Joint ETSI NFV and ITU-T SG13 Workshop on "AI-Enabled Network Evolution: Cloud Native & AI Innovation for Telco Future"

24 June 2026
Geneva

Session 1: Standardization perspectives from ITU-T SG13 and ETSI NFV ISG

Takeaways and Conclusions

1. ITU-T SG13 presented its cloud-native and AI infrastructure recommendations (containers, microservices, PaaS, serverless, distributed cloud, AI model lifecycle, etc.), covering the full stack from container to MLaaS including new and ongoing work items related to AI agent services.
2. ETSI NFV's evolution from NFV-MANO to a three-tier Telco Cloud architecture (infrastructure / platform / orchestration) establishes a concrete reference model for AI-native integration. Release 6 and 7 address cloud-native platform functions and AI agent support respectively.
3. Both organisations confirmed clear complementarity in technical architecture, work scope, and strategic direction. A joint transition toward AI-native telco standards is both necessary and technically feasible.

Suggestions to SG13

- SG13 may consider strengthening coordination with ETSI NFV technical groups to align ongoing work on cloud-native orchestration, NFV-MANO evolution, and AI infrastructure.
- SG13 could continue cooperation with ETSI NFV on feasible technical items, particularly in areas overlapping with ETSI NFV Releases 6 and 7.
- Focus on the latest developments and ongoing activities

Session 2: Industrial perspectives and practices on cloud native and AI native coordination

Takeaways and Conclusions

1. ETSI NFV introduced ongoing work on Telco Cloud Infrastructure, Telco Cloud Platform and Telco Cloud Orchestration, including lifecycle management, telemetry, repository management, intent management, measurement and data analytics, and support for AI-related applications and agents.

2. China Mobile shared telco cloud practices including the shift from VM-based VNF to containerized CNF, cross-site unified MANO deployment and AI-powered autonomous network O&M; the absence of standardized CNF packaging and testing specs remains a critical challenge.

3. GTI (Global TD-LTE Initiative) focuses on integrating 5G-Advanced, 6G, and AI for commercial value through global open labs, addressing AI-driven traffic inversion, achieving network operation energy savings via AI, proposing a unified AI agent protocol framework, and offering validated open lab use cases for standardization input.

Suggestions to SG13

- ITU-T SG13 has developed Recommendations for cloud-native and ML applications, yet it needs to accelerate the formulation of a recommendation system for AI agent-oriented networks and AI infrastructure.
- Cooperate with industry consortia including GTI through focus groups to integrate verified industrial practices and supplement SG13's deliverables.
- Continue the exchange of information for specific technical matters through Liaison activities.

Roundtable discussion on future cooperation between ITU-T SG13 and ETSI ISG NFV

Takeaways and Conclusions

1. Both organisations are aligned on the need for, and practical path toward, formal collaboration. Complementarity in architecture, terminology, and work scope is confirmed.

2. Four concrete cooperation directions were identified as possible areas for further discussion: (1) functional architecture mapping; (2) terminology alignment; (3) standing document/standards exchange; and (4) joint AI-native challenge activity.

3. GTI's open-lab outputs were welcomed as valuable inputs to both ETSI NFV and SG13 standardisation work.

4. A dedicated full-day technical workshop in 2027 on Telco Cloud implementation specifics was suggested as a possible follow-up activity.

Suggestions to SG13

- Continue to share draft standards, work items, and use cases with ETSI NFV on a standing basis to enable joint use-case analysis and concept alignment — particularly on AI agent management frameworks and Telco Cloud architecture terminology.
- Incorporate GTI open-lab use cases into its use-case repository; consider launching a joint global challenge activity with ETSI NFV and GTI to test AI-native network capabilities in federated environments.
- Possible SG13 work items for cooperation with ETSI NFV include multi-cloud APIs, service mesh management, microservice governance, AI data-related work items, and other relevant topics.