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# ENI ISG PoC Report Template

## B.1 General

The following normative disclaimer shall be included on the front page of a PoC report:

*Submission of this ENI ISG PoC Report as a contribution to the ENI ISG does not imply any endorsement by the ENI ISG of the contents of this report, or of any aspect of the PoC activity to which it refers.*

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## B.2 ENI ISG PoC Report

### B.2.1 PoC Project Completion Status

Indicate the PoC Project Status. Can the PoC be considered completed? If this is a multi-stage PoC project, indicate the Reported Stage status and plans for future Project Stages/Milestones:

- Overall PoC Project Completion Status: \_\_\_\_\_ **Completed** \_\_\_\_\_
- PoC Stage Completion Status (Optional - for Multi Stage projects only): \_\_\_\_\_

### B.2.2 ENI PoC Project Participants

Specify PoC Team; indicate any changes from the ENI ISG PoC Proposal:

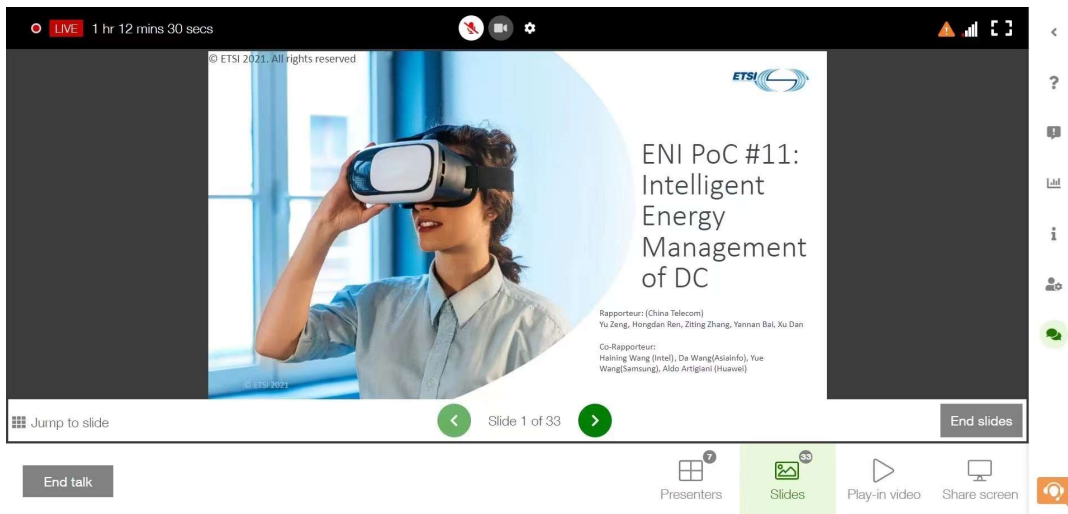
- PoC Project Name: \_\_\_\_\_ Intelligent Energy Management of DC \_\_\_\_\_
- Network Operator/Service Provider: China Telecom Contact: Yu Zeng(zengyu@chinatelecom.cn)
- Manufacturer A: \_\_\_\_\_ Intel \_\_\_\_\_ Contact: HainingWang(haining.wang@intel.com)
- Manufacturer B: \_\_\_\_\_ Huawei \_\_\_\_\_ Contact: Aldo.Artigiani@huawei.com
- Additional Members: \_\_\_\_\_ Asia Info \_\_\_\_\_ Contact: Lilei Wang(wangll9@asiainfo.com)
- Additional Members: \_\_\_\_\_ Samsung \_\_\_\_\_ Contact: yue2.wang@samsung.com

### B.2.3 Confirmation of PoC Event Occurrence

To be considered as complete, the PoC should have been physically demonstrated with evidences extracted from the demonstration, i.e. the following information should be provided:

- ETSI ENI Webinar meeting, Online, 27, July, 2021

The PoC progress was presented by China Telecom and Intel in the ESTI ENI Webinar, introducing the first smart energy-saving concept verification project led by an operator.

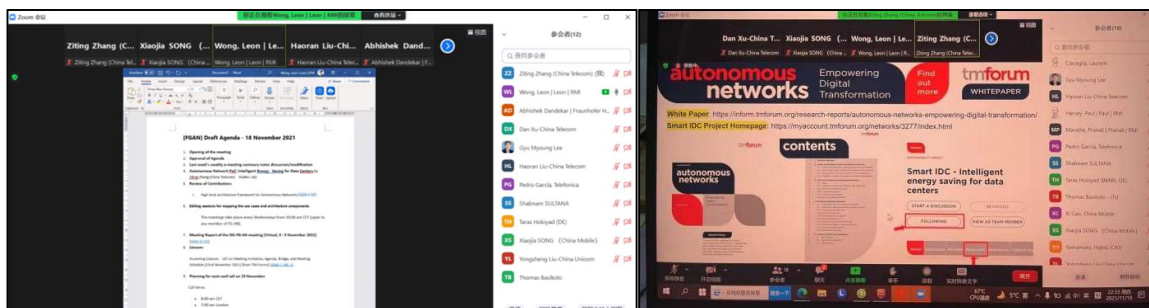


- □2021 Autonomous Driving Network China Industry Summit, Beijing, 23, September, 2021

Co-organized by TMF and CCSA. As a representative of China, shared the practice of intelligent energy-saving in Data centers.



- □2021 ITU-T FGAN (Focus Group-Autonomous Network) Proof of Concept meeting, Online, 18, November



- IDC Energy Saving Innovation and Application Seminar, Beijing, 30, November 2021

Introduced the architecture, solutions, platform capabilities and follow-up promotion plans.



- Won the "New Product Award" of the 2021 Digital Expo Leading Technology Achievement Award



- Won the 2021 TMF "Sustainability – impact Sustainability Award" 14<sup>th</sup> Oct. 2021



SMART IDC - INTELLIGENT ENERGY SAVING FOR DATA CENTERS



## B.2.4 PoC Goals Status Report

Specify PoC Goals from ENI ISG PoC Proposal (clause A.1.2). Identify any changes from the original ENI ISG PoC Proposal with an explanation as to why the changes were made. Indicate the extent that each goal was met. Provide sufficient information for those not familiar with the PoC goals to understand what has been achieved and/or learned.

- PoC Project Goal #1: DC portrait classification. Demonstrate the use of AI on DC dynamic environmental data to provide a categorization and requirements analysis. Goal Status (Demonstrated/Met?) Demonstrated
- PoC Project Goal #2: Policy-based DC Energy Management. Demonstrate the use of AI algorithms to enable the use of a policy-based energy management according to intent aware autonomy and data mining. Goal Status (Demonstrated/Met?) Demonstrated

## B.2.5 PoC Feedback Received from Third Parties (Optional)

Where applicable, provide in a free text, feedback received from potential customers, Ecosystem partners, event audience and/or general public.

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## B.3 ENI PoC Technical Report (Optional)

### B.3.1 General

PoC Teams are encouraged to provide technical details on the results of their PoC using the PoC Scenario Report template below.

## B.3.2 PoC Contribution to ENI ISG

Use table B.1 to list any contributions to the ENI ISG resulting from this PoC Project.

**Table B.1**

Contribution	WG	WI/Document Ref	Comments
ENI(21)000_250 Proposal for updating ENI 001 use case about PoC11 (Intelligent energy management of DC)	ENI	ETSI GS ENI 001	Add intelligent energy management of DC related information into ENI 001 for reference.
ENI(21)000_251 Proposal for updating ENI002 Requirements about Poc#11	ENI	ETSI GS ENI 002	Add some data collection and algorithm related requirements of data center in ENI 002.
RGR/ENI-009v121_Data_Proc_Mech (GR ENI 009)/ENI(21)019_041	ENI	ESTI GR ENI 009	Add some data related information in ENI 009.
RGR/ENI-009v121_Data_Proc_Mech (GR ENI 009)/ENI(21)000_020	ENI	ESTI GR ENI 009	Add some data related information in ENI 009.
ENI(21)020_042 Terminology draft release 3 documents	ENI	ESTI GR 004	Add abbreviation of IDC to the new draft

## B.3.3 Gaps identified in ENI standardization

Use table B.2 to indicate Gaps in standardization identified by this PoC Team including which forum(s) would be most relevant to work on closing the gap(s). Where applicable, outline any action(s) the ENI ISG should take.

**Table B.2**

Gap Identified	Forum (ENI ISG, Other)	Affected WG	WI/Document Ref	Gap details and Status
Applying AI to IDC on energy management	ENI ISG, TMF	ENI	ENI(21)020_039	The PoC demonstrated that ENI general architecture cannot be used directly for IDC energy management. Gap is addressed by a specified energy architecture in PoC#11.

## B.3.4 PoC Suggested Action Items

Suggestions for further exploration:

1. Use Case: more specific use case scenarios can be updated to the use case working item
2. Requirements: some tailor-made requirements that on the carbon emission control can be added to the existing requirements working item
3. Terminology: there are definitions and abbreviations that refer by the PoC#11 can be added to Terminology draft V3.1.1

## B.3.5 Additional messages to ENI

The sustainable responsibility is getting more and more important for network operator, by applying proper techniques e.g. AI, big data etc, the network operator can reduce both electricity power and also water consumption, thus keep the network as green as possible. This will also need the whole industry to work together.

### B.3.6 Additional messages to Network Operators and Service Providers

We would like to raise the interest of network operators and service providers, by actively using a more power efficient DC (lower PUE), the carbon footprint can then also be reduced. Considering DC and base stations (4G and 5G), more impact for the environment can be achieved.

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# History

<b>Document history</b>		
V1.1.1	Dec 2021	Publication