

Newsletter #5

June 2024

Pioneering the Future of 5G and Beyond

Discover the world of cloud computing and networking with ACROSS – *Newsletter Edition #5*

Welcome to the **Fifth Edition** of our Newsletter, featuring all the latest news from **ACROSS (Automated zero-touch cross-layer provisioning framework for 5G and beyond vertical services).** This Research and Innovation Action, funded by the Horizon Europe framework Programme, designs and implements an end-to-end service deployment and management platform for next generation networks and services, aiming at unprecedented levels of automation, performance, scalability, and energy efficiency.















Conferences

EuCNC & 6G Summit

(Antwerp, Belgium, 4 June 2024)

Our esteemed colleague Kostis Trantzas from UoP had the great opportunity to present a research on "Intent-based Network Management adopting Multimodal Generative AI" with a paper submitted at the EuCNC & 6G Summit this year! The paper explores the implementation of an intent based management framework which receives a high level description of the desired network capabilities along with supplementary files, e.g. deployment descriptors, and translates them into configuration files consumable by the network itself. In order to achieve this, the work establishes a translation pipeline that leverages the employment of emerging multimodal generative artificial intelligence (GenAI) models, specifically Large Language Models (LLMs), and open industry-ready standard templates. The adoption of those two emerging technologies offers high dynamicity on the interpretation process of the user's intent, while ensuring that its outcome is compatible with every orchestrator or next-generation Operating Support System (Next-gen OSS) that adheres to those standards.















Conferences

EuCNC & 6G Summit

(Antwerp, Belgium, 5 June 2024)

Our esteemed colleague Ricard Vilalta (CTTC) had the privilege of co-chairing the EuCNC & 6G Summit Special Session on "Open Source for bridging Research and Standardization" on June 5, 2024. In the ever-evolving realm of ICT standardization, ETSI is steering the industry towards a future defined by software, collaboration, and implementation driven standardization processes. At the heart of this revolution lies a new powerful tool – the collaborative Software Development Groups – and four initiatives —Open Source MANO, TeraFlowSDN, OpenSlice, and OpenCAPIF— each contributing a unique chapter to the narrative of Telco transformation. The discussion panel delved into the compelling stories behind these projects, uncovering the motivations that fuel their development, the way they embrace research, and the goals they aim to achieve.















Events

TFS#4 Hackfest

(Athens, Greece, 21-22 May 2024)

At the beginning of the first day, TFS TSC Chair Lluis, provided an introduction about software-defined networks as well as the role of TFS, the new TFS Release 3 architecture, and an overview of latest demos and use cases. The intro was followed by some technical sessions, led by TELEFONICA sharing their knowledge and experience about the use of the Border Gateway Protocol (BGP) & BGP Link State (BGP-LS) speakers and device inventory in TFS. During the afternoon, participants organized themselves in small teams and started working on them and hacking TFS mentored by TFS community members.

The second day was fully dedicated to work on the Hackfest challenges, of increasing complexity! These challenges have been done with increasing difficulty, allowing the participants to understand how the new features taught during the Hackfest work. These challenges evolved from simple changes in TFS configuration files to making changes in the database to learning how to save and modify information in TFS and understanding the new BGP-LS component taught the first Hackfest day.















Events

OSL#3 Plenary
(Antwerp, Belgium, 6 June 2024)



After the EuCNC & 6G Summit closing session, the ETSI OSL had its plenary meeting hosted by IDLab (UGent - UAntwerpen - imec) in their beautiful premises in Antwerp. ACROSS partners UoP, CTTC, TID and UBITECH participated in OSL technical discussions and exchanged ideas on future directions as well as the process for following the upcoming OSL Release 1 in a few weeks. Finally all committed to support and participate at SNS4SNS in ETSI in November!













Meetings

SNS JU SB Meeting

(Aachen, Germany, 9 April 2024)

We are thrilled to share that the ACROSS project had the privilege of participating in the SNS JU Steering Board meeting held in Aachen, on April 9, 2024. The event was graciously hosted by Fraunhofer Institute for Production Technology IPT and it was an incredible opportunity to collaborate, exchange ideas and contribute to the advancement of our shared goals. We are enthusiastic about the future of the ACROSS project and are dedicated to advancing the limits of network and service management. Our participation in the SNS JU SB meeting reaffirmed our commitment to excellence and our role in driving industry progress.















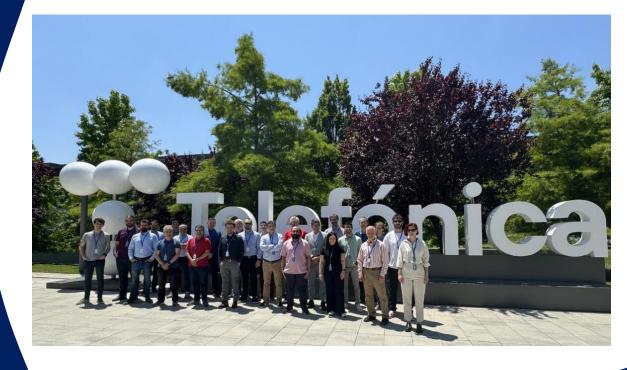
Meetings

4th Plenary Meeting

(Madrid, Spain, 28-29 May 2024)

The 4th plenary meeting was successfully held in Madrid, Spain, on the 28th and 29th of May 2024. In the meeting, partners discussed task progress, challenges, opportunities, and future implementation plans. The project coordinator, NOVA, chaired the whole process during the 2-days meeting. The 4th Plenary meeting, hosted by our esteemed partner Telefonica, achieved the following objectives:

- Alignment of the integration of individual components and workplan towards the 1st release of ACROSS platform
- Assessment of interoperability and integration testing results between different modules
- Identification and mitigation of key technical risks and implementation challenges
- · Monitor and intensify dissemination and communication activities
- Planning on the upcoming mid-term project review















Meetings

SNS TB Meeting

(Antwerp, Belgium, 7 June 2024)

The 1st SNS-JU Technology Board (TB) Face-to-Face meeting under the leadership of 6G-IA was followed by ACROSS partner UoP. The Technical Managers of all 35 Smart Networks and Services Joint Undertaking (SNS JU) Phase 1 projects gathered in Antwerp, Belgium to discuss and progress on the common technical activities of the TB (Reference Figure, Sustainability, AI/ML, etc.) and planned the next steps for common actions and synergies on multiple levels.















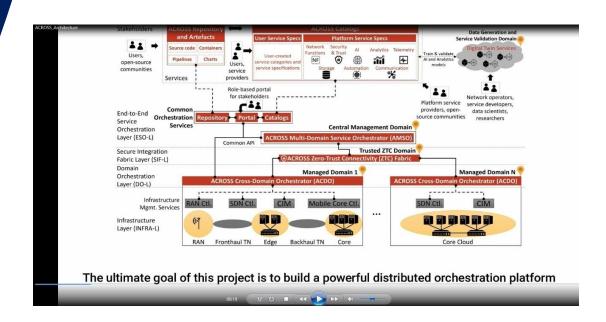
Video Clips

ACROSS Architecture Video

The second VIDEO of ACROSS is OUT!

ACROSS's consortium releases the second video of the project entitled "ACROSS Architecture", one that aims to inform the public about the Architecture, the Services and the Test Cases of ACROSS.

The "ACROSS Architecture" video is publicly available through ACROSS's YouTube channel!

















Our Team

NOVA



Orchestrating a brighter world











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