## Catalogue of Early Demand: Future Projects of Public Procurement for Innovation

Smart City Expo – Agora North Wednesday, November 20, 2019

9.30-10.30











## Agenda:

09.30 – 09.35 Public Procurement of Innovation - ACCIÓ

Ana Simon, ACCIÓ Agency

09.35 – 10.05 Catalogue of Early Demand: Future Projects

Project 1: A platform enabling public service operators to combine publication of open data with access to and control by citizens of their related personal data, Grenoble-Alpes Métropole, Claus Habfast

Project 2: Connected Vehicle Technology Sandbox, City of Tampa, Vik Bhide

Project 3: Terrassa, A resilient city, City of Terrassa, Laura Sarrion

Project 4: Pro-active identification of cockroach plagues / City of Terrassa, Laura Sarrion

**Project 5:** Sustainable Urban Environment that incorporates Smart initiatives in the fields of Urban Environment, Waste Management, Energy and Water / City of Parets del Vallès, Carlos Garrigues

Project 6: Immersive VR Memory Café for Dementia Patients / Oxfordshire Country Council, Deirdre Wallace

Project 7: New model of standardization of assistance processes / Cons.Corp. Sanit. Parc Taulí, Anna Ullastres

Project 8: Intestinal Perfusion Monitoring system during colorectal Surgery / C.C.S. Parc Taulí, Anna Ullastres

Project 9: Design Health strategy to promote healthy habits, improve maternal health, ensure optimum child development and reduce child obesity / Consorci Sanitari de Terrassa, Ramon Roca

development and reduce child obesity / Consorci Sanitari de Terrassa, Ramon Roca

Project 10: Integrated solution to improve living conditions elderly people at home including health promotion and healthy habits coach / Consorci Sanitari de Terrassa, Ramon Roca

Project 11: A rapid diagnostic tests to improve the clinical pathways associated with Ventilated Acquired Pneumonia (VAP) / AQUAS Agency, Jean Patrick Mathieu

10.05 – 10.15 Future PPI on Urban Waste

Teresa Guerrero, Waste Agency of Catalonia

10.15 – 10:25 Guide of PPI

Anna Ciutat, Director general of Public Procurement

10.25 – 10.30 Closing









## **ACCIÓ Web: Public Procurement of Innovation**



Contact with ACCIÓ: Anna Monistrol amonistrol@gencat.cat



## Troba el millor comprador per a la teva innovació

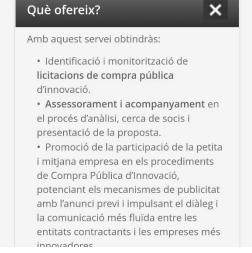
La Compra pública d'innovació és una actuació administrativa de foment de la innovació, orientada a potenciar el desenvolupament de solucions innovadores des de la demanda, mitjançant l'instrument de la compra pública.

Si ets una empresa innovadora que pot aportar noves solucions al mercat i vols optar a les licitacions públiques obertes, sol·licita aquest servei! T'ajudarem a trobar les licitacions on pots tenir més oportunitats, t'assessorarem en la presentació de la proposta i et facilitarem la recerca de socis per dur-la a terme.

No ho dubtis més i consulta les licitacions obertes en compra pública d'innovació!

Consulta totes les licitacions obertes de compra pública d'innovació







#### Documents clau

JAZZTEL 46.11 M M A V O ···

- · Guia de compra pública en innovació
- Licitacions de Compra pública d'innovació obertes









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## Catalogue of Early Demand

Claus Habfast, Grenoble-Alpes Métropole Vik Bhide, City of Tampa Laura Sarrion, City of Terrassa Carlos Garrigues, City of Parets del Vallès Deirdre Wallace, Oxfordshire Country Council Anna Ullastres, Consorci Corporació Sanitària Parc Taulí Ramon Roca, Consorci Sanitari de Terrassa Jean Patrick Mathieu, AQUAS Agency









1

## A platform enabling public service operators to combine publication of open data with access to and control by citizens of their related personal data



#### **Coordinator:**

#### **Grenoble-Alpes Métropole**



#### **CHALLENGE**

French law requires cities larger than 3500 inhabitants to make available their "territorial data"

in an anonymous open data format.

- 1. Collection and extraction of open data
- 2. "Territorial data" shall be compiled for each citizen into a personal account
- 3. Citizens should be able to authorize and revoke at any moment that specific personal data

#### **EXPECTED RESULTS**

- Higher impact at lower cost: increase publication of open data from smaller cities by pooling resources with a bigger nearby city.
- · Help to build up trust into a city administrations' role as curator of citizens' personal data
- Foster local non-profit use of citizen

TERM TO LAUNCH THE TENDER



#### INTERESTED IN MAKING A PUBLIC BUYER CONSORTIUM



TYPE OF PUBLIC PROCUREMENT INNOVATION





data.

metropolegrenoble.fr







#### **Connected Vehicle Technology Sandbox**



#### **Coordinator:**

#### City of Tampa, FL, USA





Image Source: Pixabay

#### CHALLENGE

 Using cellular networks (4G/5G) based applications to connect vehicles, transit, infrastructure and pedestrians (V2X) to improve safety and multimodal mobility.

#### **EXPECTED RESULTS**

- Transit bus/streetcar efficiency: Transit signal priority
- Pedestrian safety: Pedestrian in roadway/intersection warning
- Crash avoidance: Forward collision warnings, intersection movement assist, queue ahead warnings
- Secure V2X solution

#### TERM TO LAUNCH THE TENDER

< 1 year</pre> <2 years

>2 years

#### TYPE OF PUBLIC PROCUREMENT INNOVATION

PCP

PPI

#### INTERESTED IN MAKING A PUBLIC BUYER CONSORTIUM

YES

NO

INTEREST IN MARKET SITUATION



NO









## **TERRASSA: A RESILIENT CITY**



#### **Coordinator:**

#### **Terrassa City Council**



Image Source: Pixabay



#### **CHALLENGE**

To have mechanisms that facilitate risk identification, simulation of effects and proposal of actions on that way the municipal services can be connected to prevent, mitigate and correct the impacts. Main priorities;

- 1. Risk of fire in the North-West area
- 2. Floods in the Riera de Palau
- 3. Vulnerable groups of people

#### **EXPECTED RESULTS**

- To acquire TIC innovative systems to facilitate the flow of identification
- To achieve a Resilient City
- Development of **Innovation Public Procurement** processes

#### TERM TO LAUNCH THE TENDER



TYPE OF PUBLIC PROCUREMENT INNOVATION



#### INTERESTED IN MAKING A PUBLIC BUYER CONSORTIUM













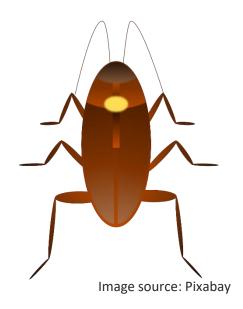


#### PRO-ACTIVE IDENTIFICATION OF COCKROACH PLAGUES



#### **Coordinator:**

#### **Terrassa City Council**





#### CHALLENGE

To solve the problem of cockroach plagues.

The elimination of the plague from its detection takes an approximate duration of one week, which decisively affects the quality of life of the citizenship and the image of the city.

#### **EXPECTED RESULTS**

- To identify the early period of insects before their appearance on public roads and activate the appropriate action measures.
- The acquisition of innovative systems that facilitate this early identification of plagues which are also easily exportable to other cities.

#### TERM TO LAUNCH THE TENDER



TYPE OF PUBLIC PROCUREMENT INNOVATION



#### INTERESTED IN MAKING A PUBLIC BUYER CONSORTIUM













## **5** Motorization of public services



#### **Coordinator:**

Ajuntament de Parets del Vallès





#### **CHALLENGE**

Oriented to promote a sustainable urban environment, which incorporates Smart initiatives in the sub-areas of Sustainable Urban Environment that incorporates Smart initiatives in the fields of Urban Environment, Waste Management, energy and Water.

#### **EXPECTED RESULTS**

- Motorization of public services water, street lighting, electric energy meters, garbage collection containers.
- City services, traffic control, traffic lights, information panels at bus stops.

#### TERM TO LAUNCH THE TENDER

< 1 year | <2 years | >2 years

#### TYPE OF PUBLIC PROCUREMENT INNOVATION

PCP PPI

#### INTERESTED IN MAKING A PUBLIC BUYER CONSORTIUM













## **6** Immersive VR Memory Café for Dementia Patients



#### **Coordinator:**

## iHUB Oxfordshire Country Council





#### **CHALLENGE**

The number of people with dementia globally is estimated to be 50 million and is projected to nearly triple by 2050. There is recognized need to support dementia patients in improving and retaining their cognitive ability.

Accessibility of services designed to this end vary and there is a recognized need to deliver reminiscence therapies via technology.

#### **EXPECTED RESULTS**

- Reducing pressure on statutory services: delivering psychosocial interventions in the home environment via technology will reduce pressure on the NHS and create efficiency savings.
- Health & Wellbeing: Reminiscence therapies act as a positive driver for people living with dementia.
- **Transport**: Reducing Carbon emissions by eliminating the need for patient transport
- Workforce: releasing NHS capacity

#### **TERM TO LAUNCH THE TENDER**

< 1 year | <2 years | >2 years

TYPE OF PUBLIC PROCUREMENT INNOVATION

PCP PPI

#### INTERESTED IN MAKING A PUBLIC BUYER CONSORTIUM











## 7 New Model of standardization of assistance processes



#### **Coordinator:**

Consorci Corporació Sanitària de Parc Taulí







Image Source: Freepik

#### **CHALLENGE**

Clinical pathways are tools to standardize care process management. Current processes are highly variable and it is common to use them only for recording nursing activity.

Our hospital developed the Multidisciplinary standardization on Assistance Processes, However we are currently using it on paper, making data storage, manage, and analysis difficult.

#### **EXPECTED RESULTS**

A digital solution to keep track of all clinical processes in our hospital. A solution that facilitates the integration of all professionals involved in patient assistance.

- **Impact on professionals:** better planning for clinical processes based on scientific evidence. Increase of security during patient's assistance. Support in decision making.
- Impact on patients: better assistance
- Impact on hospitals: Decrease of unnecessary hospital stays, detailed planning, easy to obtain data for analysis.

TERM TO LAUNCH THE TENDER

< 1 year | <2 years | >2 years

TYPE OF PUBLIC PROCUREMENT INNOVATION

PCP PPI

INTERESTED IN MAKING A PUBLIC BUYER CONSORTIUM











## **8** Intestinal Perfusion Monitoring system During Colorectal Surgery

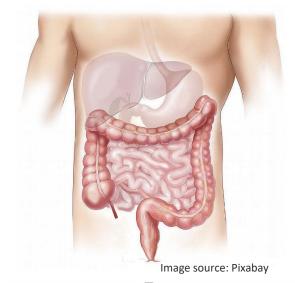


#### **Coordinator:**

Consorci Corporació Sanitària de Parc Taulí







#### **CHALLENGE**

There are a high number of suture dehiscence mainly due to poor vascularization of anastomosis during colorectal surgery.

Therefore there is the need to develop a method, objective, reliable, and effective, for the evaluation of the intestinal vascularization, allowing the identification of those areas with the least probability of suffering a suture outage after an anastomosis

#### **EXPECTED RESULTS**

- Increasing the patient quality of life
- Reduction of expenses associated with suture dehiscence
- Improvement of the standardization of the procedure, and easiness of decision-making by the surgeon.

**TERM TO LAUNCH THE TENDER** 

< 1 year | <2 years | >2 years

TYPE OF PUBLIC PROCUREMENT INNOVATION

PCP PPI

INTERESTED IN MAKING A PUBLIC BUYER CONSORTIUM











9

## Design Health strategy to promote healthy habits, improve maternal health, ensure optimum child development and reduce child obesity.



#### **Coordinator**:

#### Consorci Sanitari de Terrassa



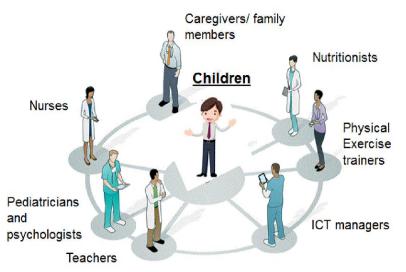


Image Source: Consorci Sanitari de Terrassa

#### CHALLENGE

Prevention and early intervention to prevent successfully the obesity.

Identifying mothers and children at risk of being obese and the determinants that have caused this condition to establish what type of intervention should be performed in each individual or group.

#### **EXPECTED RESULTS**

Providing a strong evidence of successful approaches for bridging the 'knowledge-do' gap in improving maternal and child health.

Obtaining successful engagements and adherence to the health program and promote healthy habits and education.

To create an IT lifelong learning platform for self-engagement. To increase the overall healthy habits, making them self-aware of the benefits of a healthy lifestyle.

#### **TERM TO LAUNCH THE TENDER**

< 1 year | <2 years | >2 years

#### TYPE OF PUBLIC PROCUREMENT INNOVATION

PCP PPI

#### INTERESTED IN MAKING A PUBLIC BUYER CONSORTIUM











## 10 Integrated solution to improve living conditions for elderly people at home, including health promotion and healthy habits coach.



#### **Coordinator:**

#### Consorci Sanitari de Terrassa





Image source: Pixabay

#### **CHALLENGE**

To set up an universal and versatile platform capable to gather information from different kinds of Medical devices at home to monitor patients. Transmit information in a secure way.

The platform has to give specific feedback to patients including information of their indications and their medication.

#### **EXPECTED RESULTS**

Impact on the improvement of the well-being and QoL of these patients

Impact on prompt intervention when a medicals alert arise.

Social impact having elderly with multi chronic disease well monitored and their relatives and carers well informed on their status.

Impact on the way of care are provided by health care organizations patient-centred and focusing on prevention, early detection and coaching.

#### **TERM TO LAUNCH THE TENDER**

< 1 year | <2 years | >2 years

#### TYPE OF PUBLIC PROCUREMENT INNOVATION

PCP PPI

#### INTERESTED IN MAKING A PUBLIC BUYER CONSORTIUM











## 11

## A rapid diagnostic tests to improve the clinical pathways associated with Ventilated Acquired Pneumonia (VAP)



#### **Coordinator:**

AQUAS: Agència de Qualitat i Avaluació Sanitàries de Catalunya



Agència de Qualitat i Avaluació Sanitàries de Catalunya



Image Source: Pixabay

#### **CHALLENGE**

- The diagnosis of Ventilator-Associated Pneumonia (VAP) is a challenge because the affected tissue is not accessible to sampling. A VAP diagnosis based on clinical symptoms only might lead to overdiagnosis and excessive antibiotic treatment. An early detection of VAP can enhance the appropriate management of the disease, reduce morbidity and mortality.
- EURIPHI project defined the clinical decision tree, focusing on detection of colonization and antibiotic stewardship of VAP.
- We identified several needs; such as the absence of reliable epidemiological data and useful prognostic biomarkers.

#### **EXPECTED RESULTS**

• A rapid test that can rule in or out infection, diagnose a syndrome (sepsis, pneumonia), or identify a specific pathogen or resistance determinant should be targeted as this will improve patient care and reduce healthcare costs.

#### **TERM TO LAUNCH THE TENDER**

< 1 year | <2 years | >2 years

TYPE OF PUBLIC PROCUREMENT INNOVATION

PCP PPI

#### INTERESTED IN MAKING A PUBLIC BUYER CONSORTIUM

YES NO











# Future PPI about collection of urban waste

Teresa Guerrero, Agència de Residus de Catalunya













# FUTUR PUBLIC PROCUREMENT OF INNOVATION (PPI) ON URBAN WASTE

**SMART CITY EXPO** 

Barcelona, 20 November 2019

Teresa Guerrero Waste Agency of Catalonia



## Waste Agency of Catalonia Agència de Residus de Catalunya

#### **WHO WE ARE**

The public authority in waste management of the Government of Catalonia (Spain)



#### http://www.arc.cat

General Plan

Statistics and monitoring

Prevention

7,5 million inhabitants

Awareness creation

Economic & fiscal incentives

Separate collection promotion

Nearly 1000 municipalities, doing waste separate collection



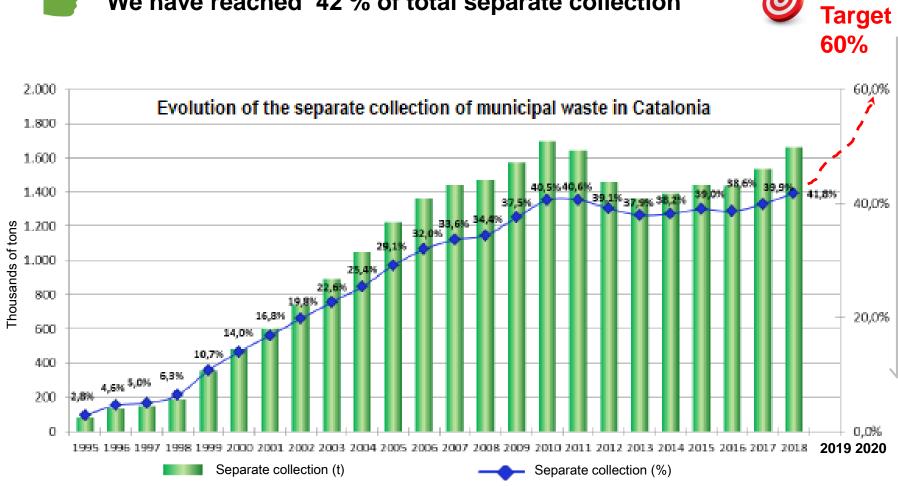


### **Municipal Waste in Catalonia**

New



We have reached 42 % of total separate collection





We have been around the same level for 5 years



## Main objectives for 2025





Decrease the generation of municipal, industrial and construction waste by at least 15% by weight compared to 2010







## Main objectives for 2025





Achieve a separate collection rate of 60% for municipal waste







## Main objectives for 2025



## Improve the quality of waste collected:



Biowaste < 10% impurities





Packaging < 25% impurities



To increase the quality and value of recovered materials



We know what we want to achieve





but we don't know exactly how to do it





This is a good opportunity to launch a PPI process!



## PPI budget and main steps

Budget: 20.000.000 €, 50% from

European Regional Development Fund



Challenges identification

Open market consultation

Pilots definition



Grant publication (4/11/2019)



## Innovation strategy for a better separate collection

1st challenge

Results in small municipalities

More populated municipalities

2nd challenge





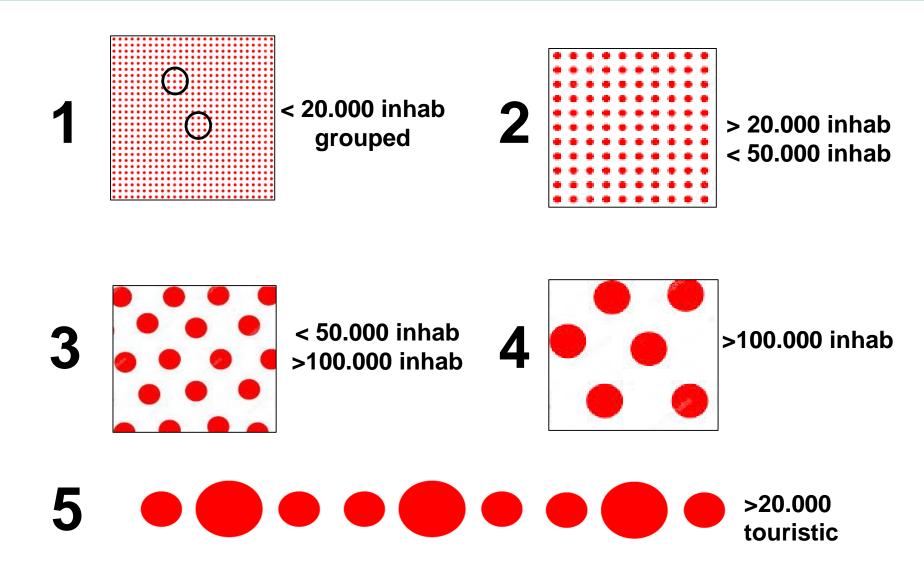
Assimilated industrial waste

3rd challenge



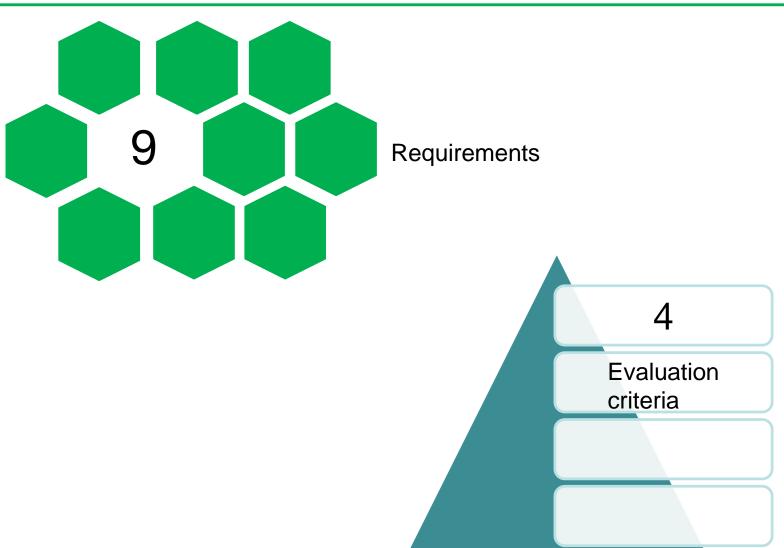
Monitoring System
Transparent & accessible

## **Pilot projects classification**





## **Pilot projects specification**





## 9 requirements

## Citizens & comercial activities









## Separate collection

Targets & actions





## 9 requirements





Pay
As You Throw
PAYT































## 4 evaluation criteria

## Scope



**Budget** 



**Objectives** 



**Design** 





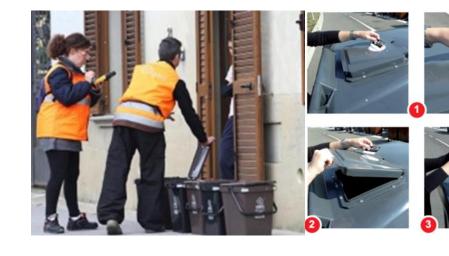
## **Innovation**

#### **Technology**

#### Collaboration

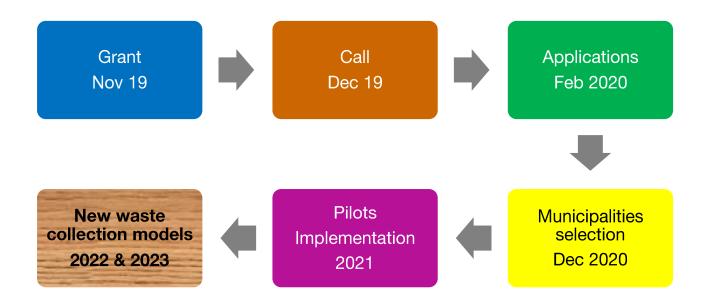






- Public administration and private sector
- Big companies and SMEs
- Technology and TICs suppliers
- Environmental and communication consultancies
- Social entities and citizens

## **Next steps**



http://residus.gencat.cat/ca/actualitat/noticies/detall/Ajudes-FEDER





## **Thanks!**

Teresa Guerrero
Waste Agency of Catalonia
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# New Guide of Public Procurement of Innovation

Anna Ciutat, Oficina de Contractació Pública de la Generalitat











Generalitat de Catalunya
Departament de la Vicepresidència
i d'Economia i Hisenda
Direcció General

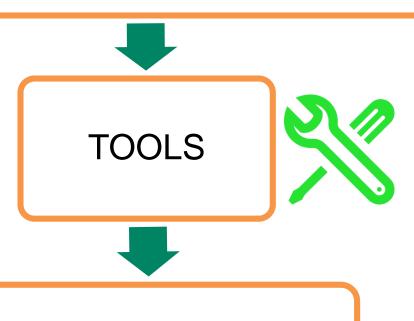
de Contractació Pública

## **GUIDE ON PUBLIC PROCUREMENT OF INNOVATION**

## WHY IS AN INNOVATION GUIDE NECESSARY?



#### TO PROMOTE PUBLIC PROCUREMENT OF INNOVATION



- Public buyers
- Suppliers

## CHANGE IN MENTALITY





# PUBLIC AUTHORITIES

- Identify needs, not products
- Interact with the market
- Be a driving force for innovation



## SUPPLIERS

- Learn how to exchange information with public buyers
- Don't be afraid of giving information
- Confidence in public administration

## WHAT IS PUBLIC PROCUREMENT OF INNOVATION?





#### PROMOTION OF BUSINESS INNOVATION



IMPROVEMENT OF PUBLIC SERVICES



CHANGE IN MANAGEMENT SYSTEM



**DEFINE THE NEEDS** 



NEW PRODUCTS NEW WAYS
OF WORKING



IT'S NOT ONLY TECHONOGY

#### WHY BUYING INNOVATION?





#### **NEW NECESSITIES**



LIMITED RESOURCES



MORE SOCIAL DEMAND



MORE QUALITY WITH LESS COSTS



RESPONSE TO FUTURE CHALLENGES



**MODERNIZE** 

## WHEN AND HOW BUY INNOVATION?



#### WHEN?

- We need a solution not available in the market
- The current contract does not completely satisfy the needs

#### HOW?

- Diagnosing needs, and improvement potential
- Opening up to change
- Planning and providing information to the market

#### HOW TO BUY INNOVATION?







#### MARKET RESEARCH

Preliminary market consultations

Pre-commercial Public Procurement

#### FORMAL PROCUREMENT

Public Procurement of Innovation.

Different procedures (ordinary and specific)

#### MARKET RESEARCH METHODS



#### Preliminary market consultations



I'm not familiar with the market and want to know if there are any suppliers



need help with the technical specifications



Keep confidentiality respecting transparency and equality of treatment



Future providing must be open tender

## Pre-commercial public procurement



The product doesn't exist



Research and development



No commercialization. Shared results



Exploration, design and development

#### PUBLIC PROCUREMENT OF INNOVATION. FORMAL PROCUREMENT



## NOT DEVELOPED PRODUCTS. ADAPTATION OF EXISTING PRODUCTS

#### **PROCEDURES**

Competitive procedure with negotiation

Competitive dialogue Innovation partnership

Open and restricted procedure

#### **SUBJECT-MATTER**

Must include R&D

Must Identify a necessity

Functional requirements

Performance indicators

#### SPECIFIC PROCUREMENT PROCEDURES (I)



Competitive procedure with negotiation

- The product or service exists.
- It requires adaptation or improvement

Competitive dialogue

- No technical prescriptions
- Each bidder presents his solution
- Procedure for stages

**Innovation** partnership

- R&D&I COMPULSORY
- 2 STAGES:
- Research (a contract for each bidder)
- Procurement (The best/s of First Stage)
- Pay for the research
- · Long procedure. Planning.

#### SPECIFIC PROCUREMENT PROCEDURES (II)



Competitive procedure with negotiation

- + Market knowledge
- - Time
- · Research

Competitive dialogue

- Market knowledge
- + Time
- = Research

Innovation partnership

- Market knowledge
- + Time
- · + Research

## OPEN AND RESTRICTED PROCEDURES



#### **SPECIFICATIONS**

- Functional requirements
- What I need NOT what I want
- Enabling alternative solutions



#### CRITERIA

- Not only price
- Cost and life-cycle
- Quality
- Functional



#### TECHNICAL SPECIFICATIONS

- Define needs for functionalities or performances.
- Specify the aims to achieve
- Minimum descriptive of the solution



#### CONTRACT PERFORMANCE

- Establish quality and performance indicators
- Exit clauses. Provide resolution or modifications
- Value engineering. Foreseeing allowances or sharing savings

#### UNSOLICITED PROPOSALS



#### A COMPANY PROPOSES A PRODUCT OR A SOLUTION

Preliminary performance to identify and to plan needs.

**DON'T BUY** 

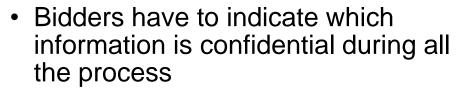
Value the interest of the product.

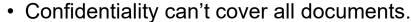
Advertising (Preliminary Market Consultation)

Avoid advantages for the proposing company

#### **CONFIDENTIALITY**







- Procurement documents must indicate what cannot be confidential.
- An excess of confidentiality limits free market participation



- The whole product or partially is NOT generally known nor easily accessible
- It has a business value
- Reasonable measures of the owner to keep it in secret.





## INTELLECTUAL PROPERTY RIGHTS



## Change the clauses of intellectual property rights

Establish conditions for sharing rights

The exploitation of rights can be a part of the price

Public authorities must reserve right of use



https://contractacio.gencat.cat/ca/inici/

dgcp.economia@gencat.cat

ACCRA BERLÍN BOGOTÀ BOMBAI BRUSSEL·LES BUENOS AIRES CASABLANCA COPENHAGUEN DUBAI HONG KONG INSTANBUL JOHANNESBURG LIMA LONDRES MÈXIC DF MIAMI MILÀ MONT-REAL MOSCOU NOVA YORK PARÍS PEQUÍN SANTIAGO DE XILE SAO PAULO SEÜL SYDNEY SILICON VALLEY SINGAPUR STUTTGART TEL AVIV TÒQUIO VARSÒVIA WASHINGTON DC XANGAI



## Thank you!

## International Tenders in Public Procurement of Innovation

Smart City Expo – Agora North Wednesday, November 20, 2019

15.45 - 16.45

#### **Contact with ACCIÓ:**

#### **Anna Monistrol**

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