

مشروع " نقل التكنولوجيا وتتجير نتائج البحث العلمي من خلال المشتريات الحكومية للابتكار في منطقة المتوسط"

Public Procurment Innovation Final Results Event 29-10-2023- Jordan











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- Project Overview
- National Living lab
- Policy Maker Group and PPI White Paper
- Institutional and market capacity building
- National sectorial platforms for precompetitive analysis of the products and solutions
- Mediterranean Living Lab
- INNOVATION PROCUREMENT PILOTS

PROJECT OVERVIEW











- **PPI4MED** Technological transfer and commercialization of public research results through PPI in the Mediterranean region.
- ENI CBC "Mediterranean Sea Basin Programme", the largest Cross-Border Cooperation (CBC) initiative implemented by the EU under the European Neighbourhood Instrument (ENI).
 - Thematic Objectives A.2 Support to education, research, technological development and innovation (Promote economic and social development)
 - Priority A.2.1 Support technological transfer and commercialization of research results
- Geographic scope: Spain, Italy, Tunisia, Egypt, Jordan
- Duration 37 months (Starts | October 2020 Ends 3 | October 2023)

CONSORTIUM











- 5 Five key Mediterranean Institutions
 - Spain
 - Tunisia
 - Egypt
 - Italy
 - Jordan









Consiglio Nazionale delle Ricerche





TO FIND SOLUTIONS TO CROSS-BORDER ISSUES

SCOPE AND OBJECTIVES





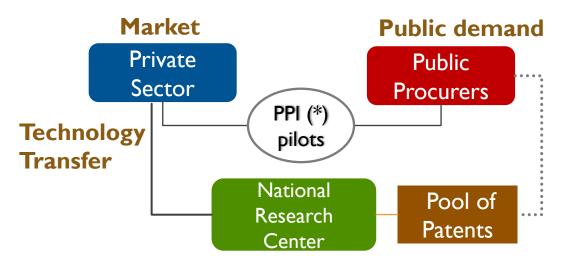






- Objective: demonstrate a model to transfer public research results from NRCs to public buyers, industry, SMEs and people through the co-design of PPI pilots.
- PPI4MED Innovation Procurement model specific objectives:
 - Demonstrate commercialization of public research results
 - Build capacity on innovation procurement
 - Create awareness of NRCs under the Innovation Procurement framework.

PPI4MED MODEL



(*) Public Procurement of Innovation (PPI): the use of public procurement as an strategic instrument of the innovation policies.

EXPECTED ACHIEVEMENTS











- ✓ 5 National Living Labs on Innovation Procurement.
- ✓ I Cross-border Living Labs on Innovation Procurement
- ✓ **10 training programs** for public procurers, representatives of NRC and private companies
- ✓ **5 National sectorial platforms** for precompetitive analysis of the products and solutions
- ✓ A Cross-border sectorial platform for precompetitive analysis
 of the products and solutions
- ✓ **30 agreements** to commercialize results from NRC to public buyers,
- ✓ 8 Spin-Offs created by researchers from the NRCs
- 4 co-patents registered



WHAT IS THE LIVING LAB ON PPI?













Virtual platform for meeting and matching interests between Public procurers, Private companies (sellers) and NRC (patent owner) to generate concrete ideas that can be materialized in potential PPI projects.

- Exploration and co-generation of ideas process
- Open and Recurrent model any entity with interest in PPI can participate
- Instrument to transfer results from public R&D Centres.



WP3: LIVING LAB STATUS IN JORDAN

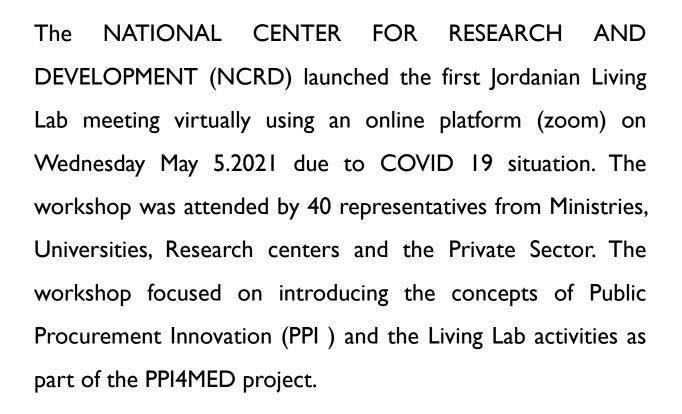


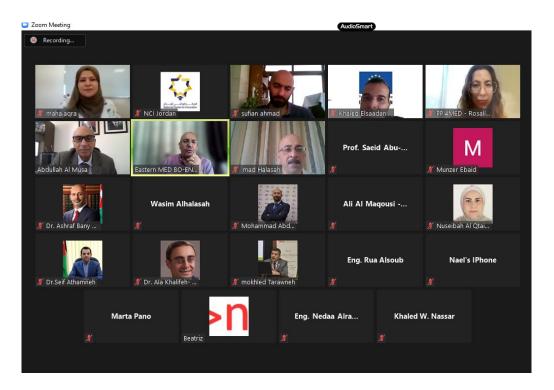












WP3: LIVING LAB ACTIVITIES











NCRD conducted a series of Living Lab workshops and face-to-face meetings between March 2022 and October 2023.

A total of 250 participants (27 public procurers buyers and 37 Sellers) participated in (45) workshops, and meetings, during these meetings, a presentation was shared, addressing the project objectives and the mechanism of participation in the project living lab and signing MoUs, and the opportunities available to the ministries and government institutions, universities, research centers, private organizations and SMEs to benefit from the capacity building, pilot phases.









WP3: LIVING LAB ACTIVITIES























WP3: LIVING LAB ACTIVITIES

























HOW TO PARTICIPATE?











FORMAL PARTICIPATION TO THE LLAB.

- To join the living lab on PPI shall be done through a participation letter/MoU.
- A document containing declarations of willingness to act with a common objective, without legally committing either party.
- Open to all interested entities and organization, with free entry and exit.
- The agreement does not have to commit or oblige any member to participate in future or other activities.

Memorandum of Understanding

Between

National Center for Research and Development

and

XXXXXXXXXXX

This Memorandum of Understanding (MoU) sets forth the terms and forms of cooperation towards the implementation of the Innovation Procurement Living lab Jordan.

Background

National Research Centres (NCR) are the main producers of R&D results in all the Countries in the MED Area (the 5 partners registered more than 4,000 patents in the last 10 years). These results are transferred to the Society through different instruments but not through Public Procurement of Innovation (PPI), although Public procurement makes up a large share of public spending and over 17% of the GDP of most neighbouring countries.

The PPI4MED project aims to create and demonstrate a model to transfer public results from NRC to public administration, industry, society through the co-design of Public Procurement of Innovation. The project, led by CSIC, also involves Italy's National Research Council (CNR), Tunisia's National Agency for the Promotion of Scientific Research (ANPR) and Jordan's National Centre for Research and Development (NCRD). Between them, they hold more than 1,000 patents that will form the basis for the design of products and technologies in environment, ICT, health, and climate change.

The 'living labs' initiative is part of the PPI4MED project, funded by the European Neighbourhood Instrument Cross Border Cooperation in the Mediterranean region 'ENI CBC Med' Programme. These 'living labs' will be launched in: Spain, Italy, Jordan, Egypt and Tunisia.

Purpose

The aim of the PPI4MED living lab on Innovation Procurement is to create virtual platforms for meeting and matching interests between public procurers (buyers), Private companies (sellers) and NRC (patents owners) to generate concrete ideas that can be materialised in potential public procurement of innovation (PPI) projects. Consequently, PPI4MED will target the participation of more than 80 public and private actors among from three key groups:

WP3: MAIN OUTPUTS











- NCRD has signed a total of 17 living lab MoUs, 6 governmental institutions, 7 research centers, and 3 companies from the private sector and 1 NGO (7 public procurers buyers and 10 Sellers).
- The signature took place between Sep2021 and October 2023.
- An Arabic version of MoU was created and distributed to interested entities to increase the level of engagement as well as the continued follow-up and support afforded by NCRD team to any Public Procurer, research center or private company.

SN	Name of the organization	Type of organization		
- 1	Yarmouk University	Research Center / University		
2	Mutah University	Research Center / University		
3	Princess Sumaya University for technology	Research Center / University		
4	The Hashemite University	Research Center / University		
5	al-Fardthakh Tech & Data Science	Private/ SMEs		
6	Smart technological systems for data processing and analysis	Private/ SMEs		
7	National Center for Innovation	Public Procure		
8	Jordan Enterprise Development Corporation JEDCO	Public Procure/synergy IPMED project		
9	Jordan Valley Authority	Public Procure		
10	Zarqa University	Research Center / University		
-11	Water Authority	Public Procure		
12	Al Bayt University	Research Center / University		
13	Amman Chamber of Industry	NGO		
14	Sovilion	Private/ SMEs		
15	Philadelphia university	Research Center / University		
16	National Agricultural Research Center (NARC)	Public Procure		
17	Scientific Research and Innovation Support Fund	Public Procure		

LIVING LAB MOUS























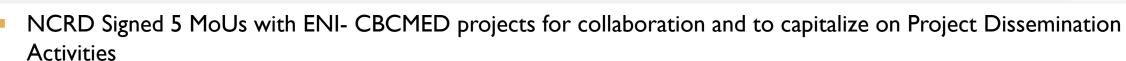
SYNERGIES AND COLLABORATION MOUS











- <u>U-SOLVE, EMPHASIS</u> and <u>MYSEA</u> Projects, (University of Science and Technology –Project partner in Jordan)
- IPMED Project, (Jordan Enterprise Development Corporation JEDCO –Project partner in Jordan)
- MED- QUAD Project, (AlBalqa Applied University –Project partner in Jordan)

















































BROKERAGE EVENTS











NCRD participated in 6 brokerage events, workshops, and info days organized by (U-

SOLVE, EMPHASIS and MYSEA, IPMED, MED- QUAD Projects) funded by the European

Union under the ENI CBC MED program.



























































PUBLIC PROCUREMENT INNOVATION CONFERENCE 17-18/10/2023

ENI CBCMED Copperating across barden









- NCRD organized Two- Day Public Procurement Innovation Conference and Exhibition at Philadelphia university.
- 52 Participants (27 public procurers buyers and 25 Sellers)attended the event.
- 4 startup companies potential spinoffs in (Energy ,Agriculture , and Water sectors) presented their products and services.









POLICY MAKER GROUP











- **WHO:** Ministries and departments responsible for innovation policies that can promote PPI as an instrument to **transfer the results** as well as to align future policies related to this instrument.
- Members of this group can put the LLab (NRC) in touch with potential public procurers.





WP2: POLICY MAKER GROUP STATUS











- Policy Maker Group was created on 15 August 2023.
- A total of 21 Members participated in 6 meetings,
 Representatives From 9 public procurers buyers and 9
 Sellers



WP2:WHITE PAPER ON PPI











The white paper is developed and will be submitted to the government about "Public Procurement Innovation"

صفحة 2

ورقة بيضاء حول المشتريات الحكومية للابتكار (PPI) في الأردن

جدول المحتويات (سيتم إضافة الملخص التنفيذي والخاتمة في النسخة النهائية)

3	مقدمة	1

- 1.1 مفهوم المشتريات الحكومية للابتكار (PPI) والتعاريف ذات الصلة
- أهمية المشتريات الحكومية للابتكار (PPI) بالنسبة للأردن
- 1.3 دراسات حالة مختارة لمشاريع PPI الناجحة من بلدان أخرى
- الدنمارك: روبوتات التطهير الدنماركية التي تم إنشاؤها في مشتريات ما قبل التتجير
 - ليتوانيا: بلوكتشين (LBCHAIN) من بنك ليتوانيا
 - ألمانيا: حل ملموس للحد من تلوث الهواء لمحطة الحافلات المركزية 1.3.3
 - 1.4 الغرض من الورقة البيضاء

الوضع الحالى للمشتريات الحكومية للابتكار (PPI) في الأردن 9

- نظرة عامة على الإطار القانوني والتنظيمي للمشتريات الحكومية للابتكار (PPI) في الأردن 9
 - 2.2 أصحاب المصلحة الرئيسيين 10
 - 2.3 تحجيم وتقييم الأنشطة ذات الصلة
 - نشاطات المشتريات الحكومية
 - نشاطات إنشاء الشركات الناشئة ونموها 17
 - - النشاطات البحثية 18 2.3.3
 - 2.4 الدراسات والتحليلات السابقة
- تحليل المنتجات والخدمات الواعدة للمشتريات الحكومية للابتكار في الأردن ، NCRD ، 2022
 - تحليل الفجوات الأردن ، NCRD ، 2023
 - الفجوات الرئيسية 22 2.4.3
 - 2.5 مبادرات PPI الحالية في الأردن 23
 - 2.6 فوائد للمشتريات الحكومية للابتكار للأردن
 - تحسين جودة وكفاءة الخدمات العامة:
 - انخفاض تكاليف المشتريات الحكومية :
 - خلق فرص عمل وأعمال جديدة: 24
 - تعزيز التنمية المستدامة:
 - 2.7 تحديات المشتريات الحكومية للابتكار في الأردن
 - 25 عدم وجود تشريعات ولوائح خاصة نقص القدرة لدى المشترين الحكوميين على تصميم وتنفيذ مشاريع PPI
 - قلة الوعى بالمشتريات الحكومية للابتكاربين الشركات وعامة الناس
 - تحديات أخرى 2.7.4

ورقة بيضاء حول المشتريات الحكومية للابتكار (PPI) في الأردن



تم تطويره من أجل:











12 تشرين الأول 2023

تم تطويره من قبل:



WP4 - INSTITUTIONAL AND MARKET **CAPACITY BUILDING**







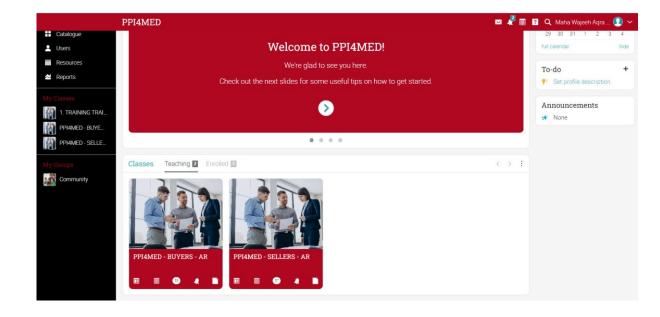




WP4 – Institutional and market capacity building

- National Public Procurers Capacitation Programme on Innovation Procurement.
- National Sellers (research transfer officers and private sector) Capacitation Programme on PPI.

Target beneficiaries → 25 public procurer and 25 representative of private sector and NRC





















- NCRD organized a hybrid training program on "Public Procurement of Innovation (PPI)" from 21 August 2023 till 23 August 2023
- 75 participants attended on-site and 29 online from various institutions, a total of (20 public procurers Buyers and 30 Sellers).

CALL FOR TRAINERS FOR TRAINING PROGRAM













The program covered the foundations of applying the Public Procurement of Innovation (PPI) model from the technical, financial and legal aspects, in addition to introducing the model's mechanisms. Some experimental models were presented in other countries, and the participants worked as teams to implement a practical application of the stages of the Public Procurement of Innovation (PPI) model.





Day 1: Monday August 21.2023

	Registration 9:30 AM – 10:00 A	AM			
Time	Title	Speaker Name			
10:00 AM - 10:05 AM	Welcome Speech	Dr. Azmi Mahafzah - Minister of High Education and Scientific Research -TB			
10:05 AM – 10:10 AM	Welcome Speech	Dr.Abdullah Al-Musa- General Secretary of the Higher Council for Science and Technology			
10:10 AM – 10:15 AM	Welcome Speech	Dr. Esmat Karardsh – Coordinator for the Eastern Mediterranean Office			
10:15 AM – 10:25 AM	Introduction to the PPI4MED project	Eng. Maha Aqra – PPI4MED Project Manager - NCRD			
	Sessions 1: Introduction to Innov	vation Purchasing			
10:25 AM - 10:40 AM	Definition of innovation	Dr.Ahmad Saleh- PPI Expert			
10:40 AM – 11:00 AM	Definition of innovation procurement	Mr.Mohd Gaafar- PPI Expert			
11:00 AM – 11:30 AM	Overview of innovation purchasing models and procedures	Mr. Abdelbaset Bani Ataya- PPI Exp			
	Group Photo				
	11:30 AM - 12:00 PM Co	ffee Break			
	Sessions 2: Public Procurement I	nnovation Model			
		Eng. Maha Aqra – PPI4MED Project Manager - NCRD			
12:15 PM – 1:15 PM	Innovation procurement key technical aspects	Mr. Abdelbaset Bani Ataya- PPI Exper			
1:15 PM -2:00 PM	Innovation procurement key financial aspects	Dr.Ahmad Saleh- PPI Expert			
2:00 PM -2:45 PM Innovation procurement legal aspects		Mr.Mohd Gaafar- PPI Expert			
	2:45 PM -3:00 PM Open I	Discussion			
	3:00 PM - 4:00 PM L	UNCH			











The Training was concluded with a case study session where participants learned about a successful case study of PPI currently implemented by the Galician Region in Spain, followed by 3 real-life case studies where the representatives of the Ministry of Health, Ministry of Agriculture and Ministry of Water and Irrigation got engaged in applying the PPI procedures on 3 innovative products, a Mouth Sanitizer, a Smart Agriculture Irrigation System, and a Waste Water Treatment Solution.



















- The participants were encouraged to continue their studies through the access of PPI4MED training platform to watch the videos and material and prepare for taking the exam before October 20.2023.
- 40 participants passed the exam (20 public procurers Buyers and 16 Sellers).



TRAINING MATERIAL











During the Program the training Material was in English, and an Arabic version of the Material was developed.







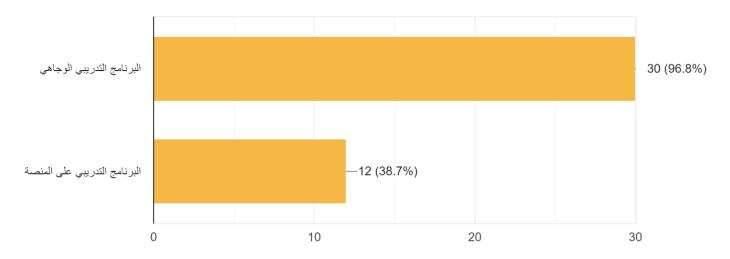






- An online satisfaction survey was created and shared with 75 Participants.
- 31 Respondents from (15 public procurers Buyers and 15 Sellers) answered
 16 Questions.

Did You attend the يمكن اختيار اكثر من خيار) على المنصة هل حضرت البرنامج التدريبي الوجاهي و/ او الدورة التدريبية Face to face training or/and online training on the platform 31 responses





















Section 1 of 4

نموذج تقييم الدورة التدريبية لنموذج المشتريات الحكومية للابتكار EVALUATION OF THE PPI CAPACITATION PROGRAMME 2023

السادة و السيدات المتدربين الكرام،

نحیة طیبة و بعد،،

كما هو معلوم لديكم بانه تم إطلاق البرنامج التدريبي لنموذج المشتربات الحكومية للابتكار " صـمن نشاطات مشروع "نقل التكولوجيا وتتجير نتائج البعث العلمي من خلال المشتربات الحكومية للابتكار " الاصابات المحوم من الاتحاد الأوروبي - ايني. الذي ينفذ من قبل خمس شركاء برناسة المجلس الوطني الإساباتي للبحوث SAPP والمجلس الوطني للبحوث الإبطالي (CNR) والوكالة الوطنية التوسيه لتعزيز البحث العلمي (ANPR) والمركز الوطني للبحث والتطوير (CNRD) وأكاديمية البحث العلمي والتكولوجي المصري. (SART) وستعدف هذا البرنامج التدريب المؤسسات الحكومية والقطاع الخاص و المنظمات عبر الربحية و الشركات الناشئة العاملة في قطاعات الصحة ، والزراعة ، وتكنولوجيا المعلومات ، والنقل ، والطاقة و المياه والمخات بن في الحامعات والمراكز التحدية.

وحضر البرنامج التدريبي الذي عقد في فندق الهيلتوت - البحر الميت من يوم الاثنين 21/8/2023 لغاية يوم الاربعاء 23/10/2023 واستمر لمدة 3 ايام 75 موظفا من مختلف المؤسسات و قدم المدربوت خلال البرنامج محاضرات حول أسس تطبيق نموذج المشتريات الحكومية للايتكار من الناحية الفنية و المالية و القانونية ،إضافة إلى التعريف بالبات النموذج.

و تم عرض بعض النماذج التجريبية في الدول الأخرى،وقام المشاركوت بالعمل كفريق على تنفيذ تطبيق عملي لمراحل نموذج المشتريات الحكومية للابتكار واختيار 3 نماذج تجريبية.

ن مشاركتكم في في تقييم البرنامج سيساعدنا في التغذية الراجعة و تحسين مخرجات التدريب.

نرجو منكم الاجابة على الاستلة حيث ان الوقت المتوقع هو من (10-15) دقيقة.

اسم المتدرب /ة (اختياري) Name of the Traniee

Short answer text

ONLINE SATISFACTION SURVEY RESULTS





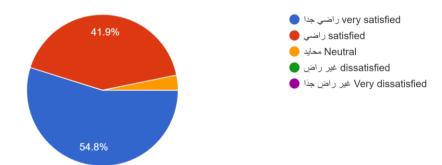




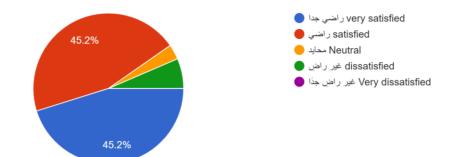


Almost 95 % of Respondents were satisfied with the organization, 90 %Content of the program ,95 % Instructors knowledge and, 90 % Interaction

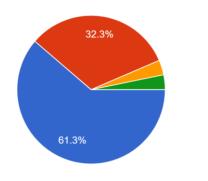
Instructors' knowledge of the subject matter سؤال رقم (2) :معرفة المدربين بالموضوع 31 responses



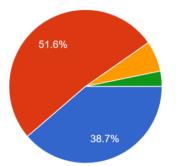
Interaction with the instructors سؤال رقم (4): التفاعل مع المدربين 31 responses



Organization of the program سؤال رقم (1) :تنظيم البرنامج 31 responses



Clarity of the content سؤال رقم (3) :وضوح المحتوى 31 responses





very satisfied راضي جدا 🌑

dissatisfied غير راض

Very dissatisfied غیر راض جدًا 🌑

satisfied راضي

Neutral محابد

ONLINE SATISFACTION SURVEY RESULTS





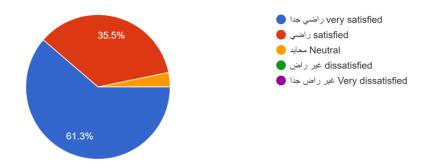




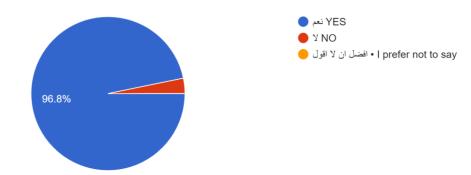


Almost 70 % of Respondents were satisfied with the online Training Platform,83 % met their expectations, 96 % felt satisfied after completing the program.

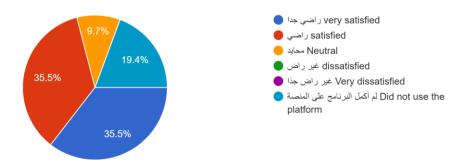
سؤال رقم (6) :الرضا العام عن البرنامج الوجاهي General satisfaction on the training program 31 responses



21 سؤال رقم (9) : هل شعرت بالرضا بعد الانتهاء من البرنامج؟ Did you feel satisfied after completing the program

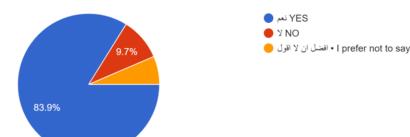


Course platform سؤال رقم (5) :في حال اكمالك للبرنامج على المنصة ما رايك ؟بالمنصة عا responses



Do you think the program was good enough to meet your expectations?

31 responses



WP5: NATIONAL SECTORIAL PLATFORMS FOR PRECOMPETITIVE ANALYSIS OF THE PRODUCTS AND SOLUTIONS











- NCRD collected data on the patents registered in the last 3 years by researchers in different universities in collaboration with the Scientific Research & Innovation Support Fund (SRISF) in the Ministry of Higher Education (MoHE).
- A total of 30 patents (16 in Health, 3 in Agriculture,6 in Transportation and Engineering, I in water, 4 in Environment) were analyzed, and around 10 were initially selected as potential projects for commercialization.

	TECHNOLOGY					
CODE	TECHNOLOGY	INSTITUTE	COUNTR Y	MAIN SECTOR ME	CLARITY 3	PATENT
N001	Airborne microorganisms and viruses detection system and method	University of Jordan	Jordan	Health	Yes	PCT/JO2022/050 008
N002	Use of substituted quinolone derivatives for treating cancer	University of Jordan	Jordan	Health	Yes	PCT/JO2022/050 004
N003	Compounds of sulfonylurea-2- amino-2-deoxy-d-glucopyranose hybrids, their method of preparation, and a pharmaceutical composition thereof	University of Jordan	Jordan	Health	Yes	In process
N004	Production of Nano-Basalt material to produce ultra-high performance concrete	University of Jordan	Jordan		Yes	PCT/JO2021/050 014
N005	A vehicle charging station	University of Jordan	Jordan	Transport	Yes	PCT/JO2021/050 009
N006	Novel substituted quinolones , methods of preparation thereof and their use for treating microbial infection	University of Jordan	Jordan	Health	Yes	Pet./jo2020/0500 06
N007	Ophthalmic Dosage Form Based Solid in Oil (S/O) Nano formulation of Vitamin C for Corneal Epithelial Wound Healing.	University of Jordan	Jordan	Health	Yes	PCT/JO2021/050 007
N008	Regenerative vehicle suspension system	University of Jordan	Jordan	Transport	Yes	PCT/JO2020/050 002 Wo2021/166007
N009	anti-microbial effect of new fluoroquinolones n clinically important microorganism	University of Jordan	Jordan	Health	Yes	PCT/JO2020/050 006
N010	Healing hand: A glove that protect eczema patients from night scratch	University of Jordan	Jordan	Health	Yes	(PCT/JO2017/05 0001)
N011	Design of super hydrophobic Nano-porous /micro-porous composite membranes and a device for membrane distillation	University of Jordan	Jordan		Yes	WO2019/119125

BASELINE SURVEY

- An online Survey was shared with more than 150 project stakeholders,
 Respondents answered (29 public procurers Buyers and 28 Sellers).
- The objective of the baseline survey is to assess the current situation of Public Procurement of Innovation (PPI) in the country, Identify stakeholder barriers and needs for PPIs opportunities, and Define common stakeholders' needs and challenges at national level.
- SWOT analysis was conducted, Studies of detailed needs of public buyers in (Health, Agriculture, Energy, Water and Transportation) sectors, the results of the analysis was discussed in the Brainstorming sessions(National sectorial platform).













Baseline Survey for PPI4MED project

×

PPI4MED Project: Technological transfer and commercialization of public research results through PPI in the Mediterranean region.

The baseline survey allows to analyse the internal and external environment of the project stakeholders understanding the different sectors needs and competitive environment.

Objectives:

- Assess the current situation of Public Procurement of Innovation (PPI) in each partner country.
- Identify stakeholder barriers and needs for PPIs opportunities.
- Define common stakeholder needs and challenges at cross border level.

Section 3 of 7								
Section 2: Questionnaire - I Part 1 of 5	nnovation E	Engagemen	t			× 1		
* کیِف نصف دور ?The role & participation of young people in the field of innovation in your country ومشارکة الشباب في مجال الإبتكار في دولتك؟								
	1	2	3	4	5			
Below Expectation	0	0	0	0	0	Excellent		
* How do you see the level of women participation in the field of innovation in your country? پرایشه ما مو مستوری مشارکة اشراه فی مجال ۱۹۲۸کش فی دولشه؟								
	1	2	3	4	5			
Below Expectation	0	0	0	0	0	Excellent		

WP5: NATIONAL SECTORIAL PLATFORM











- NCRD created a virtual National sectorial platform (Brainstorming sessions) targeting 5 sectors (Health, Agriculture, Energy, Water and Transportation). This platform enabled public authorities and public procures to discuss their needs and challenges, researchers and companies showed their capacities to resolve the challenges and needs by offering solutions and patents that could be commercialized.
- All results from the base line survey, SWOT and National sectorial platform was published in a report in Nov.2022.

http://ncrd.gov.jo/?q=jordan-releases-its-report-precompetitive-analysis-%E2%80%93-ppi4med-project







Precompetitive Analysis of Promising Products and Services for Public Procurement of Innovation Report- Jordan

Technological transfer and commercialization of public research results through PPI in the Mediterranean region Project

B A.2.1 0136 PPI4MED

National Center for Research and Development (NCRD) - Jordan



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SECTORIAL PLATFORM -HEALTH











- 20 representatives from the government, private sector, universities, and research centers, attended the session dated 28/9/2022.
- 6 challenges were identified, discussion and recommendations were summarized in the pre-competitive analysis of the products and solutions report







SECTORIAL PLATFORM - AGRICULTURE



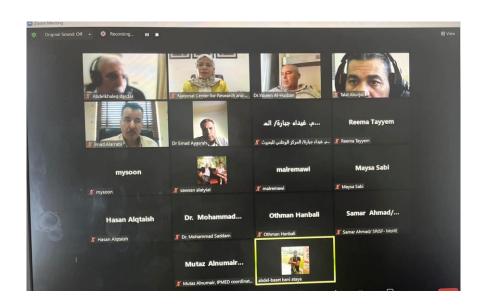








- 24 representatives from the government, private sector, universities, and research centers, attended the session dated 10/10/2022.
- 14 challenges were identified, discussion and recommendations were summarized in the pre-competitive analysis of the products and solutions report







SECTORIAL PLATFORM - WATER









- 20 representatives from the government, private sector, universities, and research centers, attended the session dated 26/10/2022.
- 14 challenges were identified, discussion and recommendations were summarized in the pre-competitive analysis of the products and solutions report







SECTORIAL PLATFORM - ENERGY AND TRANSPORTATION









- 21 representatives from the government, private sector, universities, and research centers, attended the session
- 10 challenges were identified, discussion and recommendations were summarized in the pre-competitive analysis of the products and solutions report



dated 3/11/2022.





WP5: MAIN OUTPUTS











A total of 85 representatives from the government, private sector, universities, and research centers, attended these sessions and 44 challenges were identified.

The discussions focused on: the baseline survey findings and SWOT Analysis, the challenges faced by researchers ,the role of innovation and entrepreneurship centers, government Procurement plans, the list of patents, the role of Scientific Research & Innovation, and ways of cooperation between the key players: the government, the private sector, and universities/research centers/ researchers in PPI Model and Potential Public Procurement Innovation Pilots in Jordan.

Session date	Sector	Link on NCRD Youtube
28/9/2022	Health	https://youtu.be/yZEza4OPcSg
10/10/2022	Agriculture	https://youtu.be/zd5BILvQOAU
26/10/2022	Water	https://youtu.be/9pEucaJ5efg
3/11/2022	Energy & Transportation	https://youtu.be/sf9Gp_lgnkY

SPIN-OFF CREATION











- A call for Spin- off support was published on 2/10/2023
- 7 Applications were received, (3 in Water, 2 in Agriculture, 2 in Health sectors).
- The Applications were not supported since the project ends on October 31.2023 without an extension of time.



Application for Spin- off Support





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)	PPI4ME	D	

1. Name spin-off	2. Contac	t person (name, surname, position)
3. Technological area 1.Water management and Treatment () 2.Waste Management () 3.Energy and energy efficiency. () 4.ICT enable technologies () 5.Health () 6. Agriculture ()	4. Particip Yes No	pation in the living lab
3. Name Technological Offer	5. Actual protection (patent secrect or other figure) 	6. TRL
7. Differential value proposition for the public adm	ninistration (What would the	company offer? What makes it different?)
8. Interest shown by third parties (future custome	ers, partners, etc.)	

MEDITERRANEAN LIVING LAB EVENT 17-10-2023











NCRD shared the 44 outcomes of the National sectorial platform (Brainstorming sessions) targeting 5 sectors (Health, Agriculture, Energy, Water and Transportation) with project partners to match the needs and technologies.

	MAT	CHING NEEDS AND	TECHNOLOG	GY	
CODE -	NEED -	ADMINISTRATIO -	COUNTRY	MAIN SECTOR MET	CLARIT
N087	Preparation of mathematical models to simulate aquifers to determine the safe quantities of extraction and optimal use and identify promising areas for water projects	Ministry of Water & Irrigation	Jordan	Water	YES
N088	Preparing surface modelling to estimate runoff volume contributing to flood risk management	Ministry of Water & Irrigation	Jordan	Disaster, risks	YES
N089	tudy to reduce water loss in dams and aqueducts	Ministry of Water & Irrigation	Jordan	Water	YES
N090	Study of water desalination in Aqaba	Ministry of Water & Irrigation	Jordan	Water	YES
N091	Maintenance of excavator and dam sites for durability and efficient storage of maximum quantity in the Badia areas	Ministry of Water & Irrigation	Jordan	Water	YES
N094	Research projects in desalination	Water Authority	Jordan	Water	YES
N095	Consolidation of existing water projects database	Water Authority	Jordan	Water	YES
N098	Scientific Research in: Wastewater Treatment	Water Authority	Jordan	Water	YES

MEDITERRANEAN LIVING LAB EVENT 17-10-2023











 3 technologies for (Health, Transportation, and Water) from Jordan were of interest to 3
 Public buyers in Spain.

CODE	NEED	ADMINISTRA TION	COUNTRY	MAIN SECTORS MED	TECNOLOGY	Researcher	INSTITUTE	COUNTRY
N030	Application of a sustainable precision medicine model (5SPM) for the rationalization of therapeutic prescribing in the polymedicated patient.	Castilla y León	SPAIN	Health	1. Use of substituted quinolone derivatives for treating cancer. 2. Substituted quinolone compounds, their use in the treatment of cancer, and a method for preparation	Mohammed Ameen Dr. Rula darawsheh Dr. Yusuf Mohammad Al- Hiari Dr. Violet Najib Kasabri Fouad Salih علية الصيدلة	University of Jordan	JORDAN
N043	Reserved platform of Electromobility by Induction in Motion. Premim ebus. Electromobility by induction in motion in public transport, sustainable transport.	Agencia Andaluza del Conocimiento	SPAIN	Transport	A vehicle charging station	Dr. Mousa Omar Abdallah الهندسة	University of Jordan	JORDAN
N054	Alternatives to water reuse in the face of the hydrographic deficit of the Mediterranean basin.	Agencia Andaluza del Conocimiento	SPAIN	Water	Portable device to convert gray water into drinkable water	Jamil Sami Haddad / Ayman Bassam Gamwah / Suhail Ahmed Naseer / Ayoub Muhammad Ghurair	Al-Balqa Applied University	JORDAN

MEDITERRANEAN LIVING LAB EVENT











 3 challenges / Needs in (Water, Energy, and Health) sectors from Jordan were
 Matched with technologies from Spain and Italy

17-10-2023

CODE	NEED	ADMINISTR ATION	COUNTRY	MAIN SECTOR S MED	TECNOLOGY	INSTITUTE	COUNTRY
N089	Study to reduce water loss in dams and aqueducts	Ministry of Water & Irrigation	JORDAN	Water	Drought warning system in underground aquifers. 2. Water Planting and Harvesting, a Nature-Based Ecohydrological Solution for Water Management. 3.Methodology for the assessment of groundwater resources		SPAIN
N129	Saving household energy consumption	Ministry of Energy and Mineral Resources	JORDAN	Energy	Spatial Data Analysis Model for the reduction of energy demand on an urban scale	CSIC	SPAIN
N143	Expansion of the Early Breast Cancer Detection Program	Energy and Minerals Regulatory Commission	JORDAN	Health	Method for selecting a panel of biomarkers and a parameter vector useful in predicting a likelihood of long-term survival of breast cancer in a breast cancer patient. 2. Method for creating a coherent voting network useful in predicting a likelihood of long-term survival of breast cancer in a breast cancer patient	CNR	ITALY

PPI PILOTS' OPPORTUNITIES











- Mature opportunities from the precompetitive analysis.
- Objective: Design of pilot Public Procurement of Innovation opportunities in the framework of the PPI4MED project.
 - Elaboration of the bidding strategy.
 - Defining the NRC-Buyer type agreement for implementing the PPI4MED model.
 - Legal feasibility to develop PPI with CURRENT technology.

WP6: INNOVATION PROCUREMENT PILOTS **STATUS IN JORDAN**











- The implementation of PPI Pilot WP6 requires signing agreements with public procures to adopt the PPI Model into their current R & D funding Model.
- Two Public procures were identified through the living lab meetings and precompetitive analysis as potential PPI, the Ministry of Higher Education (Scientific Research & Innovation Support fund) and National Agriculture Research center.













PPI PILOT I: NATIONAL AGRICULTURE RESEARCH CENTER (NARC)



PPI4MED







- An Agreement was signed on 10/9/2023 for PPI Pilot Development.
- Study and Review the National Challenges in Agriculture sector as a result from the pre-competitive analysis
- Selection of Two Challenges and Preliminary Market Consultation (PMC) document.
 - Challenge I: Innovative methods for early detection of the red date palm weevil
 - Challenge II: Ensuring the quality and traceability of organic agricultural products.
- NCRD on Behalf of NARC published a National call for PMC 8/10/2023
- Mapping and Meeting companies capable of submitting responses to the PMC 10/10/2023
- Analysis of Responses report, 2 solutions were received for each challenge
- Road Map and Tendering Strategy document.27/10/2023.



PPI PILOT II: SCIENTIFIC RESEARCH & INNOVATION SUPPORT FUND (SRISF)









- PPI4MED
- An Agreement was signed on 14/9/2023 for PPI Pilot Development.
- Study and Review the National Challenges in Water and Health sectors as a result from the pre-competitive analysis
- Selection of Two Challenges and Preliminary Market Consultation (PMC) document.
 - Challenge III: Dam water management
 - Challenge IV: Innovative methods for cancer
- NCRD on Behalf of SRISF published a National call for PMC 8/10/2023
- Mapping and Meeting companies capable of submitting responses to the PMC 9/10/2023
- Analysis of Responses report, 2 solutions were received for each challenge
- Road Map and Tendering Strategy document.27/10/2023.



PPI PILOT DEVELOPMENT RESULTS EVENT 29-10-2023











- NCRD organized PPI Pilot Development Results Event at the National Agriculture Research center (NARC) on Sunday 29-10-2023. 50 Participants (25 public procurers Buyers and 25 Seller) attended the event.
- Project results were presented, PPI Pilots and White paper.







INNOVATION PROCUREMENT PILOTS **DOCUMENTS**











- Analysis of Responses report
- Methodological Guide Pilots
- Road Map and Tendering Strategy documents.























PRELIMINARY MARKET CONSULTATION (PMC) UNDER THE PPI4MED PROIECT

CALL DOCUMENT

1. INFORMATION OF THE CONTRACTING AUTHORITY AND THE PRELIMINARY MARKET CONSULTATION

1.1 CONTRACTING AUTHORITY

This Preliminary Market Consultation (PMC) will be carried out by the National Center for Research and Development (NCRD) on behalf of the National Agriculture Research Center (NARC) and the Scientific Research and Innovation Fund (SRIF). Both the NARC and the SRIF have directly participated in this consultation by defining and identifying public challenges and needs. If needed, their members will offer technical assistance to the NCRD during the PMC process.

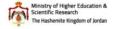
1.2. PRELIMINARY MARKET CONSULTATION PURPOSE

The purpose of this preliminary market consultation is to identify and gather information on innovative solutions that could potentially address the public challenges and needs described in Annex II. These challenges and needs have been identified within the framework of the execution of various public services and their resolution is expected improve the efficiency and capabilities of the Jordanian public sector.

In this sense, the information obtained through this PMC may be used for the development of Innovation Procurement tenders through which the suitable innovative solutions could be developed or acquired.

This Preliminary Market Consultation will be carried out within the framework of the PPI4MED project. PPI4MED is a project that aims to transfer the R&D results from





PRELIMINARY MARKET CONSULTATION (PMC) UNDER THE PPI4MED

ANALISYS OF RESPONSES

1. INTRODUCTION

On the 10th of October 2023 the jordan National Center for Research and Development (NCRD) launched a Preliminary Market Consultation (PMC) on behalf of the National Agriculture Research Center (NARC) and the Scientific Research and Innovation Fund

The purpose of this PMC was to identify and gather information on innovative solutions that could potentially address the public challenges and needs in many different areas, such as: health, agriculture, forest management and water. These challenges had been identified in close cooperation between NCRD, NARC and SRIF.

The Preliminary Market Consultation is being carried out within the framework of the PPI4MED project. PPI4MED is a project that aims to transfer the R&D results from National Research Centers (NRCs) in five Mediterranean countries to society through Innovation Procurement, to boost the commercialization of research results from public research institutions through Innovation Procurement programs and projects, as well as private-public commercialization partnerships.

2. CHALLENGES

The purpose of this PMC is to gather the necessary information for a subsequent Innovation Procurement tender regarding the following challenges:

. Challenge I: Innovative methods for early detection of the red date palm weevil.





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TENDER STRATEGY FOR NARC AND SRISE'S PILOTS MANAGED BY

The purpose of this tendering strategy is to define the main elements, decisions and alternatives that structure the tendering procedure in order to maximise its impacts.

Depending on the definition of the subject matter of the contract, this file may correspond to a supply or service contract

Γ		DECISION
1	SERVICE CONTRACT	SUPPLY GOODS CONTRACT

Modality of public procurement of innovation.

An innovation partnership procedure could also be implemented, but it is recommended for solutions with a technological maturity lower than that of the technology covered by this

	DECISION
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The determination of the tendering procedure should be made on the basis of the following

- Degree of technological maturity: the current state of the identified technology, according to PMC. TRL allows the application of specific procedure, timeline, etc.
- Timeline for the execution of the contract.
- Deadlines: the choice of a procedure involves an extensive call for tenders in which the dialogue phase with the bidders, depending on its structure and scope, may extend over several months. The contracting authority should consider its expectations for award and completion deadlines.
- Degree of definition of technical requirements:
 - o Procedure with negotiation:
 - · Precise and precise definition by the contracting authority of the requirements and of the technical and functional specifications; It is recognized, however, that negotiation with bidders on these specifications can enrich the outcome of the tender
 - . Offers perfectly adjusted to the requirements of the specifications.



















THANK YOU FOR YOUR ATTENTION!

Eng.Maha Aqra

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