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| **Title\*:** | Technology Workshop Meeting agenda “Machine Learning in communication networks”  ETSI ENI, SAI & ITU-T SG13 Q20, FG ML5G | | |
| from **Source**\*: | ENI Chairman | | |
| Contact: | Raymond Forbes | | |
|  |  | | |
| input for **Committee**\***:** | ENI | | |
|  |  | | |
| Contribution **For\*:** | Decision | **X** |  |
|  | Discussion |  |  |
|  | Information |  |  |
|  |  | | |
| Submission date**\***: | 2020-02-16 | | |
|  |  | | |
| Meeting & Allocation: | **ENI Workshop** | | |
| Relevant WI(s), or deliverable(s): |  | | |
|  | | | |

**Decision/action requested:** Please approve

**Title:** Machine Learning in communication networks

**Scope:** This Workshop will address ML/AI in ETSI & ITU-T 5G explore synergies, working together, removal of any overlaps, that ETSI ISG, ENI ISG SAI, ITU-T SG13 Q20, FG ML5G are addressing. This workshop will investigate the possibilities for technical co-operation between ENI, SAI, SG13 Q20 & FG ML5G. Also will aim to develop a roadmap of future actions and ways of working together.

Candidate issues for discussion include:

Use Case & possible gaps (Additional Use Cases, Mapping of ENI, ZSM, ML5G;

Completing the information flows in all Use Cases)

Intelligent policy management & resource management:

Radio access networks, transport networks, etc..

Models and Techniques in general

Architectures (functional and reference points & modelling)

Architectural Modelling: Benchmarks, KPIs, distributed architectures

Interoperability & Simulations (PoCs, Testing and Open Source)

Benefits of standards & competition:

Written standards or things open to differentiation,

Open Source (OTS implementations):

Linux Foundation

Eclipse Foundation

Cooperation and or contribution to 3GPP (S2 ENA, NWDAP, etc..)

Vertical industries

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| **AGENDA “**Machine Learning in communication networks**” – Monday, 16th March 2020** | | |
| **Time** | **Topic and Description** |  |
| **09:00 – 11.00 (30 minutes each)** | **Session 1**: ETSI   1. ETSI ENI intro presentation 2. ENI member - PoC project: Intelligent Network Slice Lifecycle Management 3. ETSI SAI intro presentation | Raymond Forbes  CaiShengming (remote) Will Liu/Haining Wang  Scott Cadzow (on behalf of Alex Leadbetter) |
| **11.00 – 11:30** |  | **Break** |
| **11:30 – 13:00**  **(45 minutes each)** | **Session 2**: ITU-T   1. 5G and beyond – where are we and what is next 2. ITU-T FG ML5G / SG13    * ML/AI    * Scope, work, output    * 5G AI    * Campus networks | Reinhard (remote)  Prof Slawomir Stanczak  Vishnu Ram / Marco Carugi |
| **13.00 – 14:30** |  | **Lunch** |
| **14:30 – 16.00** | **Session 3:**   1. **Cooperation up to now SG13/ENI - ITU-T/ETSI** 2. **Discussion around work-plans**  * **Use Case & possible gaps (Additional Use Cases, Mapping of ENI, ZSM, ML5G;**    + **Completing the information flows in all Use Cases)** * **Intelligent policy management & resource management:**   + **Radio access networks, transport networks, etc..** * **Models and Techniques in general** * **Architectures (functional and reference points & modelling):**   + **Architectural Modelling: Benchmarks, KPIs, distributed architectures** * **Interoperability & Simulations (PoCs, Testing and Open Source)** * **Benefits of standards & competition:**    + **Written standards or things open to differentiation,**   + **Open Source (OTS implementations):**   **Linux Foundation**  **Eclipse Foundation**   * **Cooperation and or contribution to 3GPP (S2 ENA, NWDAP, etc..)** * **Vertical industries**  1. **Industry requirements** | Luca (moderator)  Vishnu Ram (remote) "scribe"  Open discussion (everyone)  Named volunteers to open each subject with one question per topic?  Road-map on collaboration   * Synergies / complementary   + Fit-together / jigsaw * Divergent areas   + Factual   + Competitive   + Usable standards   + Timeline analysis * Joint working * Priorities |
| **16.00 – 16.30** |  | **Break** |
| **16.30 – 17.00** | **Session 4: Conclusions** | ENI Chairman |
| **16.30** |  | **End** |