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PIANO NAZIONALE
DI RIPRESA E RESILIENZA



ISTITUTO NAZIONALE
DI GEOFISICA E VULCANOLOGIA

WP 4 IRPINIA NEAR-FAULT OBSERVATORY

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Participants



INGV

INGV-Pisa – OU7

FIBIR-LONG

Sensing long-fiber cables with DAS systems
collaboration with UNIMIB, UNINA



UNINA – UO17

INFARRAYS

Installation of arrays within ISNet
collaboration with INGV



Irpinia Near-Fault Observatory



List of Deliverables

Title	Bimester	Deliverables
IO4.1	4	D4.1 Definition and completion of the hiring procedures D4.2 Purchase of the central station acquisition systems
IO4.2	8	D4.3 Purchase of the servers for network control center of the Irpinia seismic Network D4.4 Purchase of the storage system for optical fiber data distribution D4.5 Purchase of the DAS systems
IO4.3	12	D4.6 (B12) Purchase of the Array – Nodes instrumentation
IO4.4	15	D4.7 Finalisation of the civil infrastructures for the WP D4.8 Instrument installation and data distribution D4.9 Completion of all the expenses referred to the indirect costs



Cost breakdown

Cost description	Region		Cost (euro)
Personnel (2 Technologists, 1 Technician)	OS		326.760
DAS and storage systems	S		594.994
Hosting cases for fiber	S		12.826
10 central stations and 54 nodes for 6 arrays – servers	S		600.000
Site installation - hosting cases for arrays	S		241.122
General costs	S	OS	124.298



Personnel (4.1)

Hiring procedures
completed by June
2023

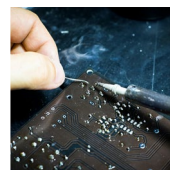


Technologist

Luca Elia

Start: July
2023

Working on
management
of the arrays,
and related
data



Technologist

Raffaello Pegna

Start: September
2023

Development of
workflows for
earthquake
analysis recorded
by DAS



Technician

Not filled

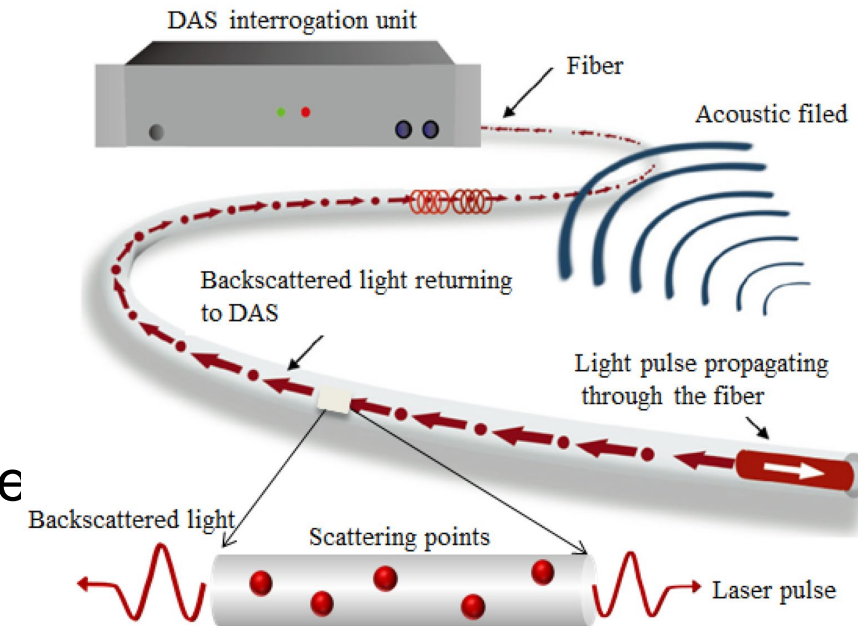
DAS Purchase (4.1)

Task 4.1 involved the purchase of **4 Distributed Acoustic Sensing (DAS)** interrogators for the measurement of dynamic deformation over a wide range of distances (1-100 km)

Total amount: **€480,700.00 + VAT**

The **purchase tender is completed**, and the contract is under assignment. Instruments are supposed to be delivered within the next 2 months.

Part of the storage system is included within this current purchase. Additional disk space will be acquired separately.





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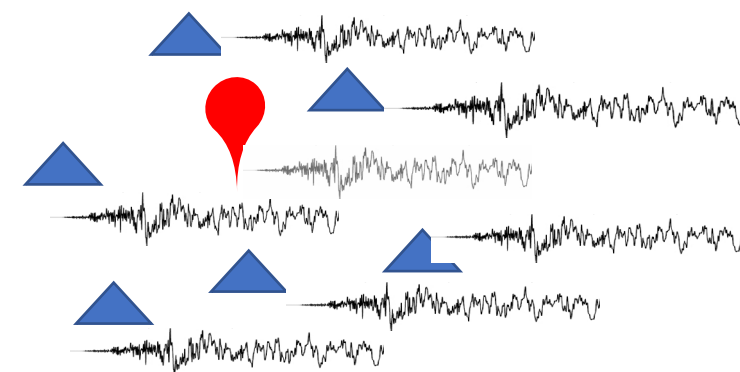


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INFARRAYS (4.2)

Task 4.2 involved the purchase of **Central stations** for the Arrays, **servers** to manage the new data acquisition, **array instruments** for nodes, and **civil infrastructure** to host the new arrays.

Total amount: **€491,803 + VAT – instruments**
€197,641 + VAT – civil infrastructures





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Central station (4.2)

First tender on MEPA was deserted

Contacted an abroad enterprise

Direct negotiation **concluded** (Oct 2023) – Order sent
Instruments will be delivered by **February 2024**



Servers (4.2)

Direct negotiation started, expected to be **concluded** by Dec
2023





Nodes and Civil Infrastructure

Delayed to 2024

- **Acquisitions** have to be done **in sequence**, since functionality and capability of the arrays will depend on the components
- First tender deserted
- Change in the Italian public contract code



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Meetings

2 Meetings (Milan and Florence) for Task 4.1. Design, organization of the data, data acquisition and processing.

1 Meeting (Naples) for Task 4.2. Design of the infrastructure and scientific goals.