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Project Full Title: Hospital Smart development based on AI





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#### **DELIVERABLE**

# D6.13 – Open Call 2 project and outcome evaluation report

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# **Executive Summary**

HosmartAI organised its Open Call 2 (OC2) to increase the outreach and adoption of the HosmartAI platform, by supporting the deployment of new pilots across the EU, within various types of healthcare entities.

For a two months period (September 15<sup>th</sup> - November 15<sup>th</sup> 2022 at 17:00 CET) the eligible applicants across the EU countries and the H2020 associated countries could apply to the Call <a href="https://www.f6s.com/hosmartai-open-call-2-for-pilots/about">https://www.f6s.com/hosmartai-open-call-2-for-pilots/about</a> as a small consortia of 2-3 partners built by technology developer (SME/Startup) and technology adopter (healthcare centre). The new pilots would enable the expansion of the HosmartAI offer, value proposition, technology capacity and the possibility of being adopted by a diversity of health care entities to overcome end-users needs and challenges.

To ensure a sound evaluation process, the project ran an Open Call 2 expressing an interest for external evaluators <a href="https://www.f6s.com/hosmartai-call-for-evaluators-2">https://www.f6s.com/hosmartai-call-for-evaluators-2</a>.

The evaluation process of the OC2 followed a 4-step structure: Step 1 - Eligibility check: first check on eligibility criteria defined for the call; Step 2 - Expert review: evaluation by external reviewers; Step 3 - Online interviews: for shortlisted applicants; Step 4 - Call results: publication of the admission/rejection resolution.

The OC2' resolutions brought the following results: (i) **OC2 for applicants**: 86 started applications > **48 finalised** > **41 eligible** > **8 shortlisted** > **4 selected**, (ii) **OC2 for evaluators**: 44 started applications > **39 finalised** > **16 selected** > **12 contracted** > 4 reserved.

Both open calls were promoted by the F6S Open Dissemination Manager who performed an engagement strategy utilizing online communications, communication KIT, and participation in the relevant events.

As a result of the evaluation processes 4 projects with the highest scores were selected:

- <u>Heart b Alt</u> Remote and unobstructed assessment of vital signs for arrhythmia screening with edge computing
- SICS Smart Intraoperative Clinical Surveillance
- <u>SoftLungX</u> Software for Diagnosis of Lung Diseases from Chest X-ray Images
- VoiceAl Prediction of Major Depressive Disorder using Vocal Biomarkers.

This deliverable reports on the 2<sup>nd</sup> Open Call EXPERIMENT – Call for Pilots, describing the evaluation processes and the monitoring activities as the follow up to the OC2 resolution. The outcome of the activities led to the selection of the winning teams to perform a 12-month EXPERIMENT programme divided into 3 phases: (1) Design, (2) Develop, Deploy Operate, (3) Assess.

The follow-up concentrates on monitoring and mentoring activities of the funded projects in support of an individual HosmartAI mentor assigned to each third party.



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# Definitions, Acronyms and Abbreviations

Acronym/ Abbreviation	Title
Al	Artificial Intelligence
Dm.n	Deliverable m.n
DoA	Description of the Action
FSTP	Funding for the Third Parties
KPI	Key Performance Indicator
M	Month
MS	Member State
KPI	Key Performance Indicator
OC	Open Call
ОСТ	The Overseas Countries and Territories
PU	Public
SME	Small and Medium Enterprises
WP	Work Package



# 1 Introduction

# 1.1 Project Information



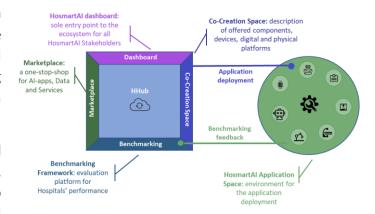
The HosmartAI vision is a strong, efficient, sustainable and resilient European **Healthcare system** benefiting from the capacities to generate impact of the technology European Stakeholders (SMEs, Research centres, Digital Hubs and Universities).



The HosmartAI mission is to guarantee the **integration** of Digital and Robot technologies in new Healthcare environments and the possibility to analyse their benefits by providing an **environment** where digital health care tool providers will be able to design and develop AI solutions as well as a space for the instantiation and deployment of AI solutions.

HosmartAI will create a common open Integration **Platform** with the necessary tools to facilitate and measure the benefits of integrating digital technologies (robotics and AI) in the healthcare system.

A central **hub** will offer multifaceted lasting functionalities (Marketplace, Co-creation space, Benchmarking) to healthcare stakeholders, combined

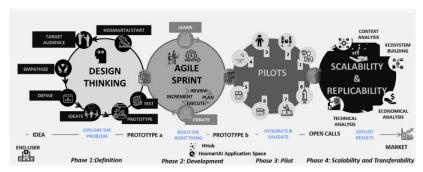


with a collection of methods, tools and solutions to integrate and deploy AI-enabled solutions. The **Benchmarking** tool will promote the adoption in new settings, while enabling a meeting place for technology providers and end-users.

**Eight Large-Scale Pilots** will implement and evaluate improvements in medical diagnosis, surgical interventions, prevention and treatment of diseases, and support for rehabilitation and long-term care in several Hospital and care settings. The project will target different **medical** aspects or manifestations such as Cancer (Pilot #1, #2 and #8); Gastrointestinal (GI) disorders (Pilot #1); Cardiovascular diseases (Pilot #1, #4, #5 and #7); Thoracic Disorders (Pilot #5); Neurological diseases (Pilot #3); Elderly Care and Neuropsychological Rehabilitation (Pilot #6); Fetal Growth Restriction (FGR) and Prematurity (Pilot #1).



To ensure a user-centred approach, harmonization in the process (e.g. regarding ethical aspects, standardization, and robustness both from a technical and social and healthcare perspective), the



**living lab** methodology will be employed. HosmartAI will identify the appropriate instruments (**KPI**) that measure efficiency without undermining access or quality of care. Liaison and cooperation activities with relevant stakeholders and **open calls** will enable ecosystem building and industrial clustering.

HosmartAI brings together a **consortium** of leading organizations (3 large enterprises, 8 SMEs, 5 hospitals, 4 universities, 2 research centres and 2 associations – see Table 1) along with several more committed organizations (Letters of Support provided).

Table 1: The HosmartAI consortium.

Number <sup>1</sup>	Name	Short name
1 (CO)	NETCOMPANY - INTRASOFT SA <sup>2</sup>	INTRA
1.1 (TP)	NETCOMPANY - INTRASOFT SA	INTRA-LU
2	PHILIPS MEDICAL SYSTEMS NEDERLAND BV	PHILIPS
3	VIMAR SPA	VIMAR
4	GREEN COMMUNICATIONS SAS	GC
5	TELEMATIC MEDICAL APPLICATIONS EMPORIA KAI ANAPTIXI PROIONTON TILIATRIKIS MONOPROSOPIKI ETAIRIA PERIORISMENIS EYTHINIS	TMA
6	ECLEXYS SAGL	EXYS
7	F6S NETWORK IRELAND LIMITED	F6S
7.1 (TP)	F6S NETWORK LIMITED	F6S-UK
8	PHARMECONS EASY ACCESS LTD	PhE
9	SMARTSOL SIA <sup>3</sup>	TGLV
10	NINETY ONE GMBH	91
11	EIT HEALTH GERMANY GMBH	EIT
12	UNIVERZITETNI KLINICNI CENTER MARIBOR	UKCM
13	SAN CAMILLO IRCCS SRL	IRCCS
14	SERVICIO MADRILENO DE SALUD	SERMAS
14.1 (TP)	FUNDACION PARA LA INVESTIGACION BIOMEDICA DEL HOSPITAL UNIVERSITARIO LA PAZ	FIBHULP
15	CENTRE HOSPITALIER UNIVERSITAIRE DE LIEGE	CHUL
16	PANEPISTIMIAKO GENIKO NOSOKOMEIO THESSALONIKIS AXEPA	AHEPA

<sup>&</sup>lt;sup>1</sup> CO: Coordinator. TP: linked third party.

Dissemination level: PU -Public

<sup>&</sup>lt;sup>2</sup> Name changed in 2022 (both for INTRA and INTRA-LU).

<sup>&</sup>lt;sup>3</sup> Name changed in 2021.



Number <sup>1</sup>	Name	Short name
17	VRIJE UNIVERSITEIT BRUSSEL	VUB
18	ARISTOTELIO PANEPISTIMIO THESSALONIKIS	AUTH
19	EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH	ETHZ
20	UNIVERZA V MARIBORU	UM
21	INSTITUTO TECNOLÓGICO DE CASTILLA Y LEON	ITCL
22	FUNDACION INTRAS	INTRAS
23	ASSOCIATION EUROPEAN FEDERATION FORMEDICAL INFORMATICS	EFMI
24	FEDERATION EUROPEENNE DES HOPITAUX ET DES SOINS DE SANTE	HOPE

#### 1.2 Document Scope

The efforts described in this document are directly linked to the execution of WP6 - Task 6.6 (*Open Call Planning and Management*), as described in the DoA. This deliverable reports on the evaluation process of the OC2 describing each evaluation phase leading to the selection of four beneficiaries awarded with the available FSTP equivalent to a total of €580.000 during the programme. In the final phase, following the official amendment with the European Commission, additional €20.000 funding was dedicated to the third parties. Moreover, it presents the statistics of the OC2s data and provides a description of the monitoring activities as a follow-up process.

#### 1.3 Document Structure

This document is comprised of the following chapters:

**Chapter 1** presents an introduction to the project and the document.

**Chapter 2** reports on the evaluation of the Open Call 2 – EXPERIMENT Call for Pilots.

Chapter 3 describes dissemination activities.

**Chapter 4** reports on the monitoring, mentoring and relieving activities of the OC2 selected projects.

Chapter 5 provides conclusions from both Open Call.

**Appendices A and B** provide templates referenced in the document.



# 2 Open Call 2 Evaluation

# 2.1 Open Call 2 – EXPERIMENT Call for Pilots

The HosmartAI Open Call 2 (OC2) aimed to increase the outreach and adoption of the HosmartAI platform, by supporting the deployment of new pilots across the European Union (EU), within various types of healthcare entities. Through OC2 — EXPERIMENT, HosmartAI was calling for pilots made of small consortia of 2–3 partners representing:

- At least one technology provider/integrator: Al and robotics start-ups/SMEs (innovators)
- And technology adopters: healthcare facilities (end users)
- Optionally applicants could engage research centre/academia, and/or another SME/start-up taking a role as a competence centre, collaborating in strategically important area(s), between the innovation and healthcare industry.

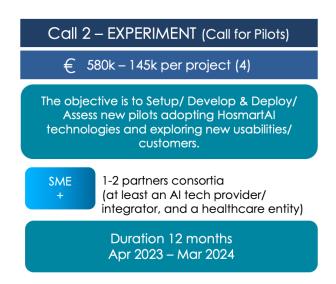


Figure 1: HosmartAI Open Call 2 design.

HosmartAI was calling for applications to AI/Robotics pilot for smart healthcare centre covering but not limited to the following technologies:

- AI: exploitable AI, Deep learning, Reinforcement learning, Convolutional Neural Networks, Clustering, Natural Language Processing
- Robotics: Conversational robots, Robotic and Sensor-based devices, Remote surgical navigation systems

The applicants in their proposals had to assure the minimum of the required KPIs for each pilot: 50 patients and 12/13 healthcare professionals. Detailed specifications of all the requirements and benefits for the selected beneficiaries were provided in the <u>Guidelines for Applicants</u>.





Figure 2: HosmartAI Open Call 2 - offer for Beneficiaries.

The outcome of the OC2 was an enrolment in the 12-month EXPERIMENT Programme built upon three Phases: Design (Phase #1), Development, Deployment, Operation (Phase #2), and Assessment (Phase #3). The maximum available funding per selected project was €145 000.



Figure 3: HosmartAI Open Call 2 Programme and payment structure.

Details regarding the OC2 characteristics and requirements were reported in deliverable D6.11 Open Call 2 handbook and proposal evaluation report.

# 2.2 Evaluation processes

The evaluation process for the Open Call 2 – EXPERIMENT Call for Pilot followed a **4-step structure**, as can be seen below:











- **Step 1**: identifying eligible applications through screening the criteria defined for the call.
- **Step 2**: remote evaluation by two external experts per application by following a provided template and a set of concrete scores per criterion, indicated in the Guidelines for Applicants:

#### ■ Excellence & innovation:

- Appropriateness of the pilot project scope and alignment with HosmartAI objectives.
- Level of innovation and technological and healthcare challenges addressed.
- Level of integration with HosmartAI technologies to test.
- Feasibility of the proposed pilot and technological contribution.
- Quality, credibility, and clarity of pilot project description.
- Minimum TRL 4.

#### ☐ Impact & exploitation:

- Overall impact of the proposed pilot if successful.
- Healthcare industrial relevance of the proposed pilot if successful.
- Level of engagement with the healthcare unit experts and patients involved.
- Gender and sex equality impact addressed.
- Quality of the exploitation plans and market potential.
- Effectiveness of the proposed measures to exploit and disseminate the pilot results.
- Potential of the outcomes to be adopted/used by healthcare entities into regular practices.
- Product concept, market and competition.

#### ■ Consortium:

- Quality of the consortium.
- Clarity of each partner role.
- Technical capacity and excellence of the technology provider capability to achieve the deployment of minimum TRL 6.
- Quality of the individual participants

#### □ Project planning and value for money:

- Quality, effectiveness and clarity of project activities, structure, and timing.
- Appropriateness of deliverables, KPIs and means of verification.
- Allocation of appropriate resources to the proposed pilot.
- Justification of the proposed resources.
- Explanation of how the project will have access to third party components if needed.
- **Step 3**: shortlisting the top projects and inviting them to an interview phase.
- **Step 4**: resolution of the call and contracting.



#### 2.2.1 Eligibility check

As described in the DoA, the eligibility check was applied to discard

- ☐ Type of main applicant: technology developer SME/Start-up
- ☐ Obligatory 2<sup>nd</sup> applicant: technology adopter Healthcare facility
- ☐ Geographical coverage legally established in the European Union (EU) countries, the Overseas Countries and Territories (OCT) linked to the Member States (MS), and/or H2020 associated countries (those which signed an agreement with the Union as identified in Article 7 of the Horizon 2020 Regulation).
- No conflict of interest
- □ Online submission form adequately completed and submitted on the F6S platform.

ELIGIBILITY CHECK First check on
eligibility criteria
EXPERT REVIEW
ONLINE INTERVIEWS
ONLINE INTERVIEWS

Application ID	Eligibility	Submitted Proposal (Max file size 30MB)	Partner #1: Country	Partner #2: Country	Partner #3: Country
1929290	Eligible - E	https://www.f6s.com/account	Hungary	Hungary	N/A
1932990	Eligible - E	https://www.f6s.com/account	Netherlands	Netherlands	N/A
1933461	Eligible - E	https://www.f6s.com/account	Cyprus	Cyprus	Spain
1934825	Eligible - E	https://www.f6s.com/account	Italy	Portugal	Portugal
	_	https://www.f6s.com/account		Spain	France
	_	https://www.f6s.com/account		SPAIN	N/A
	_	https://www.f6s.com/account		Italy	N/A
		https://www.f6s.com/account		Spain	N/A
		https://www.f6s.com/account		Spain	N/A
		https://www.f6s.com/account		Italy	n/a
	_	https://www.f6s.com/account		Germany	N/A
1949572	Eligible - E	https://www.f6s.com/account	Italy	Italy	Italy
	_	https://www.f6s.com/account		Spain	Spain
	_	https://www.f6s.com/account		Spain	Spain
	-	https://www.f6s.com/account	· · ·	Hungary	Hungary
1949797	Eligible - E	https://www.f6s.com/account	Slovenija	Slovenia	N/A
1949812	Eligible - E	https://www.f6s.com/account	Romania	Romania	N/A
		https://www.f6s.com/account		Italy	N/A
1950030	Eligible - E	https://www.f6s.com/account	Romania	Romania	Romania
1950383	Eligible - E	https://www.f6s.com/account	Lithuania	Lithuania	N/A
1950390	Eligible - E	https://www.f6s.com/account	Spain	Spain	N/A
1950392	Eligible - E	https://www.f6s.com/account	Deutschland	Germany	Germany
1950401	Eligible - E	https://www.f6s.com/account	Spain	Spain	Spain
1950403	Eligible - E	https://www.f6s.com/account	Finland	Spain	Finland
1950407	Eligible - E	https://www.f6s.com/account	Spain	Spain	N/A
1950408	Eligible - E	https://www.f6s.com/account	Greece	Greece	Greece
1950433	Eligible - E	https://www.f6s.com/account	Spain	Spain	
1950439	Eligible - E	https://www.f6s.com/account	Türkiye	Türkiye	No partner
1950461	Eligible - E	https://www.f6s.com/account	Serbia	Serbia	Serbia
1950469	Eligible - E	https://www.f6s.com/account	Spain	Spain	Spain
1950502	Eligible - E	https://www.f6s.com/account	FRANCE	FRANCE	France
		https://www.f6s.com/account		Netherlands	-
		https://www.f6s.com/account		Portugal	Portugal
		https://www.f6s.com/account		Serbia	N/A
	_	https://www.f6s.com/account		Italy	Na
	_	https://www.f6s.com/account		Romania	N/A
1950644	Eligible - E	https://www.f6s.com/account	SPAIN	SPAIN	not applicable
		https://www.f6s.com/account		Ireland	Ireland
		https://www.f6s.com/account		Serbia	Serbia
	_	https://www.f6s.com/account	•	Spain	Spain
		https://www.f6s.com/account		Denmark	N/A
1929672	Failure to s	https://www.f6s.com/account	Portugal	Portugal	Portugal
1934458	Failure to s	https://www.f6s.com/account	United Kingdom	United Kingdom	NA
1943452	Failure to s	https://www.f6s.com/account	Finland	Finland	Finland
1945374	Budget exc	https://www.f6s.com/account	Turkiye	Turkey	Turkey
1948096	Budget exc	https://www.f6s.com/account	Germany	Turkey	Turkey
		1	et 11		
1949210	Failure to s	https://www.f6s.com/account	Slovakia	Turkey	N/A

Figure 4: HosmartAI OC2 - Eligibility check.



After completing the **eligibility check,** eight applications changed their status to ineligible due to:

- Failure to submit all the required documents.
- Exceeding the maximum budget request.
- Lack of the mandatory 2<sup>nd</sup> partner in the consortium.

#### 2.2.2 External evaluation

#### 2.2.2.1 Open Call to express an interest for external evaluators

To perform a transparent evaluation process with independent evaluators, an Open Call for interested parties was launched on the F6S platform: <a href="https://www.f6s.com/hosmartai-call-for-evaluators-2">https://www.f6s.com/hosmartai-call-for-evaluators-2</a>



The requirements for the evaluators were as follows:

- ☐ 10 years of AI industrial experience
- ☐ Represent the technology adopter perspective
- ☐ Experts that have already evaluated proposals for the EC (not limited to, but desired)
- ☐ Business experience (not limited to, but desired)

ONLINE INTERVIEWS
11/4
CALL RESULTS

The selected evaluators were asked to review the proposals based on the evaluation criteria listed in the Guidelines for Applicants, mainly referring to:

- ☐ The technology quality
- ☐ The feasibility of the proposed project
- ☐ The expected impact on the project
- ☐ The clarity of the work plan

#### 2.2.2.2 Selected evaluators

The OC for external evaluators attracted 44 started applications among which 39 were finalised. The applicants represented 20 countries. Concerning gender equality, 67% were male applicants, 33% female. The geographical coverage of the applicants is shown in the following graph:

Dissemination level: PU -Public



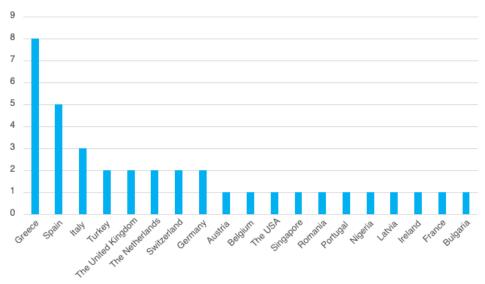


Figure 5: Open Call for interest expression for external evaluators - number of applications per country.

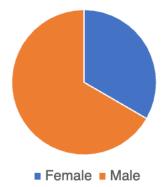


Figure 6: Call for external evaluators - number of applications per sex (67% Male vs 33% Female).

In the first phase the eligible applicants were scored directly in the F6S platform by the two HosmartAI experts using the following criteria:

- ☐ Al industrial experience (ideally 10+ years)
- ☐ Technology adopter perspective
- ☐ Experience in the EU proposals evaluation

The applications were assessed by two internal evaluators (evaluator 1 and evaluator 2) who scored the above-mentioned criteria on a scale from 1-5 (the lowest – the highest). In the final stage, the internal HosmartAI evaluators assessing the external evaluators' applications achieved a consensus selecting 16 evaluators, among them 12 accepted, 10 signed the contract, and 4 remains on the reserve list.



Application ID	Final Score	EVALUATOR 1	10 years of Al industrial experience	Technology adopter perspective	Business experience	EVALUTOR 2	10 years of Al industrial experience	Technology adopter perspective	Business experience
1942984	4.50	4.67	5	5	4	4.33	4	4	5
1937898	4.50	3.17	5	4	2	3.50	34	4	3
1942154	4.50	2.83	5	4	3	1.50	1	1	2
1937651	4.17	4.67		5	5	3.67	4		3
1937418	4.17	4.33	5	5	3	4.00	4	4	
1938011	4.17	4.00	5		3	4.33	4	5	4
1938906	4.00	4.00	5		3	4.00	4		
1938134	4.00	3.67	3			4.33	4	5	
1937077	4.00	4.33		5		3.67	4	3	4
1937618	4.00	4.00	3		5	4.00	4	4	
1937074	4.00	4.00	4			4.00	4		
1940998	4.00	3.17	5	3	3	3.50	34	4	3
1937657	3.83	4.00				3.67	3	4	
1941232	3.83	3.67	3	3		4.00	4	4	
1937407	3.83	4.00				3.67	3	4	
1937249	3.50	3.33				3.67			3
1937648	3.50	3.83	3			3.50		3	4
1943738	3.50	3.83	3		3	4.50	23	4	5
1937592	3.42	3.33			4	3.50	43	3	4
1942031	3.33	3.33	3		3	3.33	3	3	4
1943317	3.17	3.33				3.00	3	2	
1937228	3.17	3.33	3		3	3.00	3	3	3
1937428	3.00	3.00	2		3	3.00	3	3	3
1937291	3.00	3.00	1		4	3.00	3	3	3
1937899	3.00	3.00	3	3	3	3.00	3	3	3
1941069	3.00	3.50	3	3	4	3.50	- 4	3	4
1937869	3.00	3.83		4	5	2.50	3	2	3
1939116	3.00	3.50	2	4	4	2.50	2	2	3
1941370	3.00	2.50	3	3	3	1.50	2	1	2
1943167	2.83	3.00	3	3	3	2.67	3	3	2
1942683	2.83	3.00	3	3	3	2.67	3	3	2
1929863	2.67	2.67		3	3	2.67	3	3	
1941375	2.50	2.67		3		2.33	3	2	2
1938445	2.50	3.67	1	4		3.00	3	23	3
1937222	2.33	3.00		3	4	1.67	1	2	2
1937695	2.33	2.67		2	5	2.00	3	1	2
1938056	2.00	2.83		3	4	1.50	3	1	
1942849	2.00	2.67		3	3	2.00	2	2	2
1940154	1.50	1.67	1	2	2	1.00	1	1	1 1

Figure 7: Evaluation of the external evaluators.

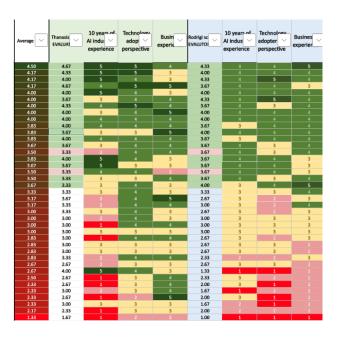


Figure 8: Evaluation of the external evaluators - consensus & selection.

#### 2.2.2.3 Remote evaluation

The external evaluators were invited to a webinar for evaluators run on 13 December 2022. They were instructed on the process covering: (1) OC2 context, (2) Evaluation materials, procedures, timeline, (3) F6S platform navigation, (4) Q&A.



The selected evaluators were assigned to review proposals within their areas of expertise. Each application was assessed by two external evaluators.

To ensure compliance with H2020 standards regarding evaluation, conflict of interest and confidentiality, each external evaluator certified:

- 1. that they will perform a confidential, fair and equitable evaluation;
- 2. confidentiality and absence of conflict of interest (disqualifying or potential);
- 3. that they will not discuss the proposals with others during the process;
- 4. that they will not get in contact with applicants under any circumstances;
- 5. compliance with EC rules.

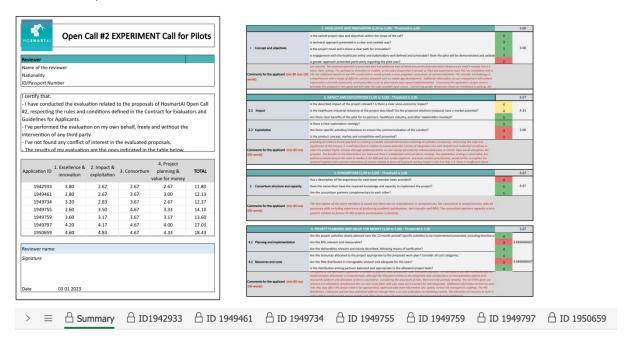


Figure 9: OC2 external evaluation report example.

In total, 82 evaluations were performed. The remote evaluation followed a series of consensus meetings leading to shortlisting 8 applicants with the highest scores between 19.14 – 17.05 points (maximum 20) obtained on a scale:

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

Dissemination level: PU -Public



## The evaluation threshold for this shortlisting was set at a score of **15 points**.

HosmartAl O	Excellence & innovation (1)	Excellence & innovation (2)	% difference	impact & exploitation (1)	Impact & exploitation (2)	% difference	Consertium (1)	Consortium (2)	% difference	Project planning & value for money (1)	Project planning & value for money (2)	% difference	Final score	Evaluator Evaluator 1 2
1950407	5.00	4.60	-9%	5.00	4.33	-15%	5.00	5.00	0%	4.67	4.67	0%	19 14	1937648 1940998
1950552	4.50	4.80	-9%	4.50	5.00	10%	4.50	5.00	10%	4.50	4.50	0%		1937651 1943738
1950659	4.80	4.60	-4%	4.50	4.83	7%	4.33	4.67	7%	4.67	4.33	-8%		1937074 1942984
1950550	4.50	4.80	6%	4.20	4.67	10%	4.50	5.00	10%	4.00	4.67	14%		1937651 1943738
1950553	4.60	4.00	-15%	4.67	4.00	-17%	4.67	4.00	-17%	4.83	4.33	-12%		1938134 1937077
1950390	4.20	5.00	16%	4.00	4.83	17%	3.67	4.00	8%	4.00	4.83	17%	17.27	1937651 1943738
1949131	4.20	4.00	-5%	4.33	3,67	-18%	5.00	4.33	-15%	4.67	4.00	-17%	17.10	1938134 1937077
1950635	4.00	4.50	11%	4.00	4.00	0%	4.50	4.00	-13%	4.50	4.60	2%	17.05	1937651 1943738
1950392	4.20	4.60	9%	4.00	4.17	4%	4.33	4.67	7%	4.00	4.00	0%	16.99	1937618 1937407
1950439	4.00	4.60	13%	3.67	3.50	-5%	4.33	5.00	13%	4.00	4.67	14%	16.89	1937618 1937407
1949797	4.40	4.20	-5%	3.67	4.17	12%	4.00	4.67	14%	4.17	4.00	-4%	16.64	1937074 1942984
1949812	4.60	4.00	-15%	4.50	4.17	-8%	4.00	4.67	14%	3.83	3.50	-9%	16.64	1938134 1937077
1950646	4.00	3.40	-18%	4.00	3.50	-14%	5.00	4.67	-7%	4.00	4.00	0%	16.29	1937618 1937407
1933461	3.80	3.80	0%	3.67	3.50	-5%	4.67	4.33	-8%	3.67	3,83	4%	15.64	1937648 1940998
1929290	3.60	3.80	5%	3.67	3.83	4%	4.00	3.67	-9%	4.00	3.83	-4%	15.20	1937418 1941069
1950408	3.60	4.00	10%	3.50	3.00	-17%	4.00	4.67	14%	4.00	3.50	-14%	15.14	1937618 1937407
1950648	3.80	4.00	5%	3.67	3.50	-5%	3.67	3.67	0%	4.17	3.67	-14%	15.08	1937618 1937407
1946346	3.60	4.00	10%	3.17	3.35	5%	4.00	4.00	0%	4.00	4.00	0%	15.06	1937418 1941069
1950502	3.20	3.80	16%	3.17	3.67	14%	4.67	4.33	-8%	3.83	3,33	-15%	15.00	1938134 1937077
1949881	3.60	3.20	-13%	3.50	3.00	-17%	4.00	4.00	0%	4.67	4.00	-17%	14.99	1938134 1937077
1934825	3.60	3.60	0%	3.50	3.33	-5%	4.00	4.00	0%	4.00	3.76	-6%	14.90	1937418 1941069
1948591	4.00	3.60	-11%	3.50	3,50	0%	4.00	3.67	-9%	4.00	3.50	-14%	14.89	1937418 1941069
1950644	3.40	4.00	15%	2.83	3.50	19%	4.67	4.00	-17%		3.83	13%	14.78	1937648 1940998
1950403	3.80	3.80	0%	3.00	2.67	-12%	4.00	4.00	0%	4.17	4.00	-4%	14.72	1937648 1940998
1950030	3.20	3.20	0%	3.67	3.17	-16%	4.00	4.33	8%	4.00	3.83	-4%	14.70	1938134 1937077
1932990	3.60	3.40	-6%	3.50	3.33	-5%	4.00	4.00	0%	3.83	3.67	-4%	14.67	1937418 1941069
1950461	3.40	4.20	19%	3.50	3,00	-17%	3.67	4.33	15%	3.33	3.50	5%	14.47	1937618 1937407
1948320	3.40	3.40	0%	3.50	3.00	-17%	4.00	3.76	-6%	4.00	3.76	-6%	14.41	1937418 1941069
1950469	3.00	3.40	12%	3.33	3.50	5%	4.00	4.30	7%	3.50	3,60	3%	14.32	1937651 1943738
1949755	2.80	2.60	-8%	3.00	3,5	14%	4.33	4.67	7%	3.83	3,33	-15%	14.03	1937074 1942984
1949572	3.80	3.40	-12%	3.00	3.17	5%	3.33	4.00	17%	3.67	3.50	-5%	13.94	1938134 1937077
1950572	3.00	3.50	14%	3.00	3,50	14%	3.67	4.00	8%	3.20	3.90	18%	13.89	1937651 1943738
1950401	3.20	3.20	0%	2.83	2.67	-6%	4.33	4.33	0%	3.67	3.50	-5%	13.87	1937648 1940998
1949759	3.20	3.60	11%	3.20	3.17	-1%	3.67	3.67	0%	3.67	3.17	-16%	13.68	1937074 1942984
1948013	3.40	3.40	0%	3.17	3.00	-6%	3.33	3.00	-11%	4.00	4.00	0%	13.65	1937418 1941069
1949461	3.00	2.80	-7%	2.67	2.67	0%	3.33	3.67	9%	3.50	3.00	-17%	12.32	1937074 1942984
1949734	2.80	3.20	13%	3.00	2.83	-6%	3.00	3.67	18%	3.17	2.76	-15%	12.22	1937074 1942984
1950433	3.20	3.80	16%	3,33	3.83	13%	2.33	2.67	13%	2.38	2.83	16%	12.19	1937648 1940998
1942933	3.60	3.80	5%	3.17	2.67	-19%	2.67	2.67	0%	3.00	2.67	-12%	12.13	1937074 1942984
1950383	3.00	2.60	-15%	2.83	2.67	-6%	3.33	3.00	-11%	2.83	2.67	-6%	11.47	1938134 1937077

Figure 10: OC2 external evaluation - consensus & shortlisting applicants.

Applicant ID	Keywords	PARTNER #1	PARTNER #2	PARTNER #3	Final score
1950407	diagnostic, treatment, rehabilitat	Spain	Spain		19.14
1950552	Disease screening / diagnostic	Portugal	Portugal	Portugal	18.65
1950659	Breast cancer screening	Spain	Spain	Spain	18.37
1950550	Surgery	Greece	Netherlands		18.17
1950553	Diagnostic	Serbia	Serbia		17.55
1950390	Diagnostic	Spain	Spain		17.27
1949131	Mental health, Diagnostic, Al	Georgia	Italy		17.10
1950635	Cancer treatment	Romania	Romania		17.05

Figure 11: OC2 shortlisted applications.



#### 2.2.3 Online interviews

As part of this second evaluation phase, a series of 8 brief online interviews (40 minutes) were conducted with each shortlisted team. The agenda is presented in Figure 12.

To effectively utilise the interview slot, each shortlisted team was asked to prepare a presentation covering: (1) the problem the pilot wants to address; (2) proposed team and solution; (3) innovation; (4) plan for each phase; (5) expected impact; (6) exploitation potential; (7) risks assessment; (8) a list of



deliverables, KPIs to measure the progress. Each slot included the Q&A session to verify any issues, as well as clarifying the interoperability feasibility with the HosmartAI technology.





Figure 12: OC2 interview phase – example of the SICS interview including agenda.

The interviews were attended by:

- The applicant's team
- Moderator Open Call Manager (F6S)
- HosmartAl internal expert of the platform and associated technologies
- HosmartAI Project Coordinator and/or Scientific Technical Manager

At the end of each interview, the moderator collected final remarks through two surveys: one for the external evaluators and one HosmartAI experts attending the interview.

The external evaluator survey covered:

- confirming if all the questions from the remote evaluation were clarified with the applicant
- providing the final score of the application by changing or confirming the scores according to the interview performance
- any final remarks to consider in the selection

The internal experts survey covered:

confirming the level of innovation presented by the shortlisted applicants



- feasibility to implement the project in the HosmartAI ecosystem interoperability with the HosmartAI platforms, technical and data requirements, if applicable
- readiness of the HosmartAI project to provide any required services for a successful implementation
- recognize any potential risk factors

The collected feedback served as a final pass or fail for the applicant's project and their technical solutions to be integrated in the HosmartAI ecosystem. After the assessment of the feedback one shortlisted application was withdrawn from the process due to discovering the conflict of interest and one was solution was not supported/compatible with the HosmartAI technology, hence raised too high risk of failure and was not considered for the selection. The reminding top four applications were selected and invited for the contracting phase.

#### 2.2.4 Call results

#### 2.2.4.1 Applications received

The article about statistical analysis of the OC2 results including comparison OC1 to published the project was on website: https://www.hosmartai.eu/hosmartai-open-calls-the-statistics-arehere/3797/



#### 2.2.4.2 Rejected applications

Candidates who did not meet the criteria (either for eligibility or funding) have received a rejection communication, which included an evaluation summary report (ESR) (Appendix A) detailing the reasons behind the rejection decision.



Dear Applicant,

We are contacting you with regards to your application to HosmartAI - Open Call #2 EXPERIMENT Call for **Pilot**. The results have been approved for publication.

Having evaluated your proposal, we regret to inform you that the score obtained in the expert assessment does not suffice for funding, given the budgetary resources available for the call. Please find attached the complete evaluation summary report (ESR), based on the comments and opinions of the external experts that have evaluated your proposal.

We want to thank you for your interest in the HosmartAI and your efforts in taking part in the Call.

Kind regards,

#### 2.2.4.3 Selected applications

The four selected applicants were contacted and invited to the contracting phase. Below there is a brief description of each of the projects, which is publicly available at https://www.hosmartai.eu/open-call-winners/.





Figure 13: OC2 winners - 9 Beneficiaries.

Table 2: OC2 selected pilot - Heart bAlt.

Project title	Remote and unobstructed assessment of vital signs for arrhythmia screening with edge computing		
Acronym	Heart bAlt		
SME	<u>Promptly</u>		
Country	Portugal		
Healthcare facility	Unidade Local de Saúde de Gaia e Espinho		
Country	Portugal		
Healthcare facility 2	Comprehensive Health Research Centre (CHRC)		
Country	Portugal		
Goal	Heart bAlt will develop and offer an Al service for personal data digestion based on heart rate patterns, detected and computed on the smartphone.		
Description	The Heart bAlt project will deliver an advanced digital solution to collect patient data (vital signs and others) in a remote, routinely, and unobstructed way. Such, powered by explainable Al and deep learning, will alleviate the burden of repetitive work on medical teams while democratizing the access to medical-grade technology, ultimately providing significant efficiency gains to health care services and patients.  Heart bAlt will target atrial fibrillation (AFib) and atrial flutter (AF) — heart rate arrythmias and common cardiovascular health problems affecting circa 3% of the general population. Importantly, AFib is associated with a five-fold increase in stroke risk. A proper identification of patients at risk, and subsequent guideline		



follow-up, can substantially reduce mortality and morbidity rates associated with cardiovascular diseases — a major global health problem. Nevertheless, wide screening of risk groups is currently limited by human resources and technical equipment availability.

Heart bAlt will curtail this by developing and offering an Al service for personal data digestion based on heart rate patterns, detected and computed at the smartphone. Promptly will integrate a key enabling technology (PPG) to monitor vital signs using a bring-your-own-device (BYOD) strategy and edge-computing, allowing every individual to fully access a clinically validated screening/diagnostic protocol. We will build on the current knowledge of logistic regressions and machine learning algorithms to develop models to personalize the prediction for/identify abnormal profiles of heart functioning. Furthermore, in combination with EHR data, it will allow issuing probability risks for AFib and AF, to be presented at a decision support system where it is possible to fine-tune alarms adequate interventions healthcare trigger by professionals. A full and wide implementation of this solution will unleash the screening of chronic diseases from the current logistic and cost restrictions towards a longterm democratized and effective medical solution.

Table 3: OC2 selected pilot – SICS.

Project title	Smart Intraoperative Clinical Surveillance
Acronym	SICS
SME	Aisthesis Medical
Country	Greece
Healthcare	<u>University Medical Center Groningen</u>
facility	
Country	The Netherlands
Goal	SICS Consortium develops an AI-powered clinical decision-support system that predicts intraoperative complications and supports anaesthesiologists making timely and accurate decisions during a surgical operation.
Description	We envision developing an intraoperative clinical decision-support system (CDSS) which integrates all available patient's health data and generates a real-time risk analysis including trajectory predictions of all relevant organ-functions for the treating physicians as easily readable feedback using AI models. Such a system would act as an early-warning and real-time decision-support tool, driven by the characteristics of the individual patient, therefore enhancing patient safety and treatment quality and outcome. We will combine the intraoperative data with the electronic health record (EHR) information of the individual patient to create a digital representation, or a digital twin. Based on this we will enhance our strategy towards a proactive personalised intraoperative medicine framework for patients' hemodynamic monitoring and therapy. In this way, the SICS proposal constructs a state-of-the-art clinical system that aggregates all the parameters towards a smart decision support, all with the aim to reduce complications and to improve short- and long-term outcome of our patients. A technology that is being utilised to further optimise this system with intervention recommendations and upcoming complication explanation, which in turn will, act as an augmented clinician who is subjected to lifelong education and training.



Table 4: OC2 selected pilot – SoftLungX.

Project title	Software for Diagnosis of Lung Diseases from Chest X-ray Images
Acronym	<u>SoftLungX</u>
SME	BioIRC
Country	Serbia
Healthcare	University Clinical Center Kragujevac
facility	
Country	Serbia
Goal	SoftLungX aims to develop deep learning model for classification of patients' radiological scans of lungs into multiple distinct respiratory diseases and risk classes based on the severity of the disease.
Description	Lung disease is one of the most common medical conditions in the world and it refers to several types of diseases or disorders that prevent the lungs from functioning properly. The main goal of the SoftLungX project is to create a ground-breaking, state-of-the-art software, completely adaptable to the possibilities of respiratory image-based disease recognition and risk level assessment. Bioengineering Research and Development Centre will be a technology provider to create a comprehensive deep learning model capable of recognizing and distinguishing between instances of COVID-19, emphysema, hernia, mass, pneumonia, pulmonary edema etc. using patients' radiological scans and then classify these patients into multiple distinct risk classes based on the severity of the disease. While a lot of work suggests that neural networks may be used for the detection of respiratory disease, there seems to be a lack of systems that are capable of distinguishing COVID-19 from other lung structure and appearance altering diseases, hence, this project will be based not only on the identification of patients with COVID-19, but also on these previously mentioned diseases and the assessment of their risk levels. The main challenge in the project comes from the sheer number of medical scans needed for every one of the aforementioned diseases that are required for the training of the deep learning model, and that all need to be labelled by their respective risk classes by a medical professional. This challenge is tackled by the use of data from public databases, combined with the new data that could be amassed in a timely manner for University Clinical Centre Kragujevac, which will also be the first technology adopter. Created system can be used in daily clinical practice, where it would assist pulmonologists and other medical experts in treatment of the patients suffering with respiratory illnesses.

Table 5: OC2 selected pilot – VoiceAI.

Project title	Prediction of Major Depressive Disorder using Vocal Biomarkers
Acronym	<u>VoiceAl</u>
SME	<u>Ensofy</u>
Country	Georgia
Healthcare facility	Medic4all Italia
Country	Italy



Goal

Improving mental health screening and management using Al-enabled vocal biomarkers technology

Description

Depression is a global public health burden that affects over 300 million people and costs global economy \$1 Trillion annually. Major Depressive Disorder (MDD) is characterized by persistent low mood, lack of energy, and suicidal thoughts, leading to worsening symptoms of comorbid medical issues. Mental health comorbidities are associated with excess treatment costs and lengthier hospitalizations. To address this issue national health organizations are recommending routine screening of depression in primary care. Unfortunately, the current screening tools, such as standardized questionnaires are severely limited — leading to very low screening rates, wasted caretaker time, and ultimately poor patient health outcomes.

VoiceAI solution, developed by Ensofy (Enso LLC), is a proprietary, state-of-art deep neural network AI system that assesses presence of depressive symptoms from a 30 seconds of human voice sample. VoiceAI aids primary care physicians and other caretakers screen mental health of their patients effectively. Planned VoiceAI pilot introduces Ensofy's proprietary solution into a well-established telehealth provider system — Medic4AII Italia. The pilot will support primary care physicians and other caretakers to effectively screen and manage their patients' mental health.

It is expected that VoiceAI will expand mental health screening and coverage and most importantly improve patients' health outcomes. The project will also improve primary care workflows — reducing caretaker workload. The pilot will run under the HosmartAI framework and will utilize number of services from HosmartAI.

Successful outcome of the pilot will validate vocal biomarkers as the optimal technology to screen depression and open new opportunities in remote patient monitoring, digital therapeutics, mental health triage, and population-screening. The proposed pilot contributes to building a more robust and efficient healthcare system that addresses the present challenges in behavioural and primary care and is directly in-line with HosmartAl's stated objectives.



# 3 Open Call 2 Dissemination

Open Call 2 promotion followed the strategy (*dissemination plan and monitoring tool*) introduced in D6.11. This chapter focuses on highlighting the key communication activities performed during the OC2 duration and after to disseminate the OC2 results including regular progress updates of the selected parties.

## 3.1 OC2 promotion

#### A series of efforts included:

- Email campaigns
- Social media campaigns
- Announcement in the <u>newsletter</u>
- Press release
- Leaflet
- Scouting through F6S
- Webinars ( 1 and 2)
- Events





Figure 14: OC2 leaflet.



Figure 15: OC2 two webinars.



#### 3.2 OC2 winners' dissemination of results

#### A series of efforts included:

- Press release
- Blog posts
- Videos promotion (<u>Heart bAlt, SICS</u>, <u>SoftLungX</u>, <u>VoiceAI</u>)
- Events participation
- Papers publication
- Social media posts



Figure 16: OC2 achievements dissemination - blog post of the selection and three reviews.



Figure 17: OC2 winners videos promotion - blog posts.



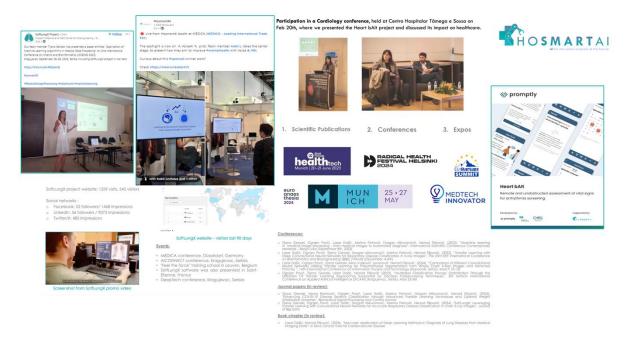


Figure 18: Dissemination activities performed by OC2 winners – examples.

#### 3.2.1 Communication kit

To support the dissemination activities carried out by all beneficiaries, a communication kit was developed and made available in the project repository comprised of:

- E-mail templates for different profiles (intermediaries, press contacts, potential applicants, and partner projects)
- Press release
- Social media visuals/posts content suggestions
- Leaflet



Figure 19: OC2 Communication KIT content.



# 4 Monitoring and mentoring – follow up

# 4.1 Support for the funded parties - activities

To ensure an adequate execution and integration of the funded pilots into the HosmartAI ecosystem, a list of concrete activities was planned in the OC2 Experiment programme. A list of executed activities

1. **Kick-off meeting**: it was held on March29<sup>th</sup> 2023 to mark the start of the OC2 pilots (Figure 20). The selected beneficiaries had a chance to meet the project partners and present their funded pilots. The open call management presented the programme of upcoming 12 months, elaborating on the monitoring and mentoring activities, including reviews and dissemination activities.



Figure 20: OC2 Kick off.

- 2. **Mentoring and regular online meetings**: A HosmartAl mentor (lead) was assigned to each OC2 winner. On average, monthly calls were performed between the team and the mentor focusing on:
  - assessing project progress, identify needs and suggesting solutions
  - guide the OC2 teams in the HosmartAI ecosystem
  - invite the teams to attend HosmartAI events or other relevant events
  - motivate them and track their deliverables.



- ensure that the resources provided by HosmartAI are effectively provided.
- 3. **Monthly meeting for mentors**: Online sessions with the participation of the OC Manager and all mentors to identify common challenges, outline improvement strategies, share experiences and good practices.

	PHASE 1 - DESIGN (April –	May 2023)	
	DESCRIPTION		
Projects kick-off	HosmartAI project presentation, OC2 projects pitches, OC.	29-Mar-23	Manager, OC Dissemination Manger, Consortium
#1 Monthly meeting for Mentors	Online meeting to collectively assess the monitoring activit	5-Apr-23	Mentors & OC Manager + OC Dissemination (optional)
#2 Monthly meeting for Mentors	Online meeting to collectively assess the monitoring activit	10-May-23	Memors & OC Manager + OC Dissemination
Deadline to submit deliverables	OC2 Beneficiaries submit deliverables - hard deadline	31-May-23	OC2 Beneficiaries, Mentors, OC Manager
Evaluation	Mentors & Reviewers have 1 week to evaluate the input an	6-Jun-23	Mentors, Reviewers
Remote review #1	The OC2 Beneficiaries will make a short presentation of the	6/13/2023 TBC	OC2 Beneficiaries, Mentors, Reviewers, OC Manager
Review reports	Mentors & Reviewers share their reports to approve or disa	15-Jun-23	Reviewers & Mentors
Resubmission	In case of disapproval, the Beneficiaries have 1 week to res	20-Jun-23	OC2 Beneficiaries
Request for payment	On acceptance of the deliverables, the OC2 Beneficiary wil	After approval	OC2 Beneficiaries, HosmartAI PC & PM
	PHASE 2 DEVELOP, DEPLOY, OPERATI	E (June – November 2023)	
ACTIVITY	DESCRIPTION	WHEN	WHO IS INVOLVED
#3 Monthly meeting for Mentors	Online meeting to collectively assess the monitoring activit	6-Jul-23	Mentors & OC Manager + OC Dissemination (optional)
#4 Monthly meeting for Mentors	Online meeting to collectively assess the monitoring activit	9-Aug-23	Mentors & OC Manager + OC Dissemination (optional)
#5 Monthly meeting for Mentors	Online meeting to collectively assess the monitoring activit	6-Sep-23	Mentors & OC Manager + OC Dissemination (optional)
#6 Monthly meeting for Mentors	Online meeting to collectively assess the monitoring activit	4-Oct-23	Mentors & OC Manager + OC Dissemination (optional)
#7 Monthly meeting for Mentors	Online meeting to collectively assess the monitoring activit	8-Nov-23	Mentors & OC Manager + OC Dissemination (optional)
Deadline to submit deliverables	OC2 Beneficiaries send deliverables to OC Manager. Ment	30-Nov-23	OC2 Beneficiaries, OC Manager
Evaluation	Mentors & Reviewers have 1 week to evaluate the input an	5-Dec-23	Mentors, Reviewers
Remote review #2	The OC2 beneficiaries will make a short presentation of the	12/6/2023 TBC	OC2 Beneficiaries, Mentors, Reviewers, OC Manager
Review report	Reviewers share their reports to approve or disapprove the	7-Dec-23	Mentors & Reviewers
Resubmission	In case of disapproval, the Beneficiaries have 1 week to res	14-Dec-23	OC2 Beneficiaries
Request for payment	On acceptance of the deliverables, the OC2 Beneficiary wil	After approval	OC2 Beneficiaries, HosmartAI PC & PM
	PHASE 3 (December 2023 - N	March 2024)	
ACTIVITY	DESCRIPTION	WHEN	WHO IS INVOLVED
#8 Monthly meeting for Mentors	Online meeting to collectively assess the monitoring activities	24-Jan-24	Mentors & OC Manager + OC Dissemination (optional)
#9 Monthly meeting for Mentors	Online meeting to collectively assess the monitoring activities	21-Feb-24	Mentors & OC Manager + OC Dissemination (optional)
#10 Monthly meeting for Mentors	Online meeting to collectively assess the monitoring activities	20-Mar-24	Mentors & OC Manager + OC Dissemination (optional)
Deadline to submit deliverables	OC2 Beneficiaries send deliverables to OC Manager.	31-Mar-24	OC2 Beneficiaries, OC Manager, Mentors, Reviewers
Evaluation	Mentors & Reviewers have 3 weeks due to holiday break to evaluat	6-Apr-24	Mentors, Reviewers
Remote review #3	The OC2 beneficiaries will make a short presentation of the work de	9-Apr-24	OC2 Beneficiaries, Mentors, Reviewers
Review report	Reviewers share their reports to approve or disapprove the deliveral	10-Apr-24	Mentors, Reviewers
Resubmission	In case of disapproval, the Beneficiaries have 1 week to resubmit up	17-Apr-24	OC2 Beneficiaries
Request for payment	On acceptance of the deliverables, the OC2 Beneficiary will be requ	After approval	OC2 Beneficiaries

Figure 21: OC2 monitoring plan - timeline of the planned activities.

4. **Review process**: At the end of each programme phase, HosmartAI mentors, with an assigned reviewer<sup>4</sup> from the HosmartAI team (based on expertise) evaluated the deliverables submitted by OC2 parties. The review process was complemented by mandatory video teleconference (approx. 45min) where a third party pitched the progress achieved, report on deliverables, KPIs, next steps, and answer questions from the reviewers and PC or PM. The reviews were organised and moderated by the Open Call Manager (F6S). Each review has been recorded and stored in the project repository (see Figure 22).

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<sup>&</sup>lt;sup>4</sup> A Reviewer was suggested by a mentor who has the best knowledge on the expertise needed to evaluate the outcomes.



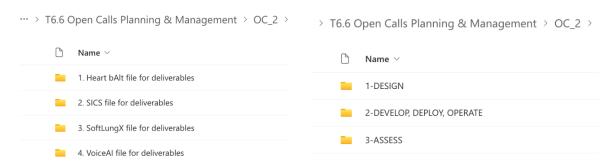


Figure 22: Monitoring files of OC2 pilots in the project repository.

No of I	VOICE AI	Sprint	٦٠,	Status	Dea	D link
01.1	Final study design, protocols, documentations, and KPIs.	Sprint 1 - l	DESIGN	Submitted	M2	D1.1 link
1.2	Assessment and evaluation report on HosmartAI components, as well as roadmap and implementation guide for the integration work	Sprint 1 - l	DESIGN	Submitted	M2	D1.2 link
1.3	List of contracted HCPs, incl. their positions, relevant experience, and excluding personal information	Sprint 1 - l	DESIGN	Submitted	M2	D1.3 link
02.1	Integrated and operational Ensofy services with HosmartAI components, and M4A platform	Sprint 2 - l	DEPLOY	Submitted	M5	D2.1 link
0(2.2-2.3)	Patient recruitment and data collection & Data collection from teleconsultations	Sprint 2 - l		Submitted	M8	D2.2 2.3 li
03.1	Final report detailing the pilot results and future developments	Sprint 3 -		Submitted	M12	D3.1 link
lo of l	SICS	Sprint	√ໂ	Status	Dea Y	Deliver
1.1	Report on the data management plan, ethical and legal requirements	Sprint 1 - l	DESIGN	Submitted	M2	D1.1 link
1.2	Anonymised patient data for further exploitation	Sprint 1 - l	DESIGN	Submitted	M2	D1.2 link
1.3	Report on the clinical translation plan	Sprint 1 - l	DESIGN	Submitted	M2	D1.3 link
02.1	Report on data harmonistaion and CDM used	Sprint 2 - 1	DEPLOY	Submitted	M4	D2.1 link
2.2	Medical device interoperability framework and component architecture	Sprint 2 - l	DEPLOY	Submitted	M4	D2.2 link
02.3	Report on AI models design and architecture, workflow and internal validation	Sprint 2 - l	DEPLOY	Submitted	M6	D2.3 link
02.4	Report on the technical description of SICS CDSS architecture, including detailed definition of each module	Sprint 2 - I	DEPLOY	Submitted	M8	D2.4 link
2.5	AI models design and architecture-Project SICS	Sprint 2 - 1	DEPLOY	Submitted	M8	D2.5 link
02.6	SICS platform architecture-Project SICS	Sprint 2 - 1	DEPLOY	Submitted	M8	D2.6 link
2.7.1	SICS Platform Beta Video-Project SICS	Sprint 2 - l	DEPLOY	Submitted	M8	D2.7 link
2.7.2	SICS Platform Beta Video-Project SICS - video	Sprint 2 - l	DEPLOY	Submitted	M8	D2.7 vide
03.1	Regulatory requirements report for SICS CDSS (Report including the qualitative and quantitative evaluation of the performance of the SICS Pilot	Sprint 3 - 4	ASSESS	Submitted	M12	D3.1 link
3.2	Report of the results of all communication and dissemination activities	Sprint 3 - A	ASSESS	Submitted	M12	D3.2 link
3.3	Business and innovation plan covering market analysis, competition analysis, financial planning, and other related issues	Sprint 3 - 2	ASSESS	Submitted	M12	D3.3 link
3.4	Clinical KPIs report	Sprint 3 - 2	ASSESS	Submitted	M12	D3.4 link
3.5	Enhanced System Impact Report	Sprint 3 - 4	ASSESS	Submitted	M12	D3.5 link
03.6	Enhanced System Demonstration Video	Sprint 3 - 4	ASSESS	Submitted	M12	D3.6 link
o of I	Heart bAlt	Sprint	<b>پ</b> ر	Status	Dea V	Deliver
01.1	Descriptive plan for the deployment and integration of the final solution	Sprint 1 - l	DESIGN	Submitted	M1	D1.1 link
1.2	Report listing the end-user specifications for the patient app and for the RPM tool used by HCP professionals	Sprint 1 - I	DESIGN	Submitted	M2	D1.2 link
01.3	Report with selected tool for PPG signal cleaning, edge-computing and clinical decision support system	Sprint 1 - I	DESIGN	Submitted	M2	D1.3 link
02.1	PPG technology integrated at Promptly patient app	Sprint 2 - 1	DEPLOY	Submitted	M3	D2.1 link
02.2	Compensated and adjusted training model	Sprint 2 - I	DEPLOY	Submitted	M6	D2.2 link
02.3	Gitlab code/software for optimized signal capture and for arrhythmic episodes identification	Sprint 2 - 1	DEPLOY	Submitted	M6	D2.3 link
02.4	Upgrade module to capacitate the RPM tool with a smart clinical decision support system	Sprint 2 - 1	DEPLOY	Submitted	M6	D2.4 link
02.5	Clinical report with sensitivity and specificity rates	Sprint 2 - 1	DEPLOY	Submitted	M8	D2.5 link
03.1	Report with general conclusions and satisfaction rates	Sprint 3 - 4		Submitted	M9	D3.1 link
03.2	A complete business plan (including clients with interest manifestation)	Sprint 3 -		Submitted	M12	D3.2 link
03.3	Data collection & algorithm improvement	Sprint 3 - A	ASSESS	Submitted	M12	D3.3 link
	SoftLungsX	Sprint.	~[	Status ~	De: V	Deliver
No of 1	SoftLungsX Report on collected data	Sprint Sprint 1 - 1		Status Submitted	De: V	Deliver D1.1 link
o of 1 ~ 01.1			DESIGN	Status	10.00	Deliver
No of 1 ~ D1.1 D1.2	Report on collected data	Sprint 1 - l	DESIGN DESIGN	Submitted	M2	D1.1 link
No of 1 ~ D1.1 D1.2 D1.3	Report on collected data Report on harmonization and unification of retrospective data	Sprint 1 - l Sprint 1 - l	DESIGN DESIGN DESIGN	Submitted Submitted	M2 M2	<u>D1.1 link</u> <u>D1.2 link</u>
No of 1 01.1 01.2 01.3	Report on collected data  Report on harmonization and unification of retrospective data  Report on reference architecture	Sprint 1 - 1 Sprint 1 - 1 Sprint 1 - 1	DESIGN DESIGN DESIGN DEPLOY	Submitted Submitted Submitted	M2 M2 M2	D1.1 link D1.2 link D1.3 link
01.1 01.2 01.3 02.1	Report on collected data  Report on harmonization and unification of retrospective data  Report on reference architecture  Developed SoftLungX deep learning modules	Sprint 1 - 1 Sprint 1 - 1 Sprint 1 - 1 Sprint 2 - 1	DESIGN DESIGN DESIGN DEPLOY DEPLOY	Submitted Submitted Submitted Submitted	M2 M2 M2 M5	D1.1 link D1.2 link D1.3 link D2.1 link
No of   Y D1.1 D1.2 D1.3 D2.1 D2.2 D2.3 D3.1	Report on collected data  Report on harmonization and unification of retrospective data  Report on reference architecture  Developed SoftLungX deep learning modules  Integrated SoftLungX application on HOSMARTAI platform	Sprint 1 - 1 Sprint 1 - 1 Sprint 1 - 1 Sprint 2 - 1 Sprint 2 - 1	DESIGN DESIGN DESIGN DEPLOY DEPLOY DEPLOY	Submitted Submitted Submitted Submitted Submitted	M2 M2 M2 M5 M6	D1.1 link D1.2 link D1.3 link D2.1 link D2.2 link
01.1 01.2 01.3 02.1 02.2	Report on collected data  Report on harmonization and unification of retrospective data  Report on reference architecture  Developed SoftLungX deep learning modules  Integrated SoftLungX application on HOSMARTAI platform  Report on successfully integrated SoftLungX application	Sprint 1 - 1 Sprint 1 - 1 Sprint 1 - 1 Sprint 2 - 1 Sprint 2 - 1 Sprint 2 - 1	DESIGN DESIGN DESIGN DEPLOY DEPLOY DEPLOY DEPLOY ASSESS	Submitted Submitted Submitted Submitted Submitted Submitted	M2 M2 M2 M5 M6 M8	D1.1 link D1.2 link D1.3 link D2.1 link D2.2 link D2.3 link

Figure 23: OC2 programme - a list of evaluated deliverables.

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Figure 24: OC2 three review teleconferences – agendas.

- 5. **Review reports**: 12 reports were produced (3 phases x 4 OC2 pilots) After each review, the Beneficiary received a review report, including status of the deliverable's acceptance, comments and potential recommendations (Appendix B).
- Engagement with the third-party networking: HosmartAI identified the appropriate instruments to establish a network of associates interested in building research collaborations, evaluating outputs, participating in events and exchanging information (e.g. common participation in MEDICA 2023 and Radical Health Festival Helsinki 2024).



#### 5 Conclusion

The Open Call 2 followed the successful path developed for Open Call 1. All the funded parties were fully dedicated to the programme, collaborated with the assigned mentors, submitted all the contracted deliverables on time and with high quality confirmed by the reviewers. In the end each of the pilots has presented the MVP and plans such as expanding validation of the technologies, advancing the functionalities, disseminating the results and scaling up opportunities.

Management of the Open Calls required significant diverse efforts, strong planning and good coordination to orchestrate required collaborative efforts. The Open Calls expanded the HosmartAI consortium of 14 Beneficiaries and provided opportunities to bridge closer science with industry, and technology need with the end user. The dialog between the involved parties, the expertise exchange, and future perspectives were the key added values coming from this experience.



Figure 25: Beneficiaries from both Open Calls.



Figure 26: HosmartAI people behind two Open Calls.



# Appendix A Evaluation Summary Report - example

HOSMARTAI – 2<sup>nd</sup> OPEN CALL: EXPERIMENT EVALUATION SUMMARY REPORT



#### **Evaluation Summary Report (ESR)**

#### HosmartAI - Open Call #2

14 February 2023

Subject	HosmartAl – Open Call #2
Proposal acronym	
Proposal title	
Proposal ID	:

#### Dear Applicant,

We are contacting you regarding your submission to the HosmartAI - Open Call #2.

Please, find below the evaluation summary report (ESR), based on the comments and opinion of independent experts that evaluated the proposal.

REMOTE EVALUATION SCORING RESULT				
EXCELLENCE & INNOVATION	Score [0-5] / Threshold [3.00]	4.30		
IMPACT & EXPLOITATION	Score [0-5] / Threshold [3.00]	3.92		
CONSORTIUM	Score [0-5] / Threshold [3.00]	4.34		
PROJECT PLANNING & VALUE FOR MONEY	Score [0-5] / Threshold [3.00]	4.09		
TOTAL	Score [0-20]/ Threshold [15.00]	16.65		

	COMMENTS FROM EVALUATORS
EXCELLENCE & INNOVATION	



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101016834

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HOSMARTAI – 2<sup>nd</sup> OPEN CALL: EXPERIMENT EVALUATION SUMMARY REPORT



# IMPACT & EXPLOITATION CONSORTIUM PROJECT PLANNING & VALUE FOR MONEY

STATUS	NOT SELECTED

#### Scoring

Each criterion yields a score from 0 to 5. A minimum threshold of 3 is required for each criterion. That means if a proposal receives less than 3 in one criterion or less than 15 in the overall score it is automatically rejected.

Score values correspond to the following assessments:

Result	Score	Detail	
Fail	0	The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information	
Poor	1	The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses	
Fair	2	While the proposal broadly addresses the criterion, there are significant weaknesses	



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2|3



## HOSMARTAI – 2<sup>nd</sup> OPEN CALL: EXPERIMENT

**EVALUATION SUMMARY REPORT** 



Good	3	The proposal addresses the criterion well, although improvements would be necessary	
Very good	4	The proposal addresses the criterion very well, although certain improvements are still possible.	
Excellent	5	The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.	

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# Appendix B OC2 Review Report Template

# HosmartAl Open Call 2 Review Report

Date of Review	DD/MM/YYYY
OC2 Project Acronym	
Phase #	

Technical excellence of the pilot
Give a short evaluation of the overall progress. Is the project progressing well? Is it likely that it will complete the proposed work? Can you list at least 3 strong points and any weak points if applicable.
Recommendations/Remarks
Technology
Give a short evaluation of the technology development/used. Is the developed technology sufficient? How is the process of integration it to the HosmartAI platform/ecosystem? (If applicable at this stage) Should a different technology been used? Is there any risk occurring for a probable failure?
Recommendations/Remarks

# **Impact**

# OSMARTAI D6.13 – Open Call 2 project and outcome evaluation report Final - v1.0, 2024-05-31

Give a short evaluation of the expected impact. Is it satisfactory? How is the Consortium performing overall? Do you have any					
objectio	ns <sup>e</sup>				
Recor	nmendations/Remarks				
Recoi	initeriodations, remarks				
Overal	l Evaluation				
	Excellent progress (the project fully achieved its objectives)				
	Good progress (the project achieved most of its objectives with minor deviations)				
	Acceptable progress (Some objectives are achieved; corrective actions are				
	required)				
	Unsatisfactory progress (Urgent corrective actions or the project will be stopped)				
List of recommendations:					
1.	Please insert of applicable				
2.					

#### List of deliverables

Deliverable title	Comments & recommendations if any	Accepted/Rejected

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