

2021-02-01- EUAG newly updates- Voices from the cross-community end users

Topic Leader(s)

- [Lei Huang](#)
- [Beth Cohen](#)
- [Lingli Deng](#)
- [Yan Yang](#)
- [Lincoln Lavoie](#)
- [Jim Baker](#)

Topic Overview

EUAG working updates, what CSPs concerns this year and what we've achieved, including AI/ML, CSPs requirements priorities, automated testing white paper, etc. We will have three sub-topics in this session. This session will be a review of Operators' concerns this year and what we've achieved, including AI/ML, CSPs requirements priorities, automated testing white paper, etc. We will have three sub-topics in this session: EUAG Networking AI/ML Survey and Next Steps, EUAG Input from LFN Projects to set Priorities, EUAG Networking AI/ML Testing Requirements, NFV testing white paper, Anuket verification program vs. LFN level branding (nee: OVP)

Slides & Recording



[EUAG-AI&ML_survey_results-2021-02-01.mp4](#)

[euag_voices-from-end-users.mp4](#)

Minutes

Session is to review the previous work and ask for community feedback about the direction of the EUAG projects. Discussion of the survey methods and process. Initial results show that most companies are just starting their journey incorporating AI/ML into their networks. Catherine: We have integrated Acumos with ONAP. What else would you expect regarding AI with ONAP? maybe start from our Control Loop mechanisms and then add AI/ML? Acumos is an AI platform LF open source

[www.Acumos.org](https://wiki.onap.org/display/DW/Acumos+DCAE+Integration) ONAP: <https://wiki.onap.org/display/DW/Acumos+DCAE+Integration> has added some integration efforts.

Is there any network automation/autonomy use-case specific model that could be enabled by Acumos Market?

AI/ML testing session: Presentation from [Yan Yang](#)

[Testing and Certification Requirements from EUAG Intelligent Network and AI Survey -v1.1.pdf](#)

What does "network service certification" mean - functional validation? A: Autonomous network service, with self-healing, self-optimization, like capabilities, to 2B customers. other ref: [lfadata.foundation](#)

What would an OVP3.0 test suite test? – Testing requirements should be the focus. RAN is one potential area, O-RAN is one potential option for RAN. O-RAN has its own OTIC certification program. I am not sure what we could help? I think the biggest challenge here will be how to divide up the testing. If testing is end-to-end, it will be hard to differentiate testing of the technologies or components from testing a specific instance of a deployment. Need to be able to create a framework that does not immediately devolve into a proprietary E2E scenario that would not be useful to the community. Can we break the components apart enough to allow the operators to get meaningful results out of it. How can we validate that the algorithms actually work in production? There are some experimental network for academic research inside and outside China. They are too way from production. It has to be possible. Otherwise these algorithms would never to put in scale adoption. I think to attract industry and business we need focus on specific use cases and then AI Tech details with it. I am sure it is very hard to push AI without some clear benefits and importantly their realization. We could share with the use-case specific priority next time.

should O-RAN be included here? xApps are all about intelligent network (though for the specific use case of RAN) – In a nutshell, yes. Might be other groups also looking at this. RAN work and any synergy with ours. I agree O-Ran should be included - they are planning embedding AI-powered radio control

February 2020 white paper was including AI/ML module February 2020 white paper was including AI/ML module
<https://www.o-ran.org/s/O-RAN-Use-Cases-and-Deployment-Scenarios-Whitepaper-February-2020.pdf>

What is the TM Forum Spec for network intelligence ? – IG1230 TMF ANP @Lingli - that's a fair analysis. We should just acknowledge the O-RAN work and any synergy with ours.

Minutes - Second Session

EUAG New updates - Summary and Next Steps [Lei Huang](#)

Add Slides here [EUAG Newly Updates - Summary and Next Step Plan.pdf](#)

Current work includes ONAP top priorities, Network Intelligence survey, VNF Testing White paper and representation of the Telecom community to the projects. Review of the current work of the white papers. [Ranny Haiby](#) Intelligent networking question. What is the common platform and where should it be hosted? Possibly an open lab where operators bring their data and the vendors bring their tools to test the AI/ML assumptions. [Morgan Richomme](#) do the lab work need to share. Labs take resources and how can they be properly shared. [Morgan Richomme](#) lab is for mostly used by ONAP project. Open Labs balanced with staging labs. Labs are often unstable, so how can the lab be used to create a standard platform. More vendors are creating their own labs, so the lab is being used less. Mostly was used for CNF and VNFs. AI/ML is a different animal. No Admin access, but user access. [Saad Sheikh](#) brings up some questions about the labs. What types of labs do we actually need? End to End validation is the key. CNF and VNF is not enough. The integration of all the elements is what the Telecom community is more interested in. SaiSeshu MUDIGANTI says that labs are a limited resource, need to be used wisely. [Heather Kirksey](#) notes that Lab as a service might be worth pursuing. Cross project labs are harder to support. Adding lots of automation is a possibility, but it requires lots of support as the requirements are constantly changing.

[Lei Huang](#) notes that maybe would gather requirements from the Operators, then look for a third party to be used for open lab testing. OVP testing potential [Morgan Richomme](#) Very limited in scope. We need to work on the testing/certification process. As a service provider, the certification cannot be too lightweight. The certification adds value only if it reduces the operators' effort to bring a given service/product into production. Badges need a static definition, while testing frameworks are living products that are more able to change to meet the changes in technology. The static definition of the RFP process has to be balanced with the rapid changes in the technology. Operators have this problem with the long time frames between the original RFP and the final execution.

[Srinivasa Addepalli](#) how many operators are willing to share data that can be used. Sorry, I can't ask this as I don't have access to microphone. There are three things that EUAG can help with. 1. AI/ML use cases for 5G RAN and 5GC (Note that NWDAF specified use cases can be satisfied with policy based analytics) that operators need 2. How many operators are willing to share data with open source communities to create algorithms or even models. Continuous access to data is important to make the models better. Note that models are as good as accuracy of input data. If there is willingness, what is the process of collaboration. It is good to understand from operators perspective 3. Operators that intend to create their own AI algorithms and models themselves and the expectation they have from open source communities, is it just the generic Data Analytics Framework platform?

What action can we take out from this conversation? We should set up a follow up a Plenary session to do a deep dive on the requirements and how can they be realized in actions. The follow up will include vendors.

Action Items

