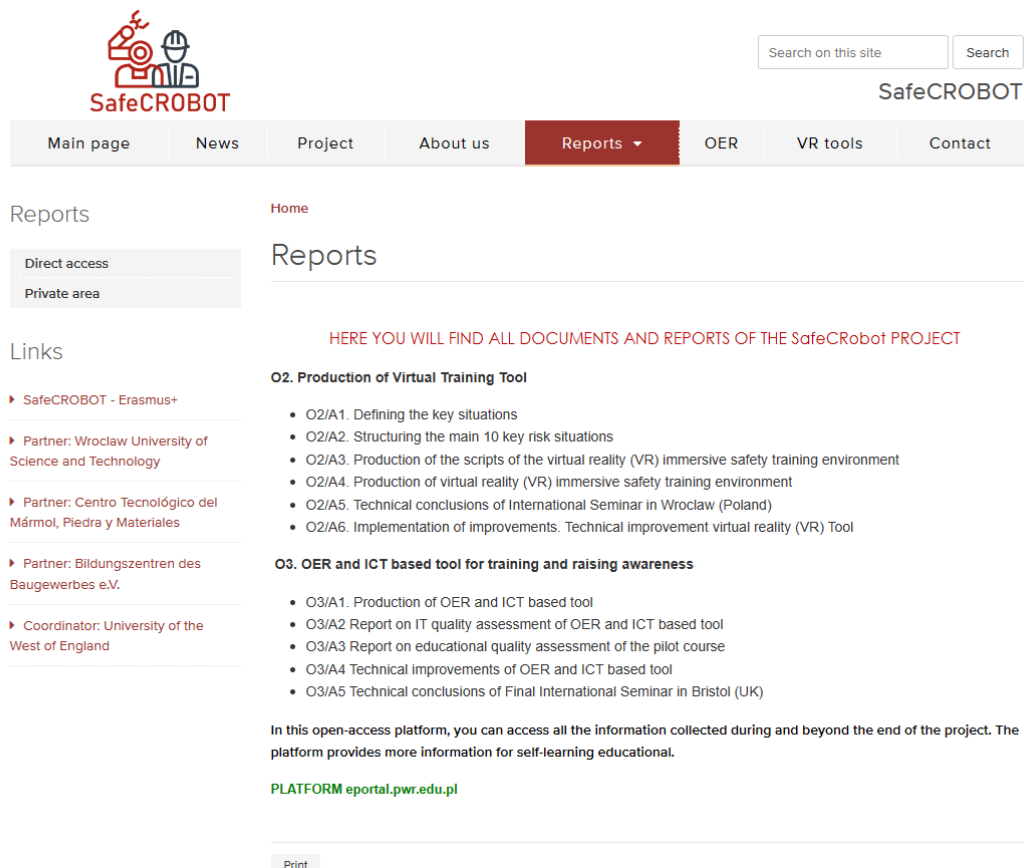
Link: https://safecrobot.pwr.edu.pl/en/about_as



The screenshot shows the 'About us' page of the SafeCROBOT website. The header includes the SafeCROBOT logo, a search bar, and a navigation menu with links to Main page, News, Project, About us (active), Reports, OER, VR tools, and Contact. The 'About us' section is titled 'About us' and lists the Promotor: UNIVERSITY OF THE WEST OF ENGLAND, BRISTOL, with its address and website. It also lists Partners: ASOCIACION EMPRESARIAL DE INVESTIGACION CENTRO TECNOLOGICO DEL MARMOL Y LA PIEDRA, with its address and website. The footer of the screenshot shows the Consortium members: University of the West of England (UWE), Asociación Empresarial de Investigación Centro Tecnológico del Mármol, Piedra y Materiales (CTM), Politechnika Wroclawska (PWR), Bildungszentren des Baugewerbes e.V. (BZB).

2.2.5. REPORTS


Link: <https://safecrobot.pwr.edu.pl/en/reports>



The screenshot shows the SafeCROBOT website's 'Reports' page. The header includes the SafeCROBOT logo, a search bar, and a navigation menu with links to Main page, News, Project, About us, Reports (active), OER, VR tools, and Contact. The left sidebar contains links to Direct access, Private area, and a list of project partners. The main content area is titled 'Reports' and contains a heading 'HERE YOU WILL FIND ALL DOCUMENTS AND REPORTS OF THE SafeCROBOT PROJECT'. It lists two main sections: 'O2. Production of Virtual Training Tool' and 'O3. OER and ICT based tool for training and raising awareness', each with a bulleted list of sub-reports. A footer note states that the platform provides more information for self-learning educational purposes, and a link to the platform is provided.

2.2.6. OER

Link: <https://safecrobot.pwr.edu.pl/en/oer>



SafeCROBOT

Main page	News	Project	About us	Reports ▾	OER	VR tools	Contact
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Links

- ▶ SafeCROBOT - Erasmus+
- ▶ Partner: Wrocław University of Science and Technology
- ▶ Partner: Centro Tecnológico del Mármol, Piedra y Materiales
- ▶ Partner: Bildungszentren des Baugewerbes e.V.
- ▶ Coordinator: University of the West of England

Home

OER

In this open-access platform, you can access all the information collected during and beyond the end of the project. The platform provides more information for self-learning educational.

DIRECT ACCESS	PRIVATE AREA
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Direct Access:

Direct access

Private area

Links

- ▶ SafeCROBOT - Erasmus+
- ▶ Partner: Wrocław University of Science and Technology
- ▶ Partner: Centro Tecnológico del Mármol, Piedra y Materiales
- ▶ Partner: Bildungszentren des Baugewerbes e.V.
- ▶ Coordinator: University of the West of England

Direct access

LIST OF AVAILABLE DOCUMENTS

Task O2/A1.1 UK [.pdf] Task O2/A1.1 NATIONAL STATICAL DATA RELATED TO ACCIDENTS IN THE CONSTRUCTION AND FACTORIES SECTOR FOR EACH PARTICIPATING COUNTRY - UK (in English)	
Task O2/A1.1 SPAIN [.pdf] Task O2/A1.1 NATIONAL STATICAL DATA RELATED TO ACCIDENTS IN THE CONSTRUCTION AND FACTORIES SECTOR FOR EACH PARTICIPATING COUNTRY - SPAIN (in English)	
Task O2/A1.1 GERMANY [.pdf] Task O2/A1.1 NATIONAL STATICAL DATA RELATED TO ACCIDENTS IN THE CONSTRUCTION AND FACTORIES SECTOR FOR EACH PARTICIPATING COUNTRY - GERMANY (in English)	
Task O2/A1.1 POLAND [.pdf] Task O2/A1.1 NATIONAL STATICAL DATA RELATED TO ACCIDENTS IN THE CONSTRUCTION AND FACTORIES SECTOR FOR EACH PARTICIPATING COUNTRY - POLAND (in English)	
Task O2/A1.2 BIBLIOGRAPHY AND REPORTS RELATED CONSTRUCTION SITES ACCIDENTS [.pdf] Task O2/A1.2 BIBLIOGRAPHY AND REPORTS RELATED CONSTRUCTION SITES ACCIDENTS (in English)	

Private Area:

Direct access
Private area

Private area

The platform for self-learning educational

PLATFORM eportal.pwr.edu.pl

Register. Create account


First name *

Last name *

E-mail *

University / Company / Organization *

☐ I'm not a robot

 reCAPTCHA
Privacy - Terms

Send

Print

Project SafeCROBOT

HERE YOU WILL FIND ALL DOCUMENTS AND REPORTS OF THE SafeCROBOT PROJECT




The platform provides more information for self-learning educational.


O2. Production of Virtual Training Tool


- O2/A1. Defining the key situations - (available)
- O2/A2. Structuring the main 10 key risk situations - (unavailable)
- O2/A3. Production of the scripts of the virtual reality (VR) immersive safety training environment - (unavailable)
- O2/A4. Production of virtual reality (VR) immersive safety training environment - (unavailable)
- O2/A5. Technical conclusions of International Seminar in Wroclaw (Poland) - (unavailable)
- O2/A6. Implementation of improvements. Technical improvement virtual reality (VR) Tool - (unavailable)


O3. OER and ICT based tool for training and raising awareness


- O3/A1. Production of OER and ICT based tool - (unavailable)
- O3/A2 Report on IT quality assessment of OER and ICT based tool - (unavailable)
- O3/A3 Report on educational quality assessment of the pilot course - (unavailable)
- O3/A4 Technical improvements of OER and ICT based tool - (unavailable)
- O3/A5 Technical conclusions of Final International Seminar in Bristol (UK) - (unavailable)


 ePortal PWR   My Courses ▾ Category ▾ Educational resources ▾ News


 [Task O2/A1.1 UK](#)

 [Task O2/A1.1 SPAIN](#)

 [Task O2/A1.1 GERMANY](#)

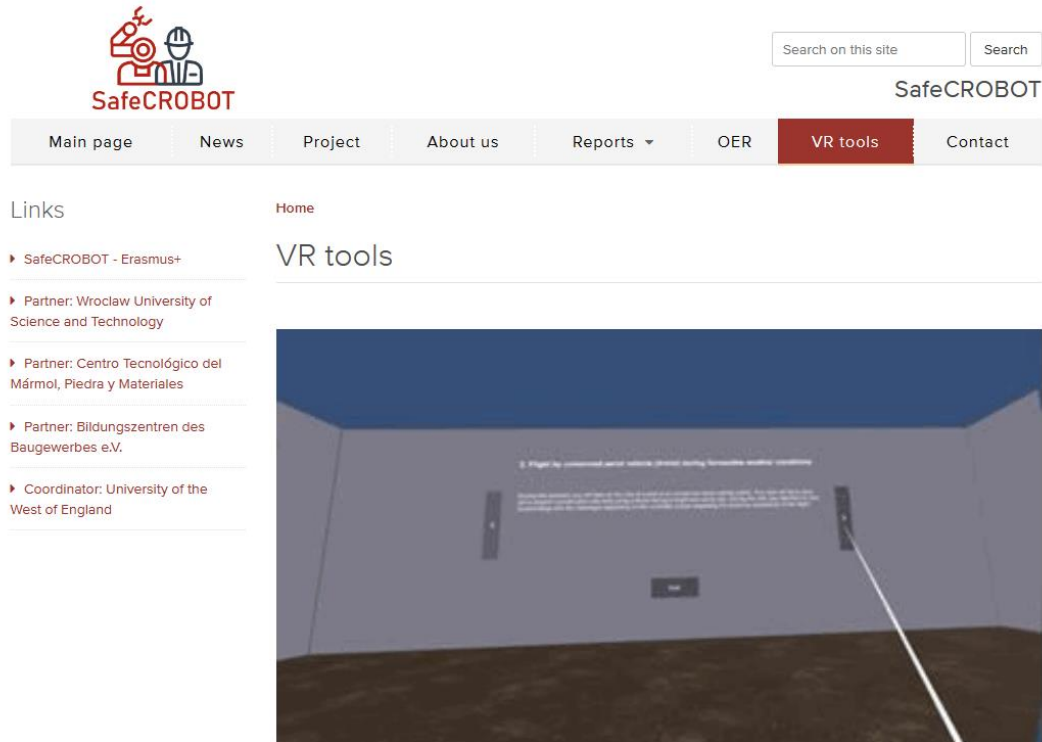
 [Task O2/A1.1 POLAND](#)

 [Task O2/A1.2 BIBLIOGRAPHY AND REPORTS RELATED CONSTRUCTION SITES ACCIDENTS](#)

 [Task O2/A1.3 LIST ROBOTISED AND AUTOMATED EQUIPMENT FOR CONSTRUCTIONS SECTOR AND RELATED TO RISK](#)

2.2.7. VR TOOLS

Link: https://safecrobot.pwr.edu.pl/en/vt_tools



The screenshot shows the SafeCROBOT website interface. At the top, there is a logo and navigation menu. The main content area displays the 'VR tools' section, which includes a large image of a VR environment. The left sidebar contains a 'Links' section with several partner and coordinator links.

SafeCROBOT

Search on this site Search

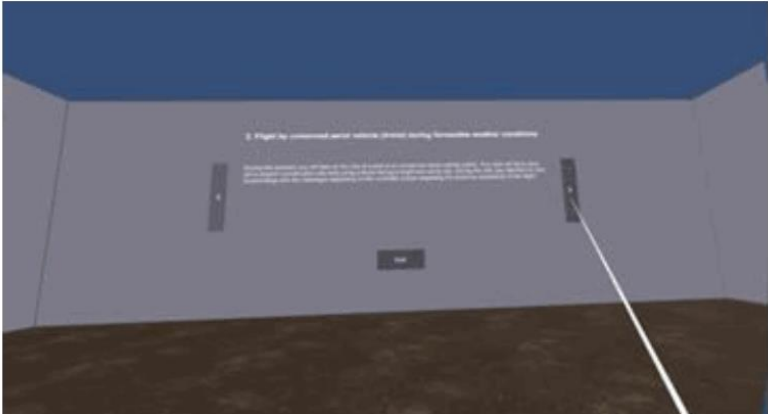
Main page News Project About us Reports ▼ OER **VR tools** Contact

Links

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- ▶ Partner: Wrocław University of Science and Technology
- ▶ Partner: Centro Tecnológico del Mármol, Piedra y Materiales
- ▶ Partner: Bildungszentren des Baugewerbes e.V.
- ▶ Coordinator: University of the West of England

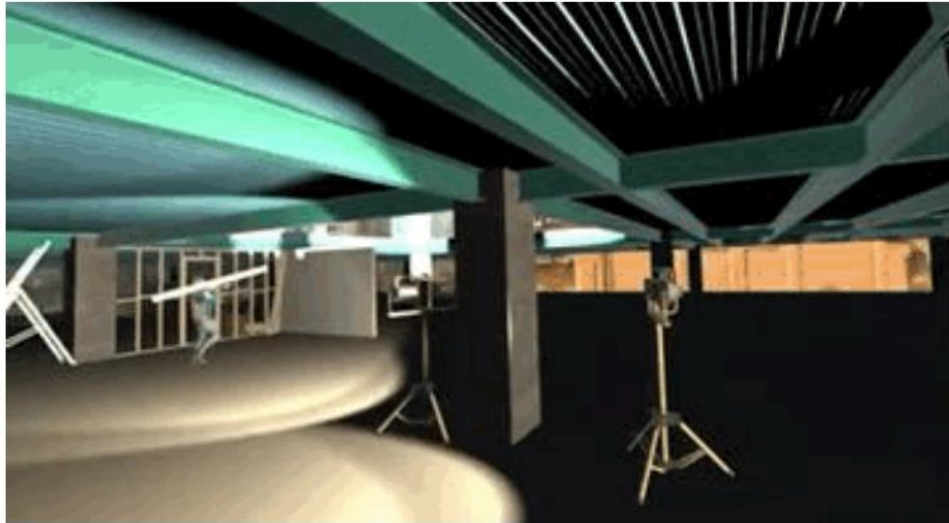
Home

VR tools



The VR environment screenshot shows a virtual construction site with a blue sky and a dark ground. A white line is visible on the ground, and there are some text overlays in the center of the screen.





Print

2.2.8. CONTACT

Link: <https://safecrobot.pwr.edu.pl/en/contact>

<https://safecrobot.pwr.edu.pl/en/contact>

SafeCROBOT

Search on this site Search

SafeCROBOT


Main page News Project About us Reports VR tools **Contact**

Links

- SafeCROBOT - Erasmus+
- Partner: Wrocław University of Science and Technology
- Partner: Centro Tecnológico del Mármol, Piedra y Materiales
- Partner: Bildungszentren des Baugewerbes e.V.
- Coordinator: University of the West of England

Home

Contact

 **Contact us**


Name*

Surname*

Email*

Topic*

Content*
Characters remaining: 1000

Captcha* ☐ I'm not a robot 

* - required field

3. Technical improvements

Taking into account all the quality assessments of participants in the pilot courses through their feedback in the questionnaires and comments during the implementation of the courses, as well as the results obtained in the quality assessment questionnaires sent to experts related to the main items of the project and the opinion of the consortium members when displaying both the OER and the tool, these results have been improved with respect to their initial beta versions.

The improvements have been as follows:

3.1.1. TECHNICAL IMPROVEMENTS IN THE OER

As far as the OER is concerned, several improvements have been made:

- The access to the OER has been made easier for the user so that he/she can find it more easily within the website.
- The project tasks have been sorted by Outputs, so that they are easier to find.

3.1.2. TECHNICAL IMPROVEMENTS IN THE VR TOOL

Technical improvements have also been made to the tool:

- The different scenarios can be accessed from an easily visible menu.
- Some technical aspects of the scenarios have been improved. Some of the improved aspects can be seen below:
 - Protective railings have been added on stages with heights.
 - Harnesses have been added to characters where required.

3.1.3. IMPROVED PRODUCTS

Both products now feature all these improvements. They can be accessed on SafeCRobot website: <https://safecrobot.pwr.edu.pl/en/>