

EMPOWERING PEOPLE. **CONNECTING KNOWLEDGE.** SHAPING FUTURES.

AI CAN ACCELERATE INNOVATION. HUMAN GIVE IT SOUL!



PEOPLE
ARE OUR PURPOSE



KNOWLEDGE
IS OUR POWER



COLLABORATION
IS OUR STRENGTH



SMART CITIES
BETTER LIVES



TRUST & ETHICS
GUIDE OUR WAY



EUROPE TOGETHER
A SHARED FUTURE

WP2 – TIMELINE OF KEY ACTIVITIES

Chronological overview of seminars, schools and mobilities
with participant engagement



SEMINAR



SCHOOL



MOBILITY

2024

2025

2026

22 MAY
2024



**RESEARCH
DISSEMINATION**
Dissemination and
training through
research

109
participants

02 – 06 JUN
2024



MOBILITY
UNiME
(ITALY)

10
participants

22 – 26 OCT
2024



SCHOOL
MULTIAGENT SYSTEMS
FOR SMART CITY

92
participants

09 – 10 DEC
2024



SEMINAR
FIWARE
IN ACTION

32
participants

13 – 17 JAN
2025



MOBILITY
WINTER MOBILITY
PROGRAM
(UMU, SPAIN)

9
participants

23 – 24 APR
2025



SEMINAR
WIRED FOR
TOMORROW

45
participants

02 – 06 JUN
2025



SCHOOL
INTELLIGENT CLOUD
CONTINUUM

55
participants

09 – 15 SEP
2025



MOBILITY
SUMMER MOBILITY
PROGRAM
(UNiME, ITALY)

12
participants

27 – 31 OCT
2025



SCHOOL
BIG DATA,
AGENTIC AI &
MICROSERVICES

177
participants

09 – 11 DEC
2025



SEMINAR
FIWARE
PRACTITIONER'S
GUIDE

34
participants

12 – 16 JAN
2026



MOBILITY
WINTER MOBILITY
(FOLLOW-UP)
(UMU, SPAIN)

8
participants



>300

TOTAL PARTICIPANTS



~60

PROJECT PARTICIPANTS



3 COUNTRIES

BULGARIA, SPAIN, ITALY



BG-RRP-2.005-0003

WP2 – SUMMER & WINTER SCHOOLS

ADVANCED TRAINING & CAPACITY BUILDING

OVERVIEW

THREE INTENSIVE TRAINING PROGRAMMES DELIVERED

1



**Advanced
Multiagent Systems
for Smart City**

 Oct 2024

 **92**
participants

2



**Intelligent
Cloud Continuum**

 June 2025

 **55**
participants

3



**Big Data,
Agentic AI &
Microservices**

 Oct 2025

 **177**
participants



15 TRAINING DAYS

KEY OBJECTIVES

SUPPORTING WP2 THROUGH:



Advanced technical training
in AI, Big Data & IoT



Development of
research capacity



Strengthening international
academic collaboration



Enabling applied research
and innovation



LOCATION

Sofia, Bulgaria



HOST

ULSIT



PARTNERS

University of Murcia,
University of Messina

WP2 – SUMMER & WINTER SCHOOLS

ADVANCED TRAINING & CAPACITY BUILDING

CORE TECHNICAL TOPICS

TRAINING AREAS



Multiagent Systems



Big Data & Data Warehousing



Agentic AI



Cloud-to-Edge Continuum



IoT Systems & Digital Twins



Microservices & Kubernetes



Distributed Intelligent Systems

TRAINING MODEL

HIGH-INTENSITY LEARNING APPROACH



5-day immersive programmes



Hands-on sessions & workshops



Research discussions & mini-projects



Project-based learning



Real-world case studies



DEEP LEARNING + PRACTICAL APPLICATION

EVOLUTION OF THE SCHOOLS

PROGRESSIVE (CASCADE) KNOWLEDGE DEVELOPMENT

1. FROM FUNDAMENTALS

Multiagent systems & FIWARE



Foundation of concepts and technologies

2. INTEGRATION

Cloud-edge architectures



Integration of systems and platforms

3. ADVANCED SYSTEMS

AI, microservices, distributed systems



Advanced intelligent and distributed solutions



From fundamentals (Multiagent systems & FIWARE) → integration (cloud-edge architectures) → advanced systems (AI, microservices, distributed systems).

EUROPEAN DIMENSION

ALIGNED WITH EU PRIORITIES



AI & Big Data competence development



Cloud-edge infrastructure



Digital Twins & Smart Cities



FIWARE ecosystem integration



SUPPORTING EU DIGITAL TRANSFORMATION AGENDA

WP2 – SUMMER & WINTER SCHOOLS

ADVANCED TRAINING & CAPACITY BUILDING

KEY RESULTS

WHAT WAS ACHIEVED



Advanced technical and research skills

Participants gained deep expertise in AI, Big Data, IoT and distributed systems.



Increased research collaboration

Stronger connections among participants, researchers and institutions.



Knowledge transfer from EU partners

Best practices, expertise and know-how shared by University of Murcia and University of Messina.



Practical competencies in real-world systems

Hands-on experience through projects, case studies and real-world scenarios.

SUSTAINABILITY & IMPACT

LONG-TERM OUTCOMES



Integration into academic programmes

Course content and materials integrated into university teaching.



Strengthened research networks

Sustainable collaboration across institutions and disciplines.



Preparation for future EU projects

Participants better prepared to join and lead future EU initiatives.



Formation of expert community

A growing community of experts driving innovation and knowledge sharing.

FINAL INSIGHT

A SCALABLE TRAINING MODEL



TRAINING

High-quality, intensive training programmes



CASCADE LEARNING

Knowledge flows through participants and institutions



RESEARCH

Strengthened research capacity and collaboration



APPLICATION

Real-world solutions for smart cities and society



HIGH IMPACT



STRONG INTERNATIONAL DIMENSION



SUSTAINABLE OUTCOMES



WP2 – SUMMER & WINTER SCHOOLS

ADVANCED TRAINING & CAPACITY BUILDING



WP2 – SEMINARS

KNOWLEDGE EXCHANGE & CAPACITY BUILDING

OVERVIEW

THREE INTERNATIONAL PRACTICAL SEMINARS DELIVERED



FIWARE IN ACTION

Dec 2024



WIRED FOR TOMORROW

Apr 2025



FIWARE PRACTITIONER'S GUIDE

Dec 2025



LOCATION:
Sofia, Bulgaria



HOST:
ULSIT (University of Library Studies and Information Technologies)

KEY OBJECTIVES

SUPPORTING WP2 THROUGH



Knowledge transfer from European experts

Sharing EU expertise, best practices and real-world experience.



Capacity building in IoT & Smart Cities

Enhancing skills and competencies in emerging technologies.



Strengthening international collaboration

Fostering partnerships between academic, research and industry organisations.



Bridging research and real-world applications

Connecting research outcomes with practical implementations.

KEY METRICS (KPI)

IMPACT IN NUMBERS



3

SEMINARS DELIVERED



111

TOTAL PARTICIPANTS



3

INTERNATIONAL FIWARE EXPERTS



6

ORGANISATIONS INVOLVED



Building expertise. Strengthening networks. Creating impact.

WP2 – SEMINARS

KNOWLEDGE EXCHANGE & CAPACITY BUILDING

TECHNICAL FOCUS AREAS

CORE TOPICS COVERED



Interoperability
& MIMs



NGSI-LD &
Context Brokers



IoT Integration &
Multi-sensor Systems



Big Data &
Data Pipelines



Data Visualisation
(Grafana, Superset)



AI Tools &
Digital Twins



Robotics &
ROS2



Low-code /
No-code Automation

LEARNING APPROACH

HANDS-ON & PRACTICE-ORIENTED



Live
demonstrations



Real-world
use cases



Learning
by doing



Interactive
discussions



Project-based
sessions



HIGH ENGAGEMENT & PRACTICAL SKILL ACQUISITION

EVOLUTION OF THE SEMINARS

PROGRESSIVE CAPACITY BUILDING MODEL

1. FOUNDATIONS
(architecture,
interoperability)



2. INTEGRATION
(IoT systems,
MIMs)



3. APPLICATION
(automation,
robotics, guide)



FROM THEORY → INTEGRATION → REAL-WORLD APPLICATION

EUROPEAN DIMENSION

ALIGNED WITH EU PRIORITIES



NGSI-LD & MIMs
standards



Living-in EU
initiative



FIWARE
ecosystem



Interoperable
smart city solutions



ENSURING EU-LEVEL COMPATIBILITY AND SCALABILITY



BG-RRP-2.005-0003

WP2 – SEMINARS

KNOWLEDGE EXCHANGE & CAPACITY BUILDING

KEY RESULTS

WHAT WAS ACHIEVED



Advanced technical and practical skills

Participants gained hands-on expertise in FIWARE technologies, IoT, data and smart city solutions.



Increased research collaboration

Stronger connections among participants, experts and organisations across Europe.



Knowledge transfer from EU experts

Direct access to international expertise and best practices from FIWARE community.



Practical competencies in real-world systems

Real use cases, tools and platforms applied to solve real-world challenges.



High participant engagement and satisfaction

Active participation, positive feedback and strong interest in future collaboration.

SUSTAINABILITY & IMPACT

LONG-TERM OUTCOMES



Integration into academic and training programmes

Seminar content and materials integrated into courses and future training activities.



Strengthened research networks

Sustainable partnerships and collaboration across institutions and countries.



Preparation for future EU projects

Participants better equipped to contribute to and lead EU-funded initiatives.



Formation of an expert community

Growing community of practitioners and researchers sharing knowledge and innovating together.



Sustainable impact

Long-term impact through capacity building, knowledge sharing and continuous engagement.

FINAL INSIGHT

A SCALABLE SEMINAR MODEL



KNOWLEDGE SHARING

Expert input and insights



LEARNING

Hands-on learning and capacity building



APPLICATION

Applying tools and solutions to real use cases



RESEARCH

Generating new knowledge and innovations



IMPACT

Real-world solutions for smart cities



HIGH IMPACT

Measurable benefits for participants, institutions and the wider ecosystem.



STRONG INTERNATIONAL DIMENSION

Bringing together experts, organisations and participants from across Europe and beyond.



SUSTAINABLE OUTCOMES

Ensuring long-term value, scalability and alignment with EU priorities.



BUILDING KNOWLEDGE. STRENGTHENING CAPACITIES. CREATING IMPACT.



BG-RRP-2.005-0003

WP2 – SEMINARS

KNOWLEDGE EXCHANGE & CAPACITY BUILDING



WP2 – MOBILITY

KNOWLEDGE EXCHANGE & CAPACITY BUILDING

OVERVIEW

SIX INTERNATIONAL MOBILITY PROGRAMMES DELIVERED



TRANCHE 1
International Travelling
Seminar
Italy, 2024



TRANCHE 2
Winter Mobility
Spain, 2025



TRANCHE 3
Summer Mobility
Italy, 2025



TRANCHE 4
Winter Mobility
Follow-up
Spain, 2026



LOCATIONS:
Spain & Italy



PARTNERS:
University of Murcia,
University of Messina

KEY OBJECTIVES

SUPPORTING WP2 THROUGH



**International
research collaboration**

Fostering cross-border collaboration
and building strong research networks.



**Knowledge transfer
in real environments**

Sharing expertise and best practices
through immersive research experiences.



**Development of joint
scientific outputs**

Producing high-quality publications,
reports and research deliverables
together.



**Strengthening
researcher mobility**

Enhancing mobility skills, international
exposure and career development.

KEY METRICS (KPI)

IMPACT IN NUMBERS



6

**MOBILITIES
DELIVERED
IN 4 TRANCHEs**



39

**PROJECT
PARTICIPANTS**



2

**INTERNATIONAL
PARTNER
UNIVERSITIES**



HIGHEST INTERNAL ENGAGEMENT
among WP2 activities

WP2 – MOBILITY

KNOWLEDGE EXCHANGE & CAPACITY BUILDING

CORE TOPICS

SCIENTIFIC & TECHNICAL AREAS



Digital Twins & Smart Cities



IoT Architectures & FIWARE



Machine Learning & Distributed AI



Data Spaces



Cybersecurity Models



Edge-Cloud Continuum

LEARNING & RESEARCH MODEL

HYBRID FORMAT



Training sessions



Hands-on workshops



Research discussions



Joint paper development



Field visits
(real-world systems)



LEARNING + RESEARCH + APPLICATION

EVOLUTION OF MOBILITIES

FROM TRAINING TO RESEARCH



2024

Academic exchange



2025

Technical specialization



2026

Joint research & publications



CLEAR TRANSITION TOWARDS SCIENTIFIC OUTPUT

EUROPEAN DIMENSION

ALIGNED WITH EU PRIORITIES



Cross-border research collaboration



Data Spaces & Smart City ecosystems



Real-world deployments
(CEUS, smart infrastructure)



Integration with EU research initiatives

WP2 – MOBILITY

KNOWLEDGE EXCHANGE & CAPACITY BUILDING

KEY RESULTS

WHAT WAS ACHIEVED



Advanced research competencies

Participants enhanced their skills in cutting-edge research and applied technologies.



Joint scientific work

Teams collaborated on research topics and produced joint outputs and results.



Knowledge exchange with EU partners

Active exchange of expertise, methods and best practices with European universities.



Development of research ideas and proposals

New research ideas were shaped into proposal concepts for future funding opportunities.

SUSTAINABILITY & IMPACT

LONG-TERM OUTCOMES



Joint research publications

Co-authored papers and scientific outputs in high-quality venues.



Future EU project preparation

Stronger readiness for EU calls and coordinated proposal submissions.



Strengthened academic partnerships

Long-term collaboration agreements and deeper institutional connections.



Foundation for ExcellCity++ initiatives

Building the basis for ExcellCity++ and future smart city innovations.

FINAL INSIGHT

A HIGH-IMPACT RESEARCH MODEL



TRAINING



COLLABORATION



RESEARCH



INNOVATION



TRAINING → COLLABORATION →
RESEARCH → INNOVATION



HIGH IMPACT

Direct contribution to research excellence and innovation capacity.



STRONG INTERNATIONAL DIMENSION

Cross-border cooperation building a smart and connected academic community.



SUSTAINABLE OUTCOMES

Long-term value through partnerships, publications and future projects.



BUILDING KNOWLEDGE. STRENGTHENING PARTNERSHIPS.
CREATING IMPACT.

WP2 – MOBILITY

KNOWLEDGE EXCHANGE & CAPACITY BUILDING

Incoming Training Mobility by JUAN ANTONIO MARTÍNEZ NAVARRO



University of Murcia (UMU), Spain

TRAINING ACTIVITIES



Multiple sensors activation



Notification mechanisms
and subscriptions



Data visualisation
and analysis



ULSIT platform design



Dashboard testing
and pilot implementation



APPLIED RESEARCH & INFRASTRUCTURE OPTIMIZATION



KEY OUTCOMES



Optimisation of smart city
architectural solutions



Enhancement of FIWARE-based
infrastructure



Practical dashboard
development



Knowledge transfer
from UMU expertise



Stronger collaboration
between ULSIT and UMU



Training focused on **optimizing architectural solutions**
for **intelligent, data-driven** and **sustainable cities**.



LOCATION
ULSIT, Sofia, Bulgaria



PARTICIPANTS
10 project participants



DURATION
21 July – 1 August 2025

WP2 – MOBILITY

KNOWLEDGE EXCHANGE & CAPACITY BUILDING



WP2 – MOBILITY

KNOWLEDGE EXCHANGE & CAPACITY BUILDING





THANK YOU

SPECIAL THANKS TO



Финансирано от
Европейския съюз
NextGenerationEU

ИЗПЪЛНИТЕЛНА АГЕНЦИЯ
„ПРОГРАМА ЗА ОБРАЗОВАНИЕ“



МИНИСТЕРСТВО
НА ОБРАЗОВАНИЕТО
И НАУКАТА



BUILDING **KNOWLEDGE**. STRENGTHENING **PARTNERSHIPS**. CREATING **IMPACT**.



HUMAN INSPIRATION SOUL



PEOPLE
ARE OUR PURPOSE



KNOWLEDGE
IS OUR POWER



COLLABORATION
IS OUR STRENGTH



SMART CITIES
BETTER LIVES



TRUST & ETHICS
GUIDE OUR WAY



EUROPE TOGETHER
A SHARED FUTURE