

# REMODEL - Robotic tEchnologies

# for the Manipulation of cOmplex

# DeformablE Linear objects

# Deliverable 8.3 – DISSEMINATION AND COMMUNICATION PLAN (UPDATE M24)

Version 2021-10-31

Project acronym: REMODEL

**Project title:** Robotic tEchnologies for the Manipulation of cOmplex DeformablE Linear

**Grant Agreement No.**: 870133 **ObjectsTopic**: DT-FOF-12-2019

Call Identifier: H2020-NMBP-TR-IND-2018-2020

Type of Action: RIA

Project duration: 48 months

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Work Package: WP8 - Communication/Dissemination, Exploitation and Knowledge Management

Lead Beneficiary: UNIBO Authors: All partners Dissemination level: Public Delivery date: 31/10/2021

Project website address: https://remodel-project.eu

















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#### 1 Executive Summary

This is the update of the document corresponding to the M24.

The document describes the dissemination approach that will be followed during REMODEL project and lists targeted dissemination platforms, in order to ensure sustainability and transferability of REMODEL project results to increase their value and impact and to reach key stakeholders.

This deliverable explains the dissemination procedure and lists the different activities carried out up to M24 and future activities.

The activities contained in this document are as follows:

- List of scientific publications
- Detailed information of scientific publications (once published)
- General and business publications
- Events: Conferences, seminars, workshops and webinars
- Blog posts
- Collaboration & cooperation with other projects, programmes, working groups, initiatives...
- Report of the collaboration & cooperation activities
- Press Releases
- Other dissemination activities

The document will be updated on M42



#### 2 Introduction

REMODEL result will be disseminated throught scientific publications, conferences, workshops, summer schools, fairs, local and international events. All the partners have experience on such activities and are motivated to disseminate in the best way all the project's developments.

The scope of the dissemination strategy is to:

- enable discussion with end-users on how to fully take advantage of the REMODEL outcomes;
- show how the outcomes are relevant, creating jobs and introducing novel technologies in the European market;
- make better use of the results, by making sure they are taken up by decision-makers to influence policy-making and by industry and the scientific community to ensure follow-up;
- show how European collaboration has achieved more than would have otherwise been possible, notably in achieving scientific excellence, contributing to competitiveness and solving societal challenges;
- give enough technical details and/or performance indicators to allow a comprehension of the design and an appreciation of the benefit coming from the project (with proper safeguarding of IPR);
- communicate the developed results to the scientific community;
- communicate the achievements of the project amongst other industries to improve their access to research results and to explore additional applications of the new technologies.



#### 3 Dissemination procedure

A common dissemination policy is incorporated from all partners in order to avoid any conflict with the commercial interests of the partners. Each partner is free to participate in any dissemination activity and present its developments to the public according to the public. The publication or presentation of intellectual property, results, documents, etc. not publicly accessible, namely when it has the status of "restricted", needs the written approval of the owner of the intellectual property, results, documents etc. Intellectual property having the status of "confidential" must not be presented under any circumstances in any dissemination activity.

The following are considered dissemination and communication activities:

- Exhibition stands and demos
- Public project presentation
- Publications in relevant scientific journals
- Participation in non-project workshops, forums and/or events
- Production of newsletters, leaflets, posters, etc.
- Special sessions organization
- Publications on social media
- Opening of PhD positions
- Organization of a conference
- Organization of a workshop
- Press release
- Non-scientific and non-peer-reviewed publication (popularised publication)
- Exhibition
- Training
- Website
- Communication Campaign (e.g. Radio, TV)
- Participation to a conference
- Participation to a workshop
- Participation to an event other than a conference or workshop
- Video/film
- Brokerage event
- Pitch event
- Trade fair
- Other



After the realization of any dissemination activity, the involved partner(s) should provide a copy of the final disseminated material to the dissemination leader who keeps record of all the dissemination activities of REMODEL for all the partners and store it in the internal REMODEL repository. Information about the activity, number and type of people reached in the context of the dissemination activity is also registered in the document "Dissemination monthly report". Each partner should update the document monthly.

The type of audience is categorized in the following groups, based on the ECAS portal classification:

- Scientific community (higher education, research)
- Industry
- Civil society
- General public
- Policy makers
- Media
- Investors
- Customers
- Other



## 4 Dissemination plan

## 4.1 List of scientific publications

List of publications: planned and submitted but not yet accepted

Table 1. List of Scientific Publications

Title of the article	Event and publication (name, date, other info)	Name of author and Organisations				
Calibration of Eye-In-Hand Rangefinders: A Benchmark	IROS 2020 (planned to be submitted by March 1 <sup>st</sup> )	Arne Peters, Lukas Vordemann, Alois Knoll				
	, ,					
Ariadne+: Deep Learning-based Aug-	IEEE Transactions on Industrial Infor-	Alessio Caporali, Riccardo Zanella,				
mented Framework for the Instance	matics	Daniele De Gregorio, Gianluca Palli				
Segmentation of Wires		UNIBO				
Real Time Collision Avoidance with-	IEEE Robotics and Automation Letters	Wendwosen Bellete Bedada, Gianluca				
GPU-Computed Distance Maps		Palli				
		UNIBO				
Deep Learning and OcTree-GPU-	MDPI Sensors, Special Issue: "State-	Ismayil Ahmadli, Wendwosen B. Be-				
based ICP for Efficient 6DModel Reg-	of-Art in Sensors for Robotic Applica-	dada, Gianluca Palli				
istration of Large Objects	tions"	UNIBO				
Tell Me What You See? Interpretable	Special Session on "Cyber-Physical	PUT: Piotr Kicki, Michał Bednarek,				
Classification of Wiring Harnesses	Systems for Deformable Manipulation"	Krzysztof Walas				
Branches With Deep Neural Networks		VWP: Paweł Lembicz, Grzegorz				
		Mierzwiak				
Review on Human to Robot Hand Mo-	IEEE TRANSACTIONS ON ROBOT-	Roberto Meattini, Raul Suarez,				
tion Mapping	ICS	Gianluca Palli, Claudio Melchiorri				
		UNIBO				
Wrinkles Detection and Clothes Manip-	IEEE Transactions on Industrial Infor-	Caporali, Alessio; Bedada,				
ulation for Robotized Laundry	matics	Wendwosen Bellete; Palli, Gianluca				
		UNIBO				
DLO3DS: Deformable Linear Objects	IEEE Transactions on Automation Sci-	Alessio Caporali, Kevin Galassi,				
3D Shape Estimation and Tracking	ence and Engineering	Gianluca Palli				
from Multiple 2D Views		UNIBO				



#### 4.2 Detailed information of scientific publications (once published)

Publications once they have been accepted

Table 2. List of Scientific Publications (detailed info)

Title	Authors	Title of the periodical or the series	Number, date or fre- quency	Pub- lisher	Place of pub- lication	Year	Relevant pages	Permanent identifiers (if available)	Is/Will open access be provided to this publication? In case YES ¿Gold (add cost) or Green(add months)?	Repository link
Extrinsic Calibration of an Eye-In-Hand 2d Li- dar Sensor in Unstruc- tured Environments Using ICP	Arne Peters, Adam Schmidt, Alois Knoll	IEEE Robot & Automa- tion Letters	5 (2)	IEEE	IEEEXplore	2020	929936	10.1109/LRA.2020.2965878	Yes/Gold/0	https://zenodo.org/rec- ord/3817196#.YJzQSqgzaUk
SEMG-Based Human- in-the-Loop Control of Elbow Assistive Ro- bots for Physical Tasks and Muscle Strength Training	R. Meattini, D. Chiaravalli, G. Palli and C. Melchiorri	IEEE Ro- botics and Automation Letters	vol. 5, no. 4, Oct. 2020	IEEE	IEEEXplore	2020	5795-5802	10.1109/LRA.2020.3010741	Yes/Green/6Months	https://cris.unibo.it/han- dle/11585/768135
Model-based Manipu- lation of Deformable Linear Objects by Mul- tivariate Dynamic Splines	Gianluca Palli	Proceed- ings of the ICPS 2020 Conference	t.b.a.	IEEE	IEEEXplore	2020	520–525	10.1109/ICPS48405.2020.9274 730	Yes/Green/0	https://cris.unibo.it/han- dle/11585/796312#.YJzQgag zaUk



Title	Authors	Title of the periodical or the series	Number, date or fre- quency	Pub- lisher	Place of pub- lication	Year	Relevant pages	Permanent identifiers (if available)	Is/Will open access be provided to this publication? In case YES ¿Gold (add cost) or Green(add months)?	Repository link
A Low Cost Tactile Sensor for Large Sur- faces Based on De- formable Skin with Embedded IMU	Yuki Iwamoto, Roberto Meat- tini, Davide Chi- araval-li, Gianluca Palli, Koji Shi-buya, Claudio Melchi- orri	Proceed- ings of the ICPS 2020 Conference	t.b.a.	IEEE	IEEEXplore	2020	501-506	10.1109/ICPS48405.2020.9274 737	Yes/Green/0	https://cris.unibo.it/han- dle/11585/785153#.YJzQjKg zaUk
Safe and Energy Efficient Robotic System for Industrial Automatic Tests on Domestic Appliances: Problem Statement and Proof of Concept	Bedada, Wend- wosen Bel-lete; Kalawoun, Ra- wan; Ahmadli, Ismayil; Palli, Gi-anluca	Procedia Manufac- turing	t.b.a.	Else- vier	Online	2020	454–461	10.1016/j.promfg.2020.10.064	Yes/Gold/490€	https://cris.unibo.it/han- dle/11585/796314#.YJzQo6g zaUk
Pointcloud-based Identification of Opti- mal Grasping Pos- esfor Cloth-like De- formable Objects	Alessio Caporali, Gianluca	Proceed- ings of the ETFA 2020 Conference	t.b.a.	IEEE	IEEEXplore	2020	581-586	10.1109/ETFA46521.2020.921 1879	Yes/Green/0	https://cris.unibo.it/han- dle/11585/796278#.YJzQsqg zaUk
Effective Deployment of CNNs for 3DoF Pose Estimation and Grasping in Industrial Settings	De Gregorio, Daniele; Za- nella, Riccardo; Palli, Gian-luca; Di Stefano, Luigi	Proceed- ings of the ICPR 2020 Conference	t.b.a.	IEEE	IEEEXplore	2020	t.b.a.	t.b.a.	Yes/Green/0	https://arxiv.org/abs/2012.13 210



Title	Authors	Title of the periodical or the series	Number, date or fre- quency	Pub- lisher	Place of pub-	Year	Relevant pages	Permanent identifiers (if available)	Is/Will open access be provided to this publication? In case YES ¿Gold (add cost) or Green(add months)?	Repository link
Auto-generated Wires Dataset for Semantic Segmentation with Domain-Independ- ence	Zanella, R., Caporali, A., Tadaka, K., De Gregorio, D., Palli, G.	Proceed- ings of the 2021 Inter- national Conference on Com- puter, Con- trol and Ro- botics, ICCCR 2021	t.b.a.	IEEE	IEEEXplore	2021	292–298	10.1109/ICCCR49711.2021.93 49395	Yes/Green/0	https://cris.unibo.it/han- dle/11585/816515#.YJzQzqg zaUk
An Approach for Modeling Grasping Configuration Using Ontology-based Taxonomy	Wael M. Mohammed, Pablo Malvido Fresnillo, Sai- gopal Vasude- van, Žiga Go- sar, Jose L. Martinez Lastra	Proceed- ings of the ICPS 2020 Conference	t.b.a.	IEEE	IEEEXplore	2020	t.b.a.	t.b.a.	Yes. Green.No embargo	An Approach for Modeling Grasping Configuration Using Ontology-based Taxonomy (tuni.fi)
Training an Under-actuated Gripper for Grasping Shallow Objects Using Reinforcement Learning	Wael M. Mo- hammed, Mirosław Nejman, Fer- nando Castaño, Jose L. Mar- tinez Lastra, Stanisław	Proceed- ings of the ICPS 2020 Conference	t.b.a.	IEEE	IEEEXplore	2020	t.b.a.	t.b.a.	Yes. Green. No embargo	https://trepo.tuni.fi/han- dle/10024/130115



Title	Authors	Title of the periodical or the series	Number, date or fre- quency	Pub- lisher	Place of pub- lication	Year	Relevant pages	Permanent identifiers (if available)	Is/Will open access be provided to this publication? In case YES ¿Gold (add cost) or Green(add months)?	Repository link
	Strzelczak, Al- berto Villalonga									
Optical Force/Tactile Sensors for Robotic Applications	Marco Costanzo and Salvatore Pirozzi	IEEE In- strumenta- tion & Measure- ment Mag- azineSpe- cial Issue on "Optical measure- ments"	21	IEEE	IEEEXplore	2021	28-35	https://doi.org/10.1109/MIM. 2021.9491003	Yes/Green/6 months	
Tactile Sensors for Parallel Grippers: De- sign and Characterization	Andrea Cirillo , Marco Cos- tanzo , Gianluca Laudante and Salvatore Pi- rozzi UCLV	MDPI Sensors	21,1915	MDPI	MDPI on line	2021	20	https://doi.org/10.3390/s210519 15	Yes/Gold/0	https://zenodo.org/rec- ord/4672281#.YJzRCqgzaUk
New Metrics for Industrial Depth Sensors Evaluation for Precise Robotic Applications	Cop, Konrad P.; Peters, Arne; Žagar, Bare L; Hettegger, Daniel; Knoll, Alois C	2021 IEEE/RSJ Internationa I Conference on Intelligent Robots and	2021	IEEE	IEEEXplore	2021		t.b.a.		https://mediatum.ub.tum.de/n ode?id=1616006&change_la nguage=en



Title	Authors	Title of the periodical or the series	Number, date or fre- quency	Pub- lisher	Place of pub- lication	Year	Relevant pages	Permanent identifiers (if available)	Is/Will open access be provided to this publication? In case YES ¿Gold (add cost) or Green(add months)?	Repository link
		Systems (IROS)								
Combining Vision and Tactile Data for Cable Grasping	Alessio Caporali, Kevin Galassi, Gianluca Laudante, Gianluca Palli, Salvatore Pirozzi UNIBO/UCLV	IEEE/ASM E Internationa I Conference on Advanced Intelligent Mechatroni cs AIM 2021	t.b.a.	IEEE/ ASME	IEEEXplore	2021	436–441	10.1109/AIM46487.2021.95174 47	Yes. Green. No embargo	http://hdl.handle.net/11585/8 32137
Validating DLO Models from Shape Observation	Gianluca Palli, Salvatore Pirozzi UNIBO/UCLV	IEEE/ASM E Internationa I Conference on Advanced Intelligent Mechatroni cs AIM 2021	t.b.a.	IEEE/ ASME	IEEEXplore	2021	430–435	10.1109/AIM46487.2021.95175 70	Yes. Green. No embargo	http://hdl.handle.net/11585/8 34227
3D DLO Shape Detection and Grasp	Alessio Caporali, Kevin	IEEE/ASM E	t.b.a.	IEEE/ ASME	IEEEXplore	2021	424–429	10.1109/AIM46487.2021.95176 55	Yes. Green. No embargo	http://hdl.handle.net/11585/8 32128



Title	Authors	Title of the periodical or the series	Number, date or fre- quency	Pub- lisher	Place of pub- lication	Year	Relevant pages	Permanent identifiers (if available)	Is/Will open access be provided to this publication? In case YES ¿Gold (add cost) or Green(add months)?	Repository link
Planning from Multiple 2D Views	Galassi, Gianluca Palli UNIBO	Internationa I Conference on Advanced Intelligent Mechatroni cs AIM 2021								
Robot Learning-based Pipeline for Autonomous Reshaping of a Deformable Linear Object in Cluttered Backgrounds	Riccardo Zanella and Gianluca Palli UNIBO	IEEE Access	t.b.a.	IEEE	IEEEXplore	2021	t.b.a.	t.b.a	Yes/Gold/0	t.b.a.
Beyond the Baseline: 3D Reconstruction of Tiny Objects With Single Camera Stereo Robot	Daniele De Gregorio, Matteo Poggi, Pierluigi Zama Ramirez, Gianluca Palli, Stefano Mattoccia and Luigi Di Stefano	IEEE Access	9	IEEE	IEEEXplore	2021	119755- 119765	10.1109/AC- CESS.2021.3108626	Yes/Gold/0	http://hdl.handle.net/11585/8 33523



Title	Authors	Title of the periodical or the series	Number, date or fre- quency	Pub- lisher	Place of pub- lication	Year	Relevant pages	Permanent identifiers (if available)	Is/Will open access be provided to this publication? In case YES ¿Gold (add cost) or Green(add months)?	Repository link
	UNIBO									
Combining Unsupervised Muscle Co-Contraction Estimation with Bio- Feedback allows Augmented Kinesthetic Teaching	Meattini, Roberto; Chiaravalli, Davide; Biagiotti, Luigi; Palli, Gianluca; Melchiorri, Claudio UNIBO	IEEE Robotics and Automation Letters	4(6)	IEEE	IEEEXplore	2021	6180 - 6187	10.1109/LRA.2021.3092269	Yes/Green/6 months	http://hdl.handle.net/11585/8 34309
Exploiting In-Hand Knowledge in Hybrid Joint-Cartesian Mapping for Intuitive Teleoperation of Anthropomorphic Robotic Hands	Roberto Meattini, Davide Chiaravalli, Gianluca Palli, Claudio Melchiorri UNIBO	IEEE Robotics and Automation Letters	6(3)	IEEE	IEEEXplore	2021	5517 - 5524	10.1109/LRA.2021.3078658	Yes/Green/6 months	http://hdl.handle.net/11585/8 34307
New Model-Based Manipulation Technique for ReshapingDeformable Linear Objects	Alaa Khalifa and Gianluca Palli UNIBO	The Internationa I Journal of Advanced Manufacturi ng Technology	t.b.a.	Spring er	Online	2021	t.b.a.	10.1007/s00170-021-08107-x	Yes/Green/6 months	t.b.a.



Title	Authors	Title of the periodical or the series	Number, date or fre- quency	Pub- lisher	Place of pub- lication	Year	Relevant pages	Permanent identifiers (if available)	Is/Will open access be provided to this publication? In case YES ¿Gold (add cost) or Green(add months)?	Repository link
Symplectic Integration for Multivariate Dynamic Spline- Based Model of Deformable Linear Objects	Alaa Khalifa and Gianluca Palli UNIBO	Journal of Computatio nal and Nonlinear Dynamics	t.b.a.	ASME	Online	2021	t.b.a.	10.1115/1.4052571	Yes/Green/6 months	t.b.a.
A Cyber-Physical System for Clothes Detection, Manipulation and Washing Machine Loading	Alessio Caporali, Wendwosen Bellete Bedada, Gianluca Palli UNIBO	4th IEEE Internationa I Conference on Industrial Cyber- Physical Systems- Special Session on "Cyber- Physical Systems for Deformable Manipulatio n"	t.b.a.	IEEE	IEEEXplore	2021	519 - 524	10.1109/ICPS49255.2021.9468 189	Yes/Green/6 months	http://hdl.handle.net/11585/8 32113
Robotic Wires Manipulation for Switchgear Cablingand Wiring	Kevin Galassi, Gianluca Palli UNIBO	4th IEEE Internationa I Conference on	t.b.a.	IEEE	IEEEXplore	2021	531-536	10.1109/ICPS49255.2021.9468 128	Yes/Green/6 months	http://hdl.handle.net/11585/8 32861



Title	Authors	Title of the periodical or the series	Number, date or fre- quency	Pub- lisher	Place of pub- lication	Year	Relevant pages	Permanent identifiers (if available)	Is/Will open access be provided to this publication? In case YES ¿Gold (add cost) or Green(add months)?	Repository link
Harness Manufacturing		Industrial Cyber- Physical Systems- Special Session on "Cyber- Physical Systems for Deformable Manipulatio n"								
Deformable Objects Grasping and Shape Detection with Tactile Fingers and Industrial Grippers	Pablo Malvido Fresnillo, Saigopal Vasudevan, Wael M. Mohammed, Jose L. Martinez Lastra, Gianluca Laudante, Salvatore Pirozzi, Kevin Galassi, Gianluca Palli	4th IEEE Internationa I Conference on Industrial Cyber- Physical Systems- Special Session on "Cyber- Physical Systems for Deformable	t.b.a.	IEEE	IEEEXplore	2021	525 - 530	10.1109/ICPS49255.2021.9468 151	Yes/Green/6 months	http://hdl.handle.net/11585/8 34239



Title	Authors	Title of the periodical or the series	Number, date or fre- quency	Pub- lisher	Place of pub- lication	Year	Relevant pages	Permanent identifiers (if available)	Is/Will open access be provided to this publication? In case YES ¿Gold (add cost) or Green(add months)?	Repository link
	TAU/UCLV/UNI BO	Manipulatio n"								
Tactile sensor data interpretation for estimation of wire features	Andrea Cirillo, Gianluca Laudante, Salvatore Pirozzi  UCLV	MDPI Electronics	10(12), 1458	MDPI	MDPI Online	2021	14	https://doi.org/10.3390/electroni cs10121458	Yes/Gold/0	https://zenodo.org/record/55 53876#.YV65aWLP1PY
Proximity sensor for thin wire recognition and manipulation	Andrea Cirillo, Gianluca Laudante, Salvatore Pirozzi  UCLV	MDPI Machines	9(9), 188	MDPI	MDPI Online	2021	24	https://doi.org/10.3390/machine s9090188	Yes/Gold/0	https://zenodo.org/record/55 53207#.YV65mWLP1PY
Vision-Based Robotic Solution for Wire Insertion with an Assigned Label Orientation	Pasquale Cirillo, Gianluca Laudante, Salvatore Pirozzi  UCLV	IEEE Access	Vol. 9	IEEE	IEEEXplore	2021	102278- 102289	10.1109/ACCESS.2021.30984 72	Yes/Gold/0	https://zenodo.org/record/55 53878#.YV65p2LP1PY



#### 4.3 General and business publications

Table 3. List of General & Business Publications

Title	Link or reference	Date	Partner/Authors (organisations)

#### 4.4 Events: Conferences, seminars, workshops and webinars

Due to the situation of Public Health Emergency reported by WHO due to the covid-19 coronavirus outbreak, many events have been cancelled or postponed, and others have been done online

Table 4. List of events

Event	Date	Name and type of audience	Countries addressed
A&T Automation and Testing	12-14 02 2020	Industry and Scientific community	Turin (Italy)
Innovabiomed	15-16 06 2020	Industry and Scientific community	Verona (Italy)
ACM/IEEE International Conference on Human- Robot Interaction (HRI)	23-26 03 2020	Industry and Scientific community	Cambridge- UK
EU Robotics Forum 2020	03-05 04 2020	Industry and Scientific community	Malaga - Spain
IEEE International Conference on Robotics and Automation (ICRA)	31.05 - 04.06 2020	Industry and Scientific community	Paris - France
Hannover Messe (Hanover Fair) 2020	20-24 05 2020	Industry and Scientific community	Hannover - Germany
Feria internacional de la máquina herramienta (BIEMH)	25-29 05 2020 23-27 10 2020 2022	Industry and Scientific community	Bilbao - Spain



Event	Date	Name and type of audience	Countries addressed
Automatica 2020	16-19 06 2020 08-12 12 2020	Industry and Scientific community	Munchen - Germany
Special Session on "Cyber-Physical Systems for Deformable Manipulation"	09-12 06 2020	Industry and Scientific community	Tampere - Finland
Flexible Automation and Intelligent  Manufacturing International Conference FAIM  2020	15-18 06 2021	Industry and Scientific community	Athens – Greece
https://sevilla.bciaerospace.com/es/	16-18 06 2020	BtoB event in Spain, the A&DM Sevilla,	Seville Spain
IFAC World Congress 2020	July 11-17 2020	Industry and Scientific community	Berlin, Germany
IEEE International Conference on Emerging Technologies and Factory Automation, ETFA 2020	08-11 September 2020	Industry and Scientific community	Vienna, Austria
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)	25/10 - 25/11 2020	Industry and Scientific community	Online
25th International Conference on Pattern Recognition (ICPR 2020)	10-15 January 2021	Industry and Scientific community	Florence, Italy
2021 International Conference on Computer, Control and Robotics, ICCCR 2021	January 8- 10, 2021	Industry and Scientific community	Online
The European Robotics Forum 2021 (ERF2021)	13-15 April 2021	Industry and Scientific community	Online
Special Session on "Cyber-Physical Systems for Deformable Manipulation"	10-13 05 2021	Industry and Scientific community	Online
4th IEEE International Conference on Industrial Cyber-Physical Systems ICPS 2021	10-13 05 2021	Industry and Scientific community	Online
IEEE/ASME International Conference on Advanced Intelligent Mechatronics AIM 2021	JULY 12 – 16, 2021	Industry and Scientific community	Online



Event	Date	Name and type of audience	Countries addressed
Invited session on "Mechatronic Systems for the Manipulation of Deformable Objects"	JULY 12 – 16, 2021	Industry and Scientific community	Online
2021 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)	September 28 - Oct 1 2021	Industry and Scientific community	Online
ITM Industry Europe Fairs in Poznan	31 Agust – 3 Sep 2021	Industry and Scientific community	Pozna <b>ń</b> , Poland



## 4.5 Blog posts

Table 5. Blog posts

Title of blog entry	Main author	Release Date
Kick-off meeting in Bologna	TECNALIA	10-12-2019
Special Session on "Cyber-Physical sistems for deformable object manipulation"	UNIBO	09-01-2020
The PCB of tactile sensors for REMODEL are ready!!!	UCLV	05-02-2020
3D model for IEMA use case is ready!!!	IEMA	16-03-2020
REMODEL use cases	TECNALIA	03-04-2020
Aeronautical sector – ELIMCO use case	ELIMCO	18-06-2020
ICPS Organized by TAU – Special Session on DLOs manipulation	TAU	03-07-2020
Test boards for sensor benchmarking are ready!!!	TUM	01-09-2020
Developing perception algorithms for wiring harnesses manipulation in automotive industry	PUT	18-09-2020
IMPROVEMENT OF WORKCELL ERGONOMICS	ELVEZ	15-10-2020
PROJECT MEETING M12 - VIRTUAL MEETINGS DURING PANDEMIC TIMES  OF CORONAVIRUS	VWP	13-11-2020
FINALLY, A REMODEL CHRISTMAS GIFT	ENKI	11-01-2021
2021 SPECIAL SESSION ON "CYBER-PHYSICAL SYSTEMS FOR  DEFORMABLE OBJECT MANIPULATION"	UNIBO	19-01-2021
SPECIAL ISSUE "State-of-Art in Sensors for Robotic applications"	UNIBO	01-02-2021
REMODEL sensorized fingers have started to work!	UCLV	10-01-2021
ERF 2021	UNIBO	02-03-2021
IEMA is designing the robotic wire storage station interfacing with the REMODEL UC1	IEMA	25-03-2021
TECNALIA is working on teaching by demostration framework	TECNALIA	06-04-2021
The REMODEL's youtube channel is ready!!!!	TECNALIA	06-05-2021



Robotic platform for aeronautical wiring harnesses manufacturing already in progress	ELIMCO	31-05-2021
TAU lastest updates	TAU	09-07-2021
Results of sensor benchmark publicly avariable	TUM	27-07-2021
IEEE/RSJ International Workshop RoboTac 2021	UCLV	15-09-21
Deformable linear object (DLO) tracking in wire manipulation task	PUT	27-09-21
ELVEZ lastest updates	ELVEZ	21-10-21

#### 4.6 Collaboration & cooperation with other projects, programmes, working groups, initiatives...

We will describe here the projects with which we are collaborating, under which areas and topics, and the status.

#### Explanation symbols

✔	Collaboration has already started – concrete collaboration activities are reported
❤	Collaboration is envisioned but have not started yet
×	Collaboration is not feasible  Collaboration have started but could not be continued – concrete collaboration activities are not reported

Table 6. Collaboration with other projects

Project	Areas for collaboration	Remark	Sta- tus	
HORSE	REMODEL will building up upon research-results	HORSE will end in April		
HORSE	and open-source software	2020		
TRINITY	Artificial Intelligence for the manipulator in ENKI's use case	Possible Collaboration		
DIH <sup>2</sup>	Manipulator for Dlnking operation	Possible Collaboration		

## 4.7 Report of the collaboration & cooperation activities

Here we will report the collaboration activities performed, date, main conclusions and action points.

Table 7. Collaboration activities

No.	Project(s) Name	Description of activity
1.	HORSE	Joint scientific publication



#### 4.8 Press Releases

Table 8. Other dissemination Activities

Туре	Published in	Partner/Authors
<u>LinkedIn Posts</u>	Linkedin	ENKI
Website posts	ENKI website	ENKI

#### 4.9 Other dissemination activities

Keynotes, workshops, prizes.

Table 8. Other dissemination Activities

Туре	Name & Comment	Partner/Authors	Link if appropriate
2020 IEEE Transactions on Automation Science and Engineering Best New Application Paper Award	Daniele De Gregorio, Riccardo Zanella, Gianluca Palli, Salvatore Pirozzi, Claudio Melchiorri "Integration of Robotic Vision and Tactile Sensing for Wire-Terminal Insertion Tasks" vol. 16, no. 2, pp. 585-598, 2019	UNIBO/UCLV	https://www.ieee-ras.org/awards-recognition/publications-awards/69-awards-recognition/society-awards/67-the-googol-best-new-application-paper-award-sponsored-by-googol-technology-hk-ltd
ICPS 2021 Best Student Paper Award	Alessio Caporali, Wendwosen Bellete Bedada, and Gianluca Palli, "A Cyber-Physical System for Clothes Detection, Manipulation and Washing Machine Loading"	UNIBO	
Keynote @RoboTac 2021 IEEE/RSJ Inter- national Workshop on New Advances in Tac- tile Sensation, Interac- tive Perception, Con- trol, and Learning: A Soft Robotic Perspec- tive on Grasp,	Salvatore Pirozzi  Keynote title:  "Force/Tactile Sensor Technology for Robotic  Manipulation"	UCLV	https://www.robotact.de/rbotac2021



Туре	Name & Comment	Partner/Authors	Link if appropriate
Manipulation, & HRI,			
within IROS2021 con-			
ference			



## 5 Conclusions

Dissemination is the public disclosure of the results of the project. It is a process of promotion and awareness-raising right from the beginning of a project. It makes research results known to various stakeholder groups in a targeted way.

During the last months and due to the Public Health Emergency situation reported by the WHO due to the outbreak of coronavirus covid-19, many events have been canceled or postponed. But in REMODEL we have used social networks and we have participated many conferences that have been held online to be able to continue making diffusion of the project.

The REMODEL dissemination activities will be reported in updated version of this deliverable at the end of the project.