

PROCURING INNOVATIVE CLIMATE CHANGE SERVICES



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PROTECT • Toolkit of resources

Introduction-

PROTECT aims to utilise innovation procurement to unlock the potential of the climate services' market, facilitating urgent climate adaptation and mitigation efforts. The project focuses on enhancing the capabilities of public and private organisations in understanding climate change, environmental and Earth Observation (EO), and innovation procurement.

Efforts concentrate on five application domains: Energy & Utilities, Sustainable Urban Communities, Agriculture, Forestry, and other Land use, Marine and Coastal Environments and Civil Security and Protection.

Key achievements include the **PROTECT Toolkit of resources** aimed at empowering stakeholders with knowledge on climate adaptation and mitigation $\frac{1}{2}$, EO $\frac{1}{2}$, and innovation procurement policies, strategies and action plans' implementation, as well as on the development of new and innovative EO-based climate services $\frac{1}{2}$.

PROTECT activities have yielded a wealth of valuable resources, such as webinars and recording , reports , and relevant website links . Yet, the challenge lies in effectively leveraging these resources to ensure that pertinent experts and users can identify at first glance content relevant to their queries. This Toolkit offers a list of selected resources, using pictograms to guide the reader, public buyers, and public authorities and EO and climate services providers.



(4

Awareness raising





Analysing climate challenges in European regions

Snapshot mapping of the main climate issues at regional level in several European Member States and across PROTECT's five application domains, with a focus on adaptation and resilience challenges.

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#2

Cross-analysing climate services and barriers into potential Pre Commercial Procurement topics

The document cross-analyses the outcomes of several other tasks (focused on climate legislation, perceived regional climate risks, national PCP policies and others) to recommend possible topics for future PCPs.

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#3

Summary of outcomes and conclusion of the PROTECT cross-analysis

A summary of the outcomes and conclusion of the cross-analysis conducted to identify drivers and barriers of the public demand for EO-based climate services

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Innovation Procurement legal framework in 11 EU Member States

This factsheet summarises the main aspects of the legal framework regarding innovation procurement in 11 EU Member States and focuses on the regulation of Pre-Commercial Procurement (PCP), market consultations, subcontracting and Intellectual Property Rights (IPR) allocation.

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#5

Open Market Consultation (OMC) document

This document describes the objectives and rules applicable to the Open Market Consultation (OMC) of the PROTECT project regarding 4 challenges, namely: Floods, Fire, Water resilience, and Sustainable Infrastructure, as described in this OMC document and annexes.

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PROTECT RESOURCE



#6

Climate change adaptation and mitigation

A one-pager on the essence of climate change adaptation and mitigation, proposing also additional sources.

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Earth Observation services' contribution to climate change adaptation and mitigation

A one-pager on the essence of the contribution of Earth Observation services to climate change adaptation and mitigation, proposing also additional sources.

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PROTECT RESOURCE



#8

Preparing a Pre-Commercial Procurement-Needs: Identifying and Assessing Needs with Value Methodologies

Guide on the use of value methodologies to identify needs in a Pre-Commercial Procurement (PCP) process.

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#9

Energy and utilities

This article outlines Energy & Utilities as the first domain, covering sector challenges, market solutions, emerging technologies, and future perspectives on climate services leveraging Earth Observation (EO).

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PROTECT Policy briefs

The 11 PROTECT Policy Briefs offer concise, practical information on project-relevant topics for policy-makers and implementors, facilitating their understanding and engagement.

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PROTECT taxonomy

The PROTECT taxonomy of Earth Observation (EO)-based climate services in the five application domains, aims to allow both service providers and procurers to match their offer/demand with one or more categories of the resulting methodology.

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Relevant European policies for PROTECT

This document presents existing EU legislations and policies in the five PROTECT domains where there is an emerging demand and potential for Innovation Procurement including Earth Observation (EO) data.

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Existing climate risk assessment frameworks

This document reviews European Climate Risk Assessment literature to identify principles for CLIMAAX's regional climate risk assessment framework for use by regional administrations.

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Examining Policy and Governance Implications of Regional and Local Climate Change Trends

The Cyprus Energy Agency report outlines current climate change efforts, future plans, and ways stakeholders like local authorities and citizens can engage and contribute to addressing the challenge.

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Buying green! A handbook on green public procurement

This handbook is designed to help public authorities successfully plan and implement GPP. It explains the possibilities offered by European Union law in a practical way, and looks at simple and effective approaches to greening contracts.

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Good environmental practices guide for the Creative Europe Programme

This guide developed by the European Commission outlines good environmental practices for Creative Europe Programme beneficiaries, aiding project application and implementation, including procurement rules and best practices.

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#17

Earth Observation & Global navigation satellite systems Market Report 2024

The Earth Observation & Global navigation satellite systems market report offers comprehensive insights on the global market, updated every two years. It combines market and application insights, covering multiple segments for EO and GNSS technologies, essential for users.

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#18

Procurement in times of crises

Overview of the procedures to be used in situation of urgency and extreme urgency. By the World Bank.

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10 things to consider when preparing an innovation procurement

Insights into 10 recommendations to implement innovation procurement.

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#20

Resource Database on Climate Services

The European Climate Adaptation Platform Climate-ADAPT is a partnership between the European Commission and the European Environment Agency. It offers a database of material and particularly Climate Services examples, further filtered by adaptation sector.

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#21

Assessing Shared Needs and Prioritisation for Innovation Procurement

The document focuses on step 1 of the European Assistance For Innovation Procurement (EAFIP) methodology: needs identification and assessment. It details 3 techniques: voice of the customer, WIBGIF (wouldn't it be great if...), and functional analysis.

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European Assistance for Innovation Procurement step-by-step methodology

The document summarises the step-by-step methodology developed in the context of the European Assistance for Innovation Procurement (EAFIP). It provides an overview on how to prepare a procurement, implement a tender and manage a contract.

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#23

Urban Agenda Partnership on Innovative and Responsible Public Procurement

E-learning module of the Urban Agenda Partnership on Innovative and Responsible Public Procurement.

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#24

Emission free ferries in Norway

This case presents the example of a Pre-Commercial Procurement (PCP) to develop emission free ferries in Norway.

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Speeding up innovation

This case example shows how a Pre-Commercial Procurement (PCP) could speed up the robot disinfection technology that was used in Covid times.

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#26

OECD's Framework for Public Sector Innovation

The OECD's Framework for Public Sector Innovation offers guiding principles and tools to foster innovation in government, improve service delivery, and address societal challenges effectively.

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EXTERNAL RESOURCE



#27

The United Nations Environment Program (UNEP) Innovation Policy for a Green Economy

Innovation policy plays a crucial role in fostering the transition to a green economy, where economic growth and environmental sustainability go hand in hand. The United Nations Environment Program (UNEP) recognises the importance of innovation in achieving sustainable development goals.

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What is innovation procurement?

The document explains briefly the nature of innovation procurement delving into precommercial procurement (PCP) and public procurement of innovative solutions (PPI). **TARGET AUDIENCES**





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#29

Assessing Climate Services Together

Emphasising early economic evaluation, the CLARA project proposes a 'maximum potential value' benchmark for enhancing 14 climate services, aiding organisational decision-making. Illustrated with renewable energy and water management sector examples, it highlights user engagement benefits.

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Capacity Building





Painpoint workshop on Floods challenge

The painpoint workshops discuss with the PROTECT community of procurers how to overcome potential challenges in preparing a Pre-Commercial Procurement (PCP) in the specific field.

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#31

PROTECT Painpoint workshop on the 'Fires' challenge

The painpoint workshops discuss with the PROTECT community of procurers how to overcome potential challenges in preparing a Pre-Commercial Procurement (PCP) in the specific field.

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PROTECT RESOURCE



#32

PROTECT Painpoint workshop on the 'Water' challenge

The painpoint workshops discuss with the PROTECT community of procurers how to overcome potential challenges in preparing a Pre-Commercial Procurement (PCP) in the specific field.

TARGET AUDIENCES





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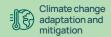


















PROTECT Painpoint workshop on the 'Infrastructure' challenge

The painpoint workshops discuss with the PROTECT community of procurers how to overcome potential challenges in preparing a Pre-Commercial Procurement (PCP) in the specific field.

TARGET AUDIENCES





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#34

Introduction to Innovation Procurement: Pre-Commercial Procurement & Public Procurement of Innovative Solutions explained

The training webinar introduces the topics of Pre-Commercial Procurement and Public Procurement of Innovative Solutions

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PROTECT RESOURCE



#35

Structuring the demand for Climate Services in Fires' Prediction

The last four PROTECT training webinars engaged the community before the Pre-Commercial Procurement call launch, focusing on identified key challenges: Flood mapping and prediction, Climate resilient water solutions, Sustainable and resilient infrastructures, Fires prediction and prevention.

TARGET AUDIENCES





THEMATICS





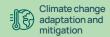


















Exploring Climate Service Scope

The first training webinar of the series on climate services and Earth Observation provided an introduction, addressing: Why care about climate services? What do climate services entail? What is the role of Earth observation data in climate services?

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#37

Matching Climate Services to Climate Targets

The first workshop sets the scene and introduces innovation procurement. Lieve Bos from the European Commission highlights its strategic importance. PROTECT experts covered Public Procurement and Innovation Public Procurement and their legal frameworks.

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PROTECT RESOURCE



#38

Advanced Pre-Commercial Procurement: Venture Capital and Public-Private Innovation

The webinar links Pre-Commercial Procurement with venture capital, covering: Introduction to Innovation Procurement and VC, Gaps in the Innovation Pathway, VC Investment in Innovation Procurement, Benefits/Costs of VC Involvement, Current schemes, observations and future work.

TARGET AUDIENCES



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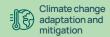


















Public Data Standards for Policymakers and Innovation

Group on Earth Observation (GEO) Data Working Group representatives joined PROTECT to raise awareness about Open Data and standards, sharing best practices and tools. The workshop focuses on open data principles and on the importance of data standardisation for assessing data solution quality.

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Flood Mapping and Prediction for Climate Services

The last four PROTECT webinars engaged the community before the Public-Commercial Procurement call launch, focusing on identified key challenges: Flood mapping/prediction, Climate resilient water solutions, Sustainable/resilient infrastructure, Fires prediction/ prevention.

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Structuring Demand for Climate Services: Resilient Water Solutions

The last four PROTECT webinars engaged the community before the Pre-Commercial Procurement call launch, focusing on identified key challenges: Flood mapping/prediction, Climate resilient water solutions, Sustainable/resilient infrastructure, Fires prediction/ prevention.

TARGET AUDIENCES





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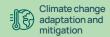


















Structuring Demand for Climate Services: Sustainable Infrastructure in Urban Areas

The last four PROTECT webinars engaged the community before the Pre-Commercial Procurement call launch, focusing on identified key challenges: Flood mapping/prediction, Climate resilient water solutions, Sustainable/resilient infrastructure, Fires prediction/prevention.

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#43

Climate change communication challenges

The video tackles climate change communication challenges, offering visualisation strategies for policymakers. Two experts present on effective practices, highlighting examples to guide informed decision-making.

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EXTERNAL RESOURCE



#44

Introduction to Innovation Procurement (EAFIP Webinar)

This European Assistance for Innovation Procurement 90-minute webinar offers an introduction to Innovation Procurement specially addressed to public procurers who start to explore and apply this instrument.

TARGET AUDIENCES





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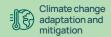


















Construction, Infrastructure Security & Energy Innovations in Information and Communication Technologies (EAFIP Webinar)

This 2-hour workshop showcases procurement cases on construction, infrastructure security & energy innovations in Information and Communication Technologies related projects. The cases address relevant innovations implementing ICT solutions to safeguard infrastructure.

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#46

Opportunities to tackle the COVID-19 Crisis through Innovation Procurement (EAFIP Webinar)

Hosted by experts in innovation procurement of Information and Communication Technologies based solutions, this one-hour webinar provides guidance to public buyers on how to proceed in the short- and middle/long-term periods in procuring the supplies and services required.

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#47

Evaluation and testing: tools and methodologies (EAFIP Webinar)

In this European Assistance for Innovation Procurement 90-minute webinar good practices were discussed regarding evaluation and testing tools and methodologies in the context of Innovation Procurement.

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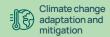


















Climate change: procure greener (EAFIP Webinar)

3-hour workshop on innovation procurement for climate change challenges that focuses on green procurement strategies, EU legislation impact, Implementing sustainable procurement strategies and Criteria for reducing environmental impact.

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EXTERNAL RESOURCE



#49

Commercialisation of innovations to overcome the Valley of Death (EAFIP Webinar)

3-hour workshop on innovation cycle from R&D to commercialisation. Topics include supporting breakthrough technologies to create new markets and overcoming the 'Valley of Death' with alternative funding like Venture Capital in PCP.

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#50

Innovation Procurement: Cybersecurity & dual use (EAFIP Webinar)

4-hour workshop on strategic innovation procurement in cybersecurity and dual use. Topics include ongoing policy initiatives in Europe and practical experiences from interesting case studies.

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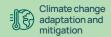


















Lessons Learned from Successful Innovation Procurement Projects (EAFIP Webinar)

3-hour workshop on innovation procurement for climate change challenges that focuses on green procurement strategies, EU legislation impact, Implementing sustainable procurement strategies and Criteria for reducing environmental impact.

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#52

Boosting economic recovery through Innovation Procurement (EAFIP Webinar)

This European Assistance for Innovation Procurement (EAFIP) webinar focuses on success stories of innovation procurement and its use as a toll to boost economic recovery.

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#53

The Management Perspective on Benefits of Innovation Procurement (EAFIP Webinar)

This 90-minute webinar for European public buyers covers: strengthening market relationships, enhancing cooperation with other authorities in the sector, and positive organisational impacts of Innovation Procurement (e.g., HR, culture).

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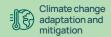


















Automation of public services & Robotics: how public authorities can deal with it (EAFIP Webinar)

This 3-hour workshop delves into Information and Communication Technologies (ICT) procurement for public service automation & robotics. Regulatory considerations for Innovation Procurement projects and Maximising benefits across contract cycles are addressed.

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EXTERNAL RESOURCE



#55

Strengthening EU Strategic Autonomy and Resilience through Innovation Procurement (EAFIP Webinar)

4-hour workshop on innovation procurement's role in strengthening Europe's strategic autonomy and resilience. The workshop covers policy initiatives, legal possibilities, and practical case studies.

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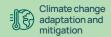


















PROCURING INNOVATIVE CLIMATE CHANGE SERVICES

