



LABUST
LABORATORY FOR UNDERWATER
SYSTEMS AND TECHNOLOGIES

Laboratory for Underwater Systems and Technologies (LABUST)

LABUST, University of Zagreb, Faculty of Electrical Engineering and
Computing

prof. dr. sc. Nikola Mišković

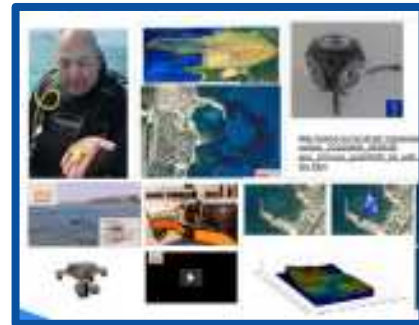




University of Zagreb
Faculty of Electrical Engineering and Computing



Laboratory for Underwater Systems and Technologies





labust.fer.hr
labust@fer.hr



Int'l

17

23

national

40

projects





- Active projects

- 4 EUROPEAN PROJECTS

- INTERREG InnovaMARE
- HE MONUSEN
- HE UWIN-LABUST
- INTERREG MARBLE

- 4 NATIONAL PROJECTS

- ZCI DATACROSS
- Multipurpose Unmanned Ship
- Multifunctional Smart Buoys
- HEKTOR

- 1 ONR PROJECT

- ROADMAP

- 1 Schmidt Ocean Institute PROJECT

- SOUND

- Finished projects

- H2020 PROJECTS

- H2020-Twinn EXCELLABUST
- H2020 Fire+ PLADYFLEET
- H2020-Teaming ACROSS
- H2020 FET Launchpad APAD
- H2020 CROBOHUB
- H2020-INFRA EUMarineRobots
- H2020 ROBOCOMM++
- H2020-FET SUBCULTRON

- FP7 PROJECTS

- FP7-INFRA EUROFLEETS₂
- FP7-ICT CADDY
- FP7-SME CART
- FP7-REGPOT CURE

- OTHER EU PROJECTS

- INTERREG BLUEMED
- INTERREG SIOI
- DG-ECHO E-URready4OS
- DG-ECHO URready4OS

- Finished projects

- OTHER INT'L

- ADRIATIC

- NATIONAL

- H2020-Twinn EXCELLABUST
- HRZZ CroMarX
- bilateral China
- ESF INFRA-LAPOST



EXCELLABUST
EXCELLING LABUST IN MARINE ROBOTICS

EXCELLABUST

Excelling LABUST in marine robotics

Funding scheme: H2020 – TWINNING

Total budget: 1.014.551,00 EUR

Start date: 01/01/2016; Duration: 36 months

Coordinator: UNIZG-FER



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 691980.



Proposal Evaluation Form



EUROPEAN COMMISSION

Horizon 2020 - Research and Innovation Framework Programme

**Evaluation
Summary Report -
Coordination and
support actions**

Call: H2020-TWINN-2015
Funding scheme: Coordination & support action
Proposal number: 691980
Proposal acronym: EXCELLABUST
Duration (months): 36
Proposal title: Excelling LABUST in marine robotics
Activity: H2020-TWINN-2015-1

Evaluation Result

Total score: 15.00 (Threshold: 10)

Form Information

SCORING

Scores must be in the range 0-5.

Interpretation of the score:

- 0–** *The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.*
- 1– Poor.** *The criterion is inadequately addressed, or there are serious inherent weaknesses.*
- 2– Fair.** *The proposal broadly addresses the criterion, but there are significant weaknesses.*
- 3– Good.** *The proposal addresses the criterion well, but a number of shortcomings are present.*
- 4– Very good.** *The proposal addresses the criterion very well, but a small number of shortcomings are present.*
- 5– Excellent.** *The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.*



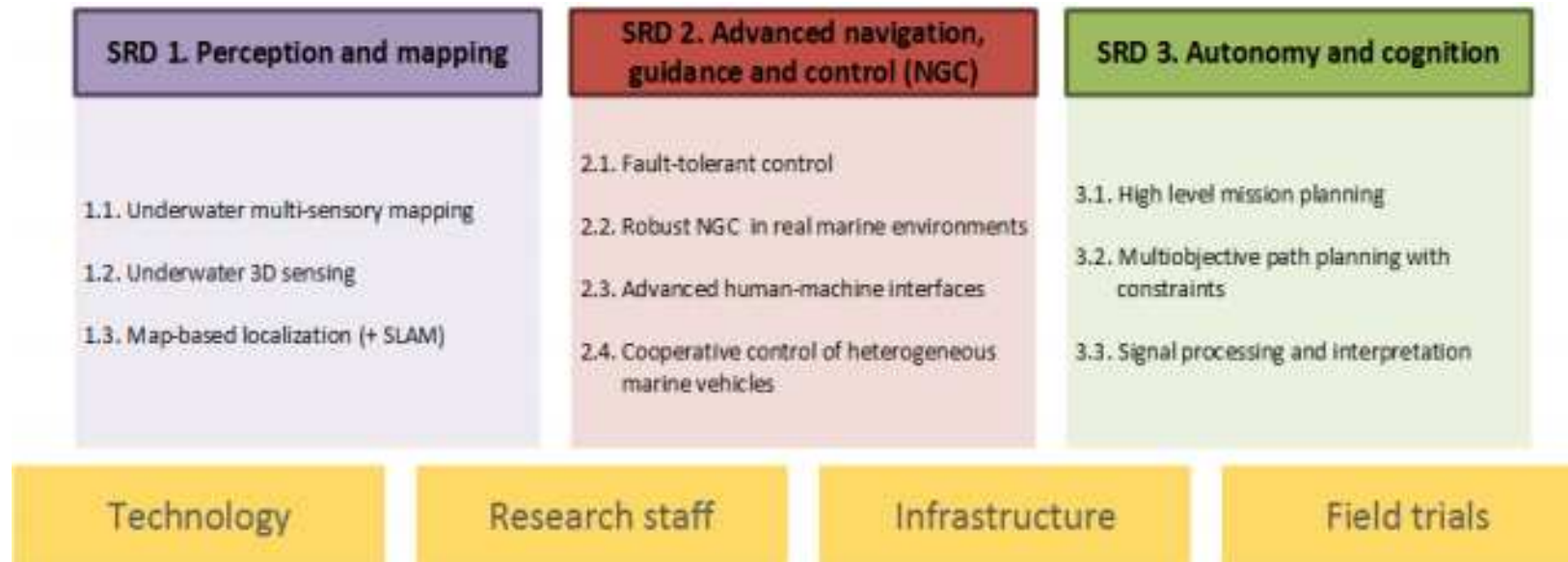
EXCELLABUST

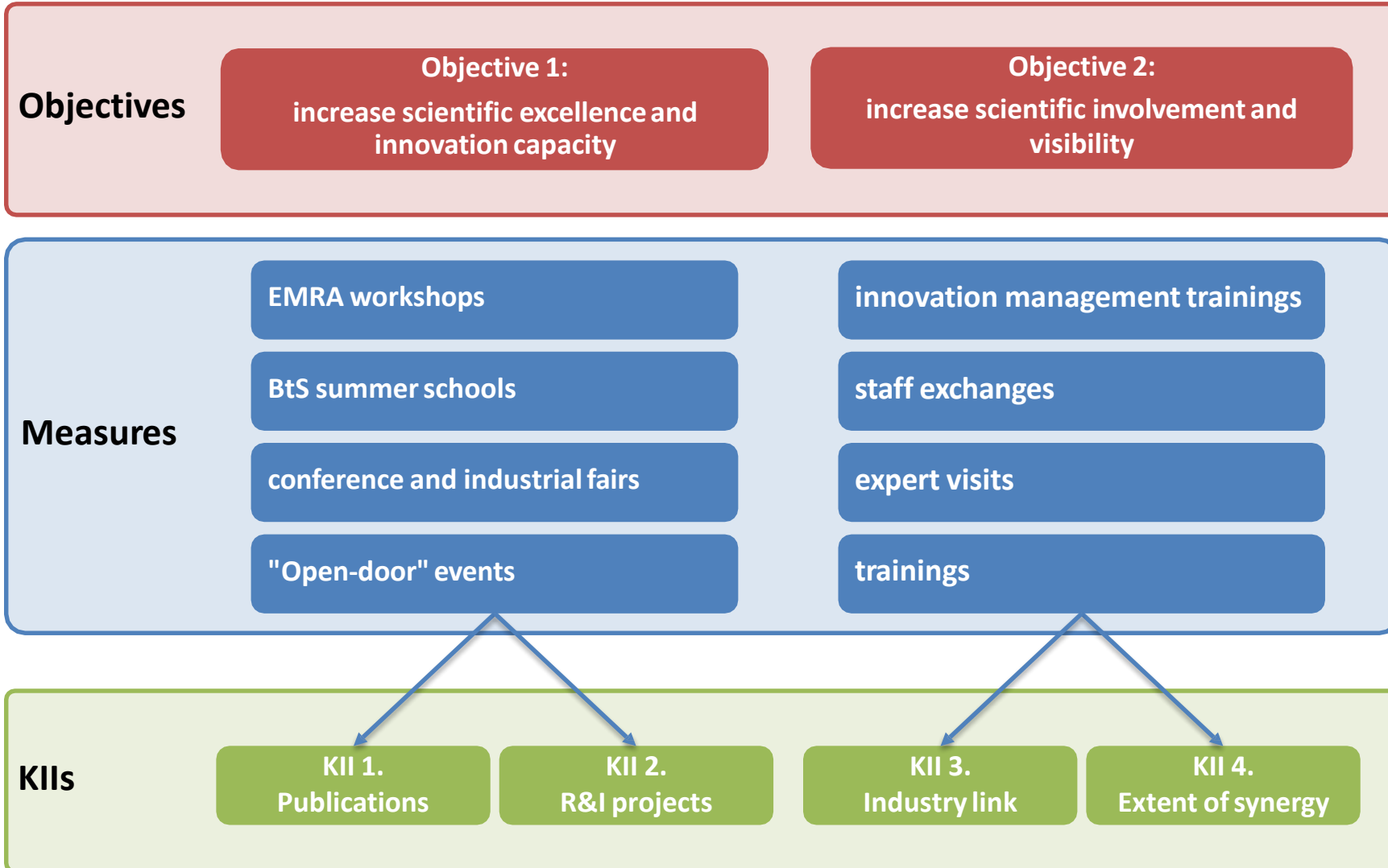
Budget

N.	Proposer name	Country	Total Cost	%	Grant Requested	%
1	SVEUCILISTE U ZAGREBU FAKULTET ELEKTROTEHNIKE I RACUNARSTVA	HR	381,225	37.58%	381,225	37.58%
2	CONSIGLIO NAZIONALE DELLE RICERCHE	IT	201,056	19.82%	201,056	19.82%
3	UNIVERSITAT DE GIRONA	ES	203,927	20.10%	203,927	20.10%
4	UNIVERSITY OF LIMERICK	IE	228,342	22.51%	228,342	22.51%
	Total:		1,014,550		1,014,550	

Project goals and objectives

- The **main goal** of EXCELLABUST project
 - address networking gaps and deficiencies between UNIZG-FER and internationally leading counterparts at EU level, by significantly strengthening **marine robotics research** within LABUST
- Aligned with **Robotics 2020 Multi- Annual Roadmap (MAR)**





EXCELLABUST

in first months

OBJECTIVES

OBJECTIVE 1

increase scientific excellence
and innovation capacity

OBJECTIVE 2

increase scientific
involvement and visibility

MEASURES

5 STAFF
EXCHANGES

69 EXPERT VISIT
INVITED TALKS

13 EXPERT VISIT
TUTORIALS

4 ON-SITE
TRAINING

45 INNOVATION
MANAGEMENT
TRAININGS

3 EMRA
WORKSHOP

45 CONFERENCES
AND
INDUSTRIAL
EVENTS

20 OPEN-DOOR
EVENTS

3 BTS SUMMER
SCHOOL

IMPACT

KEY IMPACT INDICATORS

KII 1. PUBLICATIONS



9 journal publications with IF
(15 in total)



14 conference publications
(51 in total)



70% increase in citations

KII 2. R&I PROJECTS



43 submitted proposals
(36 international and 7 national)



success rate **43%**
(16 granted projects)

KII 3. INNOVATION AND CONNECTION WITH INDUSTRY



2 startup company



7 collaboration agreements with businesses



46% joint publications

KII 4. EXTENT OF SYNERGY



2 innovative products



7 joint events organized



5 collaboration agreements with research institutions



This project has received funding from the European Union's Horizon 2020 research



Universitat de Girona
Institut de Recerca en Visió
per Computador i Robòtica





INFRA LAPOST

Istraživačka infrastruktura Laboratorija za podvodne sustave i tehnologije (INFRA-LAPOST)

Naziv korisnika sredstava: Fakultet elektrotehnike i računarstva, Sveučilište u Zagrebu

Lokacija sjedišta korisnika: Grad Zagreb

Prioritetna os: Jačanje gospodarstva primjenom istraživanja i inovacija

Vrsta natječajnog postupka: Ograničeni (privremeni)

Fond: Europski fond za regionalni razvoj (ERDF)

Operativni program: Operativni program Konkuretnost i kohezija

Razdoblje provedbe projekta: 01. listopada 2018. – 30. rujna 2020. godine

Ukupna vrijednost projekta (HRK): 1.500.000,00 kn

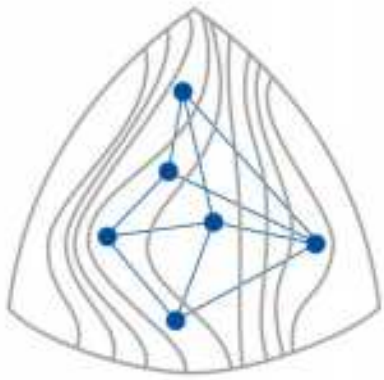
Ukupni iznos EU sufinanciranja (HRK): 1.500.000,00 kn



Evropska unija
Projekt je sufinancirala Europska unija
iz Europskog fonda za regionalni razvoj
Zagreb, 1. listopada 2018. g.







UWIN~LABUST
ERA CHAIR IN INTERNET OF UNDERWATER THINGS AT LABUST

UWIN-LABUST

ERA Chair in Internet of Underwater Things at LABUST

Funding scheme: HE – ERA Chair

Total budget: 2,5 mil EUR

Start date: 01/01/2023; Duration: 60 months



1. **The ERA Chair holder** will be Prof. Roei Diamant, an outstanding researcher and innovator in the Internet of Underwater Things research area, currently employed with the University of Haifa (Israel).
2. **The ERA Chair team** includes
 - a research team consisting of a **Group Leader, 2 postdocs** and **2 PhD students** with the objective to work towards achieving excellence in the Internet of Underwater Things research area, and one **Technology Transfer Officer** whose main objective is to ensure sustainability.



Right-to-react-pilot cover letter

	1. EXCELLENCE	2. IMPACT	3. IMPLEMENTATION	
Expert 1:	7 + 4 –	5 + 3 –	6 + 4 -	18 + (62%) 11 -
Expert 2:	13 + 4 – (2 minor shortcomings, 2 shortcomings)	14 + 4 – (3 minor shortcomings, 1 shortcoming)	12 + 1 – (minor shortcoming)	39 + (81,25%) 9 – (6 minor, 3 short)
Expert 3:	7 + 2 – (2 shortcoming)	7 + 2 – (2 shortcomings)	12 + 2 – (1 minor shortcoming)	26 + (81,25%) 6 – (1 minor, 4 short)
	27 + (73%) 10 – (2 minor, 4 short)	26 + (74,3) 9 – (3 minor, 3 short)	30 + (81%) 7 – (2 minor)	

Proposal Evaluation Form



EUROPEAN COMMISSION

Horizon Europe Framework Programme (HORIZON)

Evaluation Summary Report - Coordination and support actions

Call: HORIZON-WIDERA-2022-TALENTS-01
Type of action: HORIZON-CSA
Proposal number: 101086340
Proposal acronym: UWIN-LABUST
Duration (months): 60
Proposal title: ERA Chair in Internet of Underwater Things at LABUST
Activity: ENV + MED + ENG + MAT/SOC

N.	Proposer name	Country	Total Cost	%	Grant Requested	%
1	SVEUCILISTE U ZAGREBU FAKULTET ELEKTROTEHNIKE I RACUNARSTVA	HR	2,399,225	96.00%	2,399,225	96.00%
2	UNIVERSITY OF HAIFA	IL	100,075	4.00%	100,075	4.00%
	Total:		2,499,300		2,499,300	

Abstract:

UWIN-LABUST project aims to create conditions and opportunities at the University of Zagreb Faculty of Electrical and Engineering and Computing (UNIZG-FER) in Croatia for high quality researchers and research managers to move and engage to achieve excellence in a sustainable manner within the area of Internet of Underwater Things (IoUT), at the Laboratory for Underwater Systems and Technologies (LABUST).

The objectives of the UWIN-LABUST project are: 1) to recruit Prof. Roee Diamant from University of Haifa as ERA Chair holder who will establish his own team consisting of 3 post-docs, a technology transfer officer, and a group leader; 2) to achieve excellence in the research area of IoUT (a network of smart interconnected underwater objects) with particular focus on 3 strategic research domains: a) underwater sensor communications, b) underwater acoustic signal processing, and c) underwater collaborative autonomy; 3) to ensure sustainability of the achieved excellence; and 4) to increase UWIN-LABUST group scientific involvement and visibility.

These objectives will be reached through a set of strategic measures: expert visits and outgoing study visits for providing knowledge transfer; research & innovation management trainings and establishment of Technology Transfer Office for transferring results from academia to industry; new MSc and PhD courses to ensure knowledge transfer to new generations; organization of workshops, summer schools and conferences for strengthening links to industry, end-users, and the scientific community.

Ministry of Science and Education of Croatia has provided a letter of commitment guaranteeing additional financial support for equipment and infrastructure to UWIN-LABUST project from European Structural and Investment Funds. Dean of UNIZG-FER also committed to ensuring additional financial research support.

Evaluation Summary Report

Evaluation Result

Total score: 12.50 (Threshold: 10)



LABUST
LABORATORY FOR UNDERWATER
SYSTEMS AND TECHNOLOGIES

Hvala

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