



SEARCH FUNDING & TENDERS ▾

HOW TO PARTICIPATE ▾

PROJECTS & RESULTS

WORK AS AN EXPERT

SUPPORT ▾

Preparatory phase of new ESFRI research infrastructure projects

TOPIC ID: HORIZON-INFRA-2021-DEV-02-01

# Overview ET-PP activities

M. Martínez



ICREA



ET Symposium

Cagliari, Italy, May 2023

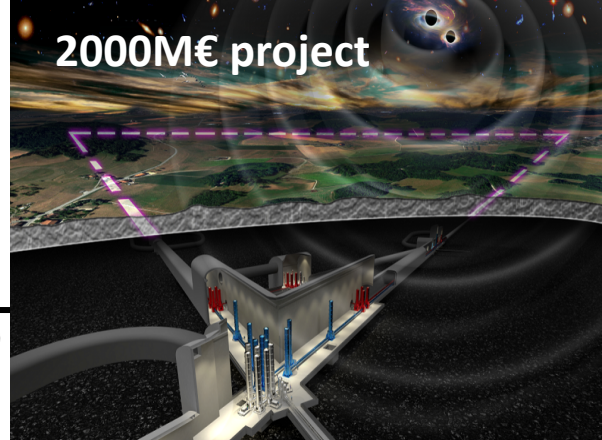


# Einstein Telescope as ESFRI



Funding & tender opportunities

Single Electronic Data Interchange Area (SEDIA)



2000M€ project



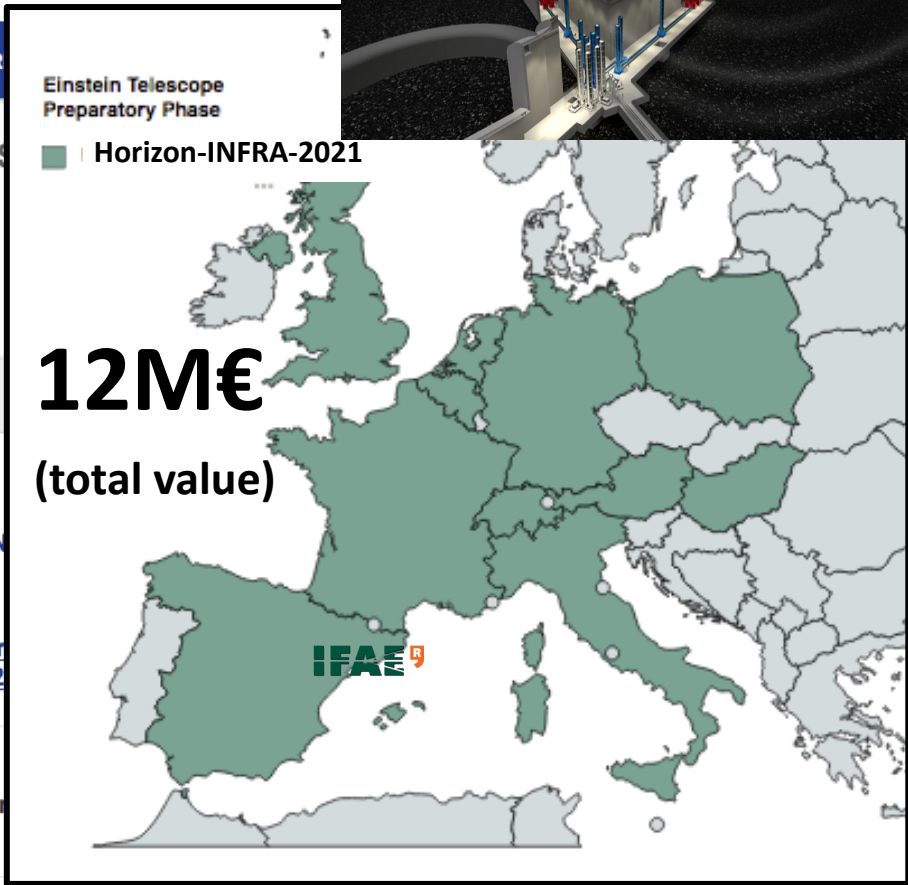
Preparatory phase of new ESFRI research infras

## Goals for ET Preparatory Phase

- Governance
- Financial architecture/plan/framework
- ET legal entity
- Final ET design and cost evaluation
- Site or sites selection
- Construction funding
- User services
- Computing model
- Sustainability

**3.45M€**

(approved)

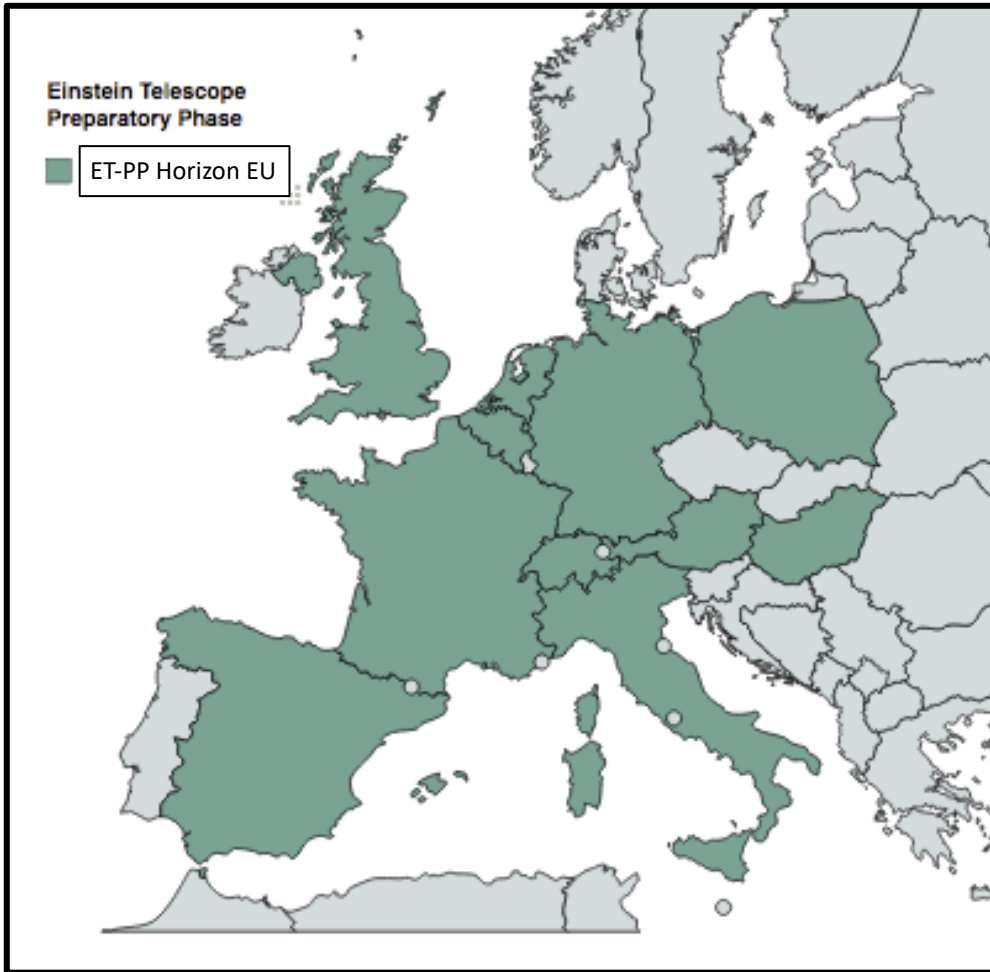


Einstein Telescope Preparatory Phase (ET-PP) in 2022 – 2026

HORIZON-INFRA-DEV EU Project coordinated by IFAE

→ Project started 1<sup>st</sup> September 2022 (<https://etpp.iafe.es>)

# Collaborative Agreement



Project: 101079696 – ET-PP – HORIZON-INFRA-2021-DEV-02

Associated with document [101079696](#) 15/08/2022

EUROPEAN RESEARCH EXECUTIVE AGENCY (REA)  
REA C – Future Society  
CA – Reforming European RMI and Research Infrastructures

**GRANT AGREEMENT**  
Project 101079696 – ET-PP

**PREAMBLE**

This Agreement ('the Agreement') is between the following parties:

**on the one part,**  
the European Research Executive Agency (REA) ('EU executive agency' or 'granting authority'),  
under the powers delegated by the European Commission ('European Commission'),

**and**

**on the other part,**  
1. 'the coordinator':  
INSTITUTO DE FISICA DE ALTAS ENERGIAS (IFAE), PIC 999613907, established  
in CAMPUS DE BELLATERRA - UNIVERSIDAD AUTONOMA DE BARCELONA,  
CERDANYOLA DEL VALLES 08193, Spain,  
and the following other beneficiaries, if they sign their 'accession form' (see Annex 3 and Article 40):

**ET-PP CONSORTIUM AGREEMENT** 09 MARCH 2023

Change Records

Version	Date	Changes
Version 0	September 2022	Initial draft for Horizon Europe
Version 1	November 2022	First version for Horizon Europe
Version 2	December 2022	Second version for Horizon Europe
Version 3	January 2023	Third version for Horizon Europe
Version 4	February 2023	Fourth version for Horizon Europe
Version 5	March 2023	Final version for Horizon Europe

Grant Agreement finally signed with EC by middle August 2022

Pre-financing process concluded and institutions received the funding in due time

—> We will follow closely the progress in the different institutions

**Collaborative Agreement Document Finalised. —> We went for signatures**

—> We just opened a (contained) process of enlarging the consortium with additional third parties

(Deadline 30th May) — planning for having them onboard by the time of next ET-PP annual meeting in 12-13 June

# Work Packages (WPs)

- **WP1 Coordination and Management**
- **WP2 Organization, Governance and Legal Aspects**
- **WP3 Financial Architecture**
- **WP4 Site Preparation**
- **WP5 Project Office / Engineering Dept.**
- **WP6 Technical Design**
- **WP7 Transfer of Technology**
- **WP8 Computing and Data Access**
- **WP9 Sustainable Development Strategy**
- **WP10 Education, Outreach and Citizen Engagement**

# ET-PP web online

<https://etpp.iafe.es>

## ET-PP Work Package Leaders



**Mario Martínez**  
Institut de Física d'Altes Energies (IFAE)



**Fernando Ferroni**  
Istituto Nazionale Di Fisica Nucleare (INFN)



**Justin O'Byrne**  
United Kingdom Research And Innovation (UKRI)



**Miriam E.H. Roelofs**  
Nikhef



**Dorota Rosinska**  
Uniwersytet Warszawski (UW)



**Attilio Sequi**  
Istituto Nazionale Di Fisica Nucleare (INFN)



**Domenico D'Urso**  
University of Sassari & INFN Laboratori Nazionali del Sud



**Massimo Carpinelli**  
European Gravitational Observatory (EGO)



**Wim Walk**  
Nikhef



**Raffaele Flaminio**  
Centre National de la Recherche Scientifique (CNRS)



**Roberto Saban**  
Istituto Nazionale Di Fisica Nucleare (INFN)



**Andreas Freise**  
Nikhef



**Harald Lück**  
Deutsches Elektronen-Synchrotron (DESY)



**Paolo Chiggiato**  
European Organization for Nuclear Research (CERN)



**Michele Punturo**  
Istituto Nazionale Di Fisica Nucleare (INFN)



**Mauro Morandin**  
Istituto Nazionale Di Fisica Nucleare (INFN)



**Rob van der Meer**  
Nikhef



**Nadia Tonello**  
Barcelona Supercomputing Center (BSC)



**Achim Stahl**  
Deutsches Elektronen-Synchrotron (DESY)



**Thomas Berghoefter**  
Deutsches Elektronen-Synchrotron (DESY)



**Chiara Arina**  
Université Catholique De Louvain (UCL)



**Maria Antonietta Marsella**  
Istituto Nazionale Di Fisica Nucleare (INFN)



**Nicolas Arnaud**  
Centre National de la Recherche Scientifique (CNRS)



**Vincenzo Napolano**  
European Gravitational Observatory (EGO)



**Robert Galler**  
Montanuniversität Leoben

## Recent News:

**V. Napolano (EGO) co-leads WP10**

**N. Tonello (BSC) co-leads WP8**

## ET-PP

### Preparatory Phase for the Einstein Telescope Gravitational Wave Observatory



Einstein Telescope will be the European Third-Generation Gravitational Wave Observatory, designed to observe the Universe by covering the whole spectrum observable from Earth with interferometric GW detectors.

The ET preparatory phase (ET-PP) will address a number of fundamental prerequisites for the approval, construction and operation of the

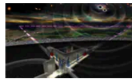
## ET-PP News

### XII Einstein Telescope Symposium

The XII symposium of the Einstein Telescope (ET) Sciences, on the 7th - 8th of June. The ET scientific journey: the formal establishment of the

Jun 15, 2022

- WP 1: Management and Coordination
- WP 2: Organization, Governance and Legal Aspects
- WP 3: Financial Architecture
- WP 4: Site Preparation
- WP 5: Project Office & Engineering Department
- WP 6: Technical Design
- WP 7: Innovation and Industrial Engagement
- WP 8: Computing and Data Access
- WP 9: Sustainable Development Strategy
- WP 10: Communication & Outreach



## WP 5: Project Office and Engineering Department

Work package led by CNRS

### Objectives

**WP5 - Project Office and Engineering Department** [led by CNRS]- has the mission to establish the ET RI Project Office and the corresponding Engineering Department. The role of this WP is to set-up a project management environment for the ET construction project.

This environment will be supported by consultative and executive bodies equipped with means to monitor, control, coordinate and report on the technical design, the engineering, the technical specifications, the risks, the budget and the schedule.

These activities are project-wide and make use of methodologies and tools which are the same across the whole of the ET construction project.

**R. Flaminio (CNRS), A. Freise (NIKHEF), and R. Saban (INFN)** act as co-coordinators of WP5 in this proposal.

### Deliverables

- D5.1 Structure and the mandate of the Project Office. (M25)
- D5.2 Functionalities required from the tools in support of the project management. (M25)

**A large fraction devoted to the creating of the Project Office/ Engineering Department (44%)**

**Significant funding for expert consulting on legal and financial aspects, socio-economic impacts, and site selection related studies**

**Significant funding for sustainability studies**

**Funding for ET-PP management, KTT, Computing model, and Outreach/Communication**

# Budget allocation

Position	ASSIGNMENT
Technical Coordinator	INFN (IN-KIND)
Systems Engineering	NIKHEF (IN-KIND)
Parameters, layout, risk Manager	CNRS (INFRA-DEV)
Software Engineer	CNRS (INFRA-DEV)
Civil Engineer	NIKHEF (INFRA-DEV)
Vacuum Engineer	CNRS (INFRA-DEV)
Integration and Technical Infrastructures Engineer	INFN (INFRA-DEV)
Head Project Office	INFN (IN-KIND)
Head Engineering Department	NIKHEF (IN-KIND)

MANAGEMENT/ADMINISTRATION

- LEGAL CONSULTER
- FINANCIAL MANAGER
- SITE SELECTION PREPARATION
- PROJECT OFFICE & ENGINEERING DEPT.
- INDUSTRIAL LIAISON
- COMPUTING
- SUSTAINABILITY
- OUTREACH/SOCIAL AWARENESS

## Project Office/Engineering Dept.

1. Technical Coordinator (in-kind)
2. System Engineering (in-kind)
3. Parameters, Layout, Risk Manager
4. Software Engineer
5. Civil Engineering
6. Vacuum Engineer
7. Integration and Technical Infrastructures Engineer

**Design of the vacuum system by CERN (in-kind funding included for first year)**

# ET-PP Open positions

## Open Position: Instrument Development Expert

The APC laboratory in Paris is recruiting a instrument system engineer for a 30 months temporary position to support the activities of the Einstein Telescope(ET) project

Nov 10, 2022



## Open Position: software engineer at IP2I-Lyon

IP2I-Lyon is recruiting a software engineer for a 3 year temporary position to participate to the support effort of the Project Office in the framework of the EU project 'Einstein Telescope Preparatory Phase' (ET-PP).

Nov 9, 2022



## Open Position: Senior IT/Computing Architect position at the Department of Astronomy and the Gravitational-Wave Science Center of the University of Geneva

The Department of Astronomy and the Gravitational-Wave Science Center (GWSC) at the University of Geneva is looking for a Senior Information Technology (IT) / Computing Architect ("Adjoint(e) Scientifique III") to support the activities of the Einstein Telescope (ET) project in the design of the computing model and infrastructure of the next-generation gravitational-wave observatory.

Oct 26, 2022



## Open Position: System engineer for Project Support and Coordination at BSC

The Barcelona Supercomputing Center is offering a position for a system engineer who will become part of the Operations Department of the Center and participate in the activities of support and coordination for the Einstein Telescope Preparation Phase project (ET-PP).

Jul 11, 2022



## Open Position: Technology Transfer Technician at IFAE

The Institute for High Energy Physics (IFAE) in Barcelona is looking for a Technology Transfer Technician to support the Knowledge and Technology Transfer (KTT) Unit. The main work will be the execution of innovation consultancy activities in the framework of an EU project ET-PP

Jun 14, 2022



## Open Position: Project Manager Assistant at IFAE

The Institute for High Energy Physics (IFAE) in Barcelona is looking for a Project Manager Assistant to support the administrative/scientific coordination of the Gravitational Wave Group and the Research



Budget being now executed  
à A number of open positions  
are advertised in ET-PP page  
→ More to come

## ET-PP Open positions

### Open Position: Science Communication Officer at IFAE

The Institut de Física d'Altes Energies (IFAE) is looking for a science communication officer. The main responsibilities of this person will be related to the management of the communication aspects of the European project: Einstein Telescope Preparatory Phase. These activities will include: internal and external communications, outreach activities and STEM education programme.

Mar 20, 2023



### Open Position: Einstein Telescope Communications and Outreach Officer

Astronomical Observatory, Faculty of Physics of University of Warsaw is recruiting a Communications and Outreach Officer for one year, with the possibility for extension till 31.08.2026, part time position (0.6 FTE) to support Einstein Telescope (ET) communications and promotion activities in the framework of the EU project 'Einstein Telescope Preparatory Phase' (ET-PP). The deadline for applications is 26th March 18:00 CET

Mar 14, 2023



This will constitute a seed  
for the ETO Communication  
Office

# WP missions (1/5)

## • WP1 Coordination and Management

1. Management
2. Coordination

## • WP2 Organization, Governance and Legal Aspects

1. ET Internal Organization
2. Legal Framework
3. Enlargement of the ET Consortium
4. Political convergence
5. Connection to other observator and communities
6. RI layout, Strategic issues and international networking

## • WP3 Financial Architecture

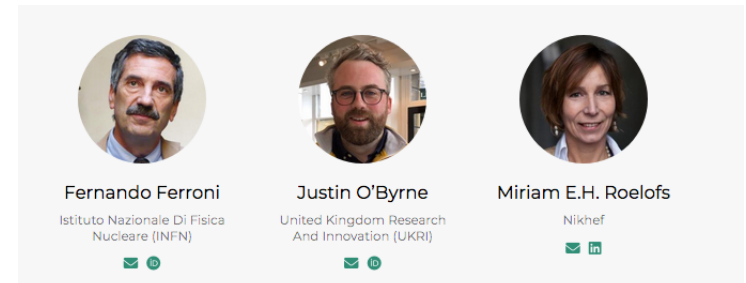
1. Cost evaluation
2. Cost Sharing
3. In-kind Contributions
4. Define immediate financial tools



### Deliverables

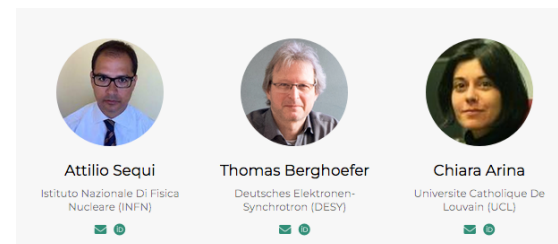
Delivered !

- D1.1 Dissemination & Exploitation (D&E) Plan (M6)
- D1.2 Data Management (D&M) Plan (M6)



### Deliverables

- D2.1 Report providing options for legal entity (M11);
- D2.2 Minutes of meetings with EC and involved ministries (M11);
- D2.3 Legal entity statutes (M36);
- D2.4 Roadmap to establish the legal entity and its implementation ready for approval by (proto Council) and/or Ministries (M47);



### Deliverables

- D3.1 Handbook for design and construction phase (M36);
- D3.2 Handbook for operation phase (M42);
- D3.3 Financial plan and Scenario analysis (M47)



# WP missions (2/5)

## • WP4 Site Preparation

1. Site scientific evaluation
2. Socio-economic impact
3. Legal/Financial aspects of the RI implementation
4. Mediation planning

First Milestone already met

Document

*(Site-specific Characteristics impacting ET performances)*

Deliverables

- D4.1 Scan of legal procedures, permitting and land acquisitions. (M10)
- D4.2 Updated socio-economic impact studies. (M15)
- D4.3 Complete quantification of all the aspects impacting the ET performance. (M28)
- D4.4 3D geology, hydrology, etc. model with detailed localisation of the ET infrastructure. (M29)
- D4.5 Updated cost and schedule estimates of the excavations (D42)



Domenico D'Urso  
University of Sassari & INFN  
Laboratori Nazionali del Sud



Wim Walk  
Nikhef

## • WP5 Project Office / Engineering Dept.

1. Technical Coordination of the Project
2. Human resources qualification
3. Strategic decisions making process
4. Planning
5. Preparation for Production
6. Industrial Partnerships
7. Risk Management

Deliverables

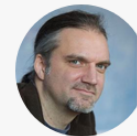
- D5.1 Structure and the mandate of the Project Office. (M25)
- D5.2 Functionalities required from the tools in support of the project management. (M25)
- D5.3 Structure and the mandate of the Engineering Department. (M25)
- D5.4 Functional Engineering Department. (M28)
- D5.5 Functional Project Office. (M28)



Raffaele Flaminio  
Centre National de la  
Recherche Scientifique (CNRS)



Roberto Saban  
Istituto Nazionale Di Fisica  
Nucleare (INFN)

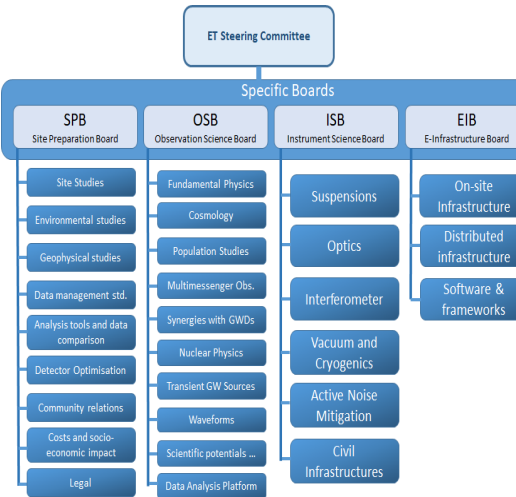


Andreas Freise  
Nikhef

# WP missions (3/5)

## • WP6 Technical Design

1. Infrastructure Technical Design
2. Experiment Technical Design
3. Scientific impact
4. Open Data Access and Services



## Deliverables

- D6.1 Refined Science Case (M18)
- D6.2 Vacuum pipe Design (M24);
- D6.3 Preliminary RI TDR (M24);
- D6.4 Preliminary DET TDR (M24);
- D6.5 RI TDR (M40);
- D6.6 DMP and Data Access Policy (M46).

Intense work on Scientific Case inside ET Collab.

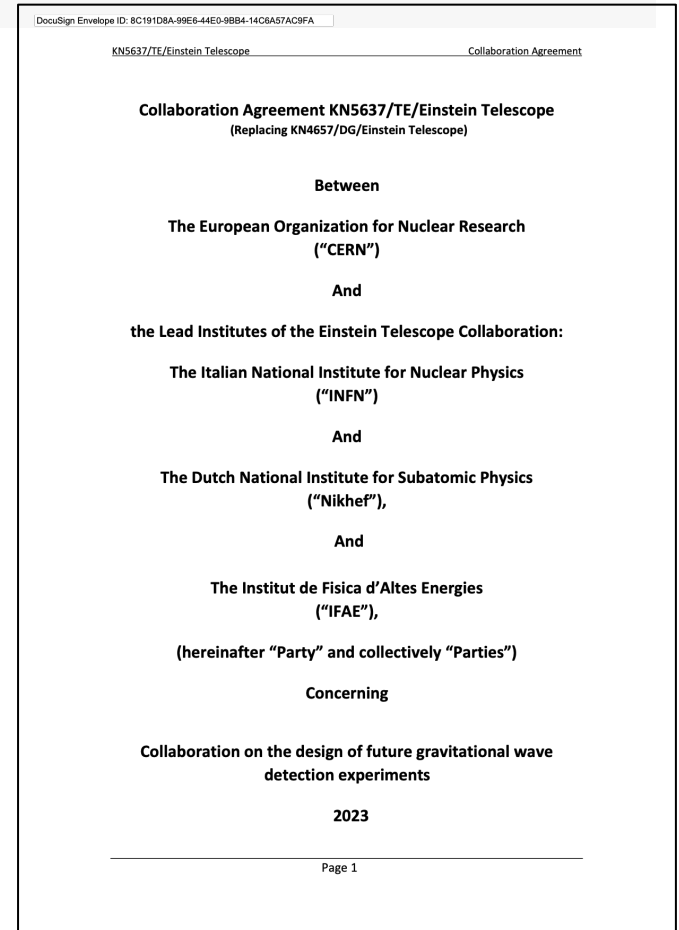
Close interaction with CERN personnel

**Vacuum/Cryo, Civil Engineering, Safety, EDMS**

—> MoU signed by CERN, INFN, NIKHEF and IFAE

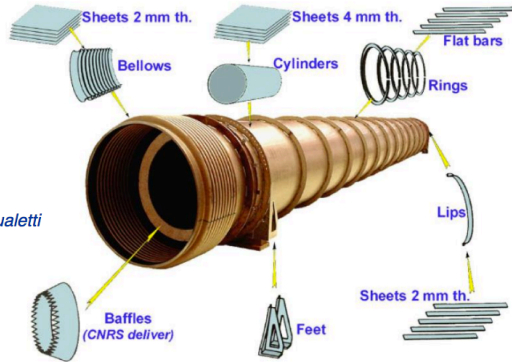
—> Vacuum pipe activity well defined and running

—> Preparing now the details of the Civil Engineering

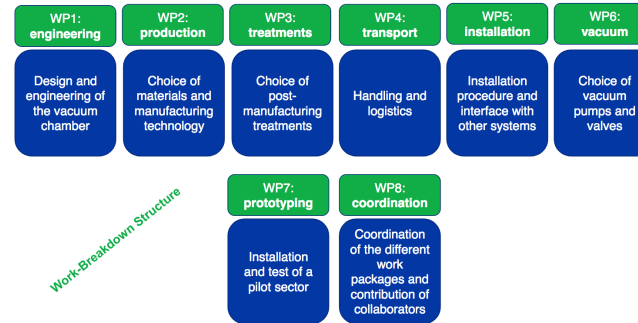


# Notes on Vacuum Design

The baseline (VIRGO)



Courtesy of A. Pasqualetti



18/05/2022 Paolo Chiggiano | Nikhef-INFN-CERN kick-off meeting 20

## Global planning

**Project led by CERN started in September 2022 (3 years duration)**

**Main deliverable is the TDR of vacuum system by fall 2025**

**A collaboration on Civil Engineering matters with CERN now is being put in place (In a 3 years framework)**

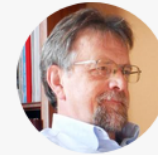
	First year				Second year				Third year			
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
Functional specifications	Yellow	Yellow										
Roles and agreement with Institutes	Yellow	Yellow										
Optimisation of baseline, including cost analysis	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue				
Definition of alternative solutions	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey				
Cost & performance of alternative solutions												
Optimisation of interfaces with services/infrastructures									Grey	Grey	Grey	Grey
Decision about vacuum design for pilot sector at CERN.								Orange				
Prototyping of the selected solutions.									Orange	Orange	Orange	Orange
Technical design report (ET vacuum system).											Green	Green

# WP missions (4/5)

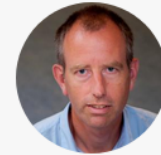
First Milestone already met

Document:

(Analysis of Promotion Strategies Accomplished)



Mauro Morandin  
Istituto Nazionale Di Fisica  
Nucleare (INFN)



Rob van der Meer  
Nikhef

## Deliverables

- D7.1 Innovation Plan (M12)
- D7.2 Report on industry engagement plan execution (M42)
- D7.3 Model for pursuing in ET a balanced industrial return (M33)
- D7.4 Report on TT and Intellectual property management in ET (M44)



Nadia Tonello  
Barcelona  
Supercomputing  
Center (BSC)



Achim Stahl  
Deutsches  
Elektronen-  
Synchrotron (DESY)

## Deliverables

- D8.1: Computing and Data Requirements (M18)
- D8.2: Computing and Data Model (M42)
- D8.3: Data Access Implementation Guidelines (M47)

## WP7 Transfer of Technology

1. Promotion of Innovative technologies
2. Liaison with industries, industrial returns
3. Intellectual Property

## WP8 Computing and Data Access

1. Computing model
2. Computing Resources
3. T0 Data Center
4. Data Preservation

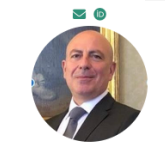
# WP missions (5/5)

## • WP9 Sustainable Development Strategy

1. Low Carbon footprint
2. Liaison with Climate Change and Geoscience
3. Landscape and Environmental impact
4. Transportation

## • WP10 Education, Outreach and Citizen Engagement

1. School Education Program
2. Dissemination and communication
3. Mentoring and Training
4. Diversity and Inclusion
5. Early Career Scientists



Massimo Carpinelli  
European Gravitational Observatory (EGO)



Stravros Katsanevas  
European Gravitational Observatory (EGO)



Maria Antonietta Marsella  
Istituto Nazionale Di Fisica Nucleare (INFN)



Nicolas Arnaud  
Centre National de la Recherche Scientifique (CNRS)



Robert Galler  
Montanuniversitaet Leoben

### Deliverables

- D9.1 ET Sustainable Development Implementation Strategy (M12)
- D9.2 ET Environmental impact assessment and mitigation strategy (M24)
- D9.3 ET CO2 footprint ET assessment and mitigation strategy (M36)



Dorota Rosinska  
Uniwersytet Warszawski (UW)



Vincenzo Napolano  
European Gravitational Observatory (EGO)

**Milestone already met**

**Hiring Communication Officer**








### Deliverables

**We would like to have a ETO Web up and running asap (in few months) —**




- D10.1 Initiate strategic media and communications plan (M11)
- D10.2 Launch consortium website and social media accounts (M24)
- D10.3 Formulate strategic media and communications plan (M24)
- D10.4 Complete bank of graphics, multimedia resources (M36)
- D10.5 Launch ECR mentorship and training programme (M44)

# Deliverables/Milestones

- In 2023 there are 10 Milestones and 8 Deliverables to meet.
- We monitor this closely to avoid delays.

Milestone No	Milestone Name	Work Package No	Lead Beneficiary	Means of Verification	Due Date (month)
1	Constitution / first meeting of the resource board	WP3	6-UCL	Workshop	33
2	Document detailing the site-specific characteristics that impact ET sensitivity and its duty cycle.	WP4	5-NIKHEF	Report. 	3
3	Common methodology to estimate impact of site characteristics on ET sensitivity and operation and, if required, a scheme to compensate it.	WP4	5-NIKHEF	Report. 	10
4	The recruitment of the Project Office team is completed.	WP5	4-CNRS	Report. 	15
5	All three documents (WP5-D5.1, D5.2 and D5.3) are published.	WP5	4-CNRS	Report.	25
6	The Engineering Department as a functional unit complete	WP5	5-NIKHEF	Report.	27
7	The Project Office as a functional unit complete	WP5	2-INFN	Report.	27
8	ET Collaboration in place	WP6	2-INFN	ET Symposium. 	11
9	Analysis of promotion strategies accomplished	WP7	1-IFAE	Report. 	8
10	Engagement plan produced	WP7	5-NIKHEF	Report. 	10
11	Analysis of balanced industrial return strategies accomplished	WP7	2-INFN	Report. 	15

# Milestones

Milestone No	Milestone Name	Work Package No	Lead Beneficiary	Means of Verification	Due Date (month)
12	Workflows Requirements collection and constraints: computing and data	WP8	1-IFAE	Workshop (+D8.1) 	11
13	Computing Infrastructures availability for ET workflows, characteristics	WP9, WP8	1-IFAE	Workshop (+ D8.1)	24
14	On site infrastructure, computing and data model	WP6, WP8	4-CNRS	Workshop (+D8.2)	36
15	Low latency and offline workflows and computing model	WP6, WP8	2-INFN	Workshop (+D8.2)	40
16	Data management, access, policy and implementation	WP2, WP6, WP8	1-IFAE	Workshop (+D8.3)	46
17	Preliminary sustainability plan	WP9	8-EGO	Report. 	11
18	ET Sustainability Workshop	WP9	8-EGO	Workshop+Report	18
19	Final sustainability plan	WP9	8-EGO	Reports.	47
20	Appointment of Communications and Outreach Coordinator	WP10	3-UW	Appointment contract 	8
21	ET Consortium website and social media launched	WP10	8-EGO	Public launch	24
22	ECR Mentorship and Training programme established	WP10	3-UW	Report.	44

# Deliverables

Deliverable No	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month)
D1.1	Dissemination and Exploitation (D&E) Plan	WP1	1 - IFAE	R — Document, report	PU - Public	6
D1.2	Data Management Plan (DMP)	WP1	1 - IFAE	R — Document, report	PU - Public	6
D2.1	Report providing options for legal entity	WP2	5 - NIKHEF	R — Document, report	PU - Public	11
D2.2	Minutes of meetings with EC and involved ministries	WP2	5 - NIKHEF	R — Document, report	PU - Public	11
D2.3	Legal entity statutes	WP2	5 - NIKHEF	R — Document, report	PU - Public	36
D2.4	Roadmap to establish the legal entity and its implementation.	WP2	5 - NIKHEF	R — Document, report	PU - Public	47
D3.1	Handbook for design and construction phase	WP3	6 - UCL	R — Document, report	PU - Public	36
D3.2	Handbook for operating phase	WP3	6 - UCL	R — Document, report	PU - Public	42
D3.3	Financial plan and Scenario analysis	WP3	6 - UCL	R — Document, report	PU - Public	47
D4.1	Scan of legal procedures, permitting and land acquisitions	WP4	5 - NIKHEF	R — Document, report	PU - Public	10
D4.2	Updated socio-economic impact studies	WP4	2 - INFN	R — Document, report	PU - Public	15
D4.3	Complete quantification of all the aspects impacting the ET performance.	WP4	3 - UW	R — Document, report	PU - Public	28



# ET-PP Deliverables for 2023

## WP1

- ET-PP Dissemination and Exploitation plan (Feb 2023, DONE)
- ET-PP Data Management Plan (Feb 2023, DONE)

—> *Preparation of all hands in-person meeting 12-13 June 2023 @ Barcelona*

—> *Collecting feedback from WPs on budget needs relevant for ETO*

## WP2

- Report providing options for legal entity (July 2023)
- Minutes of meeting with EC and involved ministres (July 2023)

## WP3

- Financial model for immediate needs (NEW 2023)

—> *We are planning for a closer WP2 - WP3 interaction*

## WP4

- Scan of legal procedures, permitting and land acquisitions (June 2023)
- Updated socio-economic impact studies (November 2023)

## WP5

## WP6

## WP7

- Innovation Plan (July 2023)

## WP8

## WP9

## WP10

- Initiate strategic media and communication plan (July 2023)

—> *We are in close contact with coordinators to have a fast(er) progress on Web*

# ET-PP meeting June 12th - 13th

<https://indico.ifae.es/event/1671/>

## ET-PP INFRA-DEV Annual Meeting

12-13 June 2023

UPF School of Management - Barcelona

Europe/Madrid timezone

Overview

Venue

Timetable

Contribution List

Registration Instructions

List of Participants

Accommodation

Travel Instructions

Social Events

Wifi and zoom connections

### Venue



The 2023 ET-PP annual meeting will take place at the [UPF Barcelona \(School of Management\) Building](#) downtown Barcelona.

Dedicated parallel session discussions on

- Communication
- Project Management Tools
- TDR preparation
- Governance, Financial Architecture, Legal Entity
- KTT and industrial Liaison
- Engineering Department
- Computing Model and Software tools
- Site Characterization

Plenary Sessions

Parallel Sessions

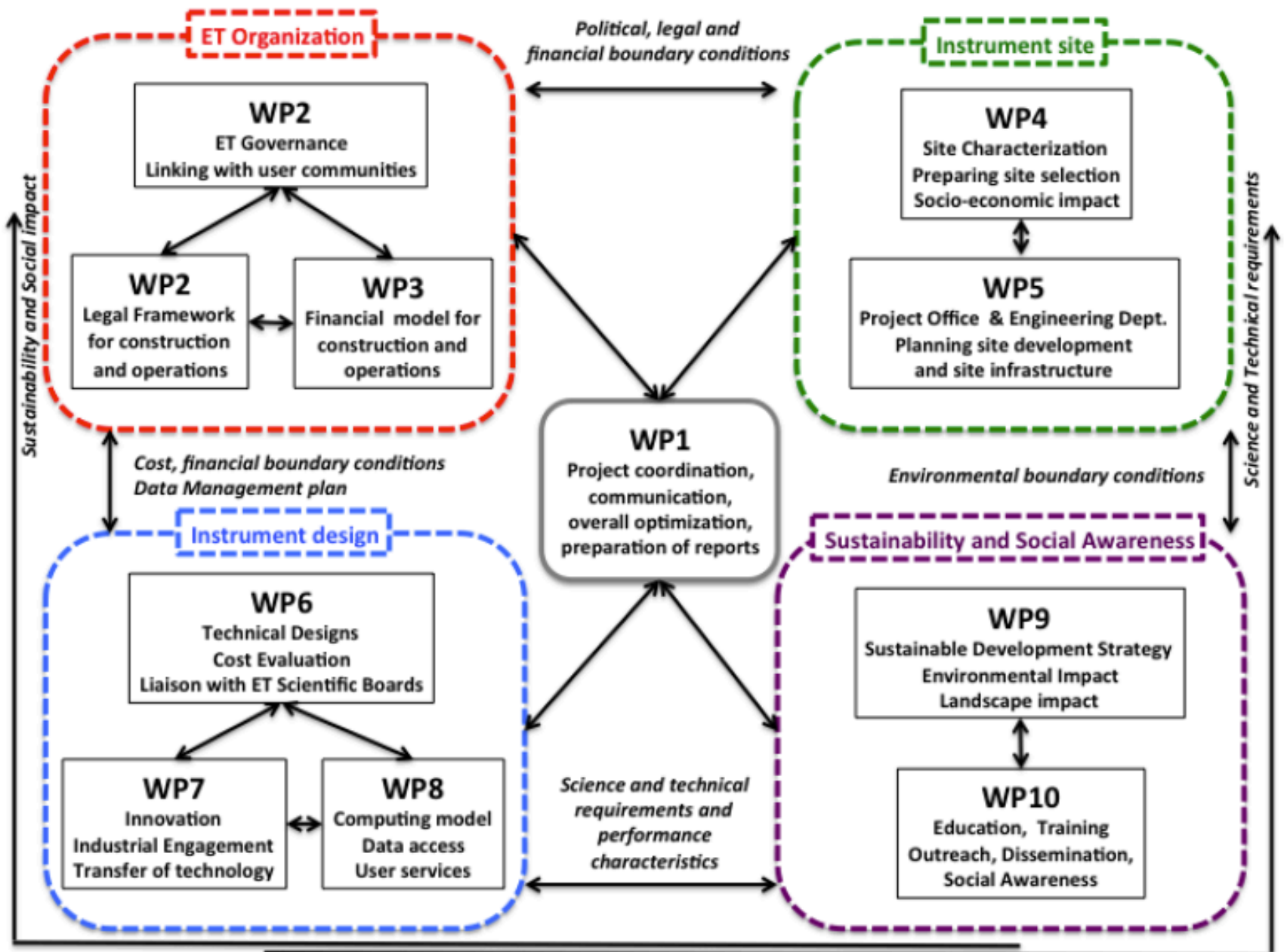
Board of Scientific Representative's Meeting

**Willing to involve relevant persons  
and encourage them to come to BCN**

# Thanks for your attention

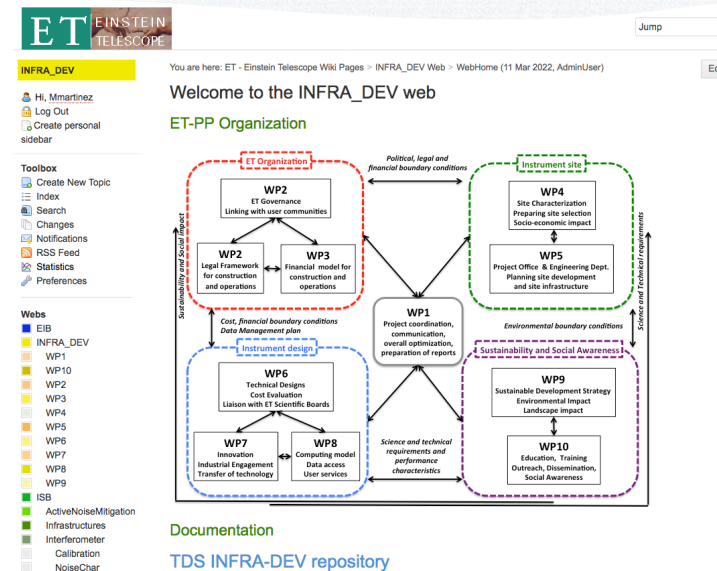






# ET-PP running

- ET-PP at work
  - Running ET-PP biweekly coordinating meetings
  - Dedicated meetings with WP1-ET-Directorate-WPX
  - Common Document repository in place
    - @ EGO (TDS + Wiki)
    - @ Dedicated google drive
  - Exploring CERN management tools actively
    - At the moment being evaluated in WP5/7
    - EDMS, INDICO@CERN, ....
  - ET bylaws in place
  - ET Collaboration in place



- Ongoing WP and WP-WP interactions
  - Collecting information on governance and financial models from other organisations (CERN, SKA, ESS,...)
  - WP teams built / or being built
  - Regular meetings established
  - SWOT analyses
  - Mapping Tasks with ET Divisions
  - **ET Collaboration – ET Observatory relationship**

	T8.1 T0 Data center	T8.2 Computing and Data Model	T8.3 Resources	T8.4 Data Access Implementation	
D1 Software, frameworks, data challenges		Computing frameworks computing domains data formats	Resources for frameworks execution and data storage availability	Data availability Data releases format	TTG Technology Tracking working Group
D2 Services and Collaboration Support			Resources and infrastructure for services and collaborative tools	Tools for monitoring, AAI (IAM), data access	
D3 Computing and data model, Resource Estimation	T0 storage and computing resources estimation	Computing model data model	Resources estimation		
D4 Multimessenger alerts infrastructure				Tools for multi messenger alerts	

Example: WP8 Tasks and EIB Divisions