ETSI Sustainability Summit 30th March 2023

ETSI

Event Wrap-Up / Conclusions

Cartoons to be shared shortly

EVENT WEBSITE: ETSI Summit on Sustainability



Session#01: The Sustainability Challenge and Global Green Initiatives.



Main Messages from the Session:

- Much work on Sustainable ICT is already underway in multiple SDOs and Industry Associations
- ICT is a key sector to address climate change through digitization / ICT enablement
- Measurement frameworks & shared KPIs are key to measuring impacts and improvements made / to be made
- ITU-T and ETSI EE have a long history of cooperation working together.

Main Findings from the Session:

- Much work has been done, but much remains to be done, cooperation is key to avoid fragmentation / duplication
- Sustainability covers many sub-topics, inc. telco supply chain, circular economy, network efficiency, & methodologies
- · Carbon emissions are but one element, energy efficiency, circular economy & waste management are also key

Suggested Actions from the Session:

- Adopt ESG (Environmental Social Governance) goals as an integral part of the company's objectives
- Seek to reduce scope 3 emissions, ensure alignment of major stakeholders in various supply chains
- Standards work needed on reporting of 'avoided emissions is needed. <Early work in ETSI OEU GS 020>
- Further investigate the concept of "digital sufficiency" / "ICT Sobriety" (the balance of ICT deployments vs real needs)
- Work on sustainability is GREAT, but what needs to be done to make it GREATER? (Challenges and opportunities)

Session#02a: The Role of ICT in Sustainability (Part 1, Operator Panel).



Main Messages from the Session:

- Sustainability is the #01 priority for Operators and indeed across the entire ICT industry
- Creating more efficient ICT solutions is key both to ICT itself and to other industries
- · Much work has already been done, and positive impacts of sustainable approaches are visible
- Individual action is good, but coordinated collective action is better

Main Findings from the Session:

- Many operators are already including more sustainable energy sources in their networks and do actively report on their KPIs – often this information is public
- Network sharing can reduce CAPEX/OPEX and environmental impacts
- Challenge is to produce ever increasing network performance (e.g. 5G-> 6G) vs reduced energy and resource consumption and reduced emissions / waste

Suggested Actions from the Session:

- Study including sustainability and energy efficiency aspects in "ALL" ETSI future deliverables
- Putting sustainability criteria in the procurement phase towards the vendors
- Collaboration between operators, to share their common requirements and provide shared requirements to the supply chain ecosystem

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Session#02b: The Role of ICT in Sustainability (Part 2, Solution Provider Panel).



Main Messages from the Session:

- Many vendors are looking seriously at sustainability, and have been doing so for several years
- Several solutions are already developed for energy efficiency, waste reduction, sustainability measurements and the reporting of performance data.
- Circular economy is an important factor and already actively used for achieving sustainability
- EC SNS JU research projects are looking at new sustainable technologies and methodologies

Main Findings from the Session:

- Many providers are actively reporting on their sustainability KPIs & often this information is public
- Important to capture, consolidate, analyse and share Sustainability Data
- A.I may be used to measure and improve sustainability BUT also consumes energy balance is key
- We need to consider the whole end-to-end service delivery chain and all elements in it, from raw materials through to end-of-life of equipment

Suggested Actions from the Session:

- Continue and expand the publication of environmental information on products and services
- Strive to reduce energy consumption and also extend lifecycles of ICT equipment
- Recycling and repurposing helps to reduce waste challenge is to take back the equipment

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Session# 03: ETSI Activities Supporting Technologies for Sustainability.



Main Messages from the Session:

- ICT also has it's own carbon footprint, and needs to be deployed responsibly
- TC ATTM, TC EE and ISG OEU have already done much for on environmental & sustainable topics
- 3GPP is doing a lot on energy efficiency and energy saving already for 5G (and beyond)
- <oneM2M> IoT can reduce the carbon footprint and energy consumption in many use cases

Main Findings from the Session:

- Rare metals (lithium / cobalt / nickel) and also metals such as copper will be in short supply
- Sobriety means doing more with less we need to consume less energy / resources
- Extend the life-cycle of hardware and improve the efficiency of software (no bloatware)

Suggested Actions from the Session:

- Cross-SDO collaboration needed to build comprehensive, consistent & non-overlapping standards
- Further promote the excellent work being done on sustainability inside ETSI, 3GPP & oneM2M
- "Digital should worry about it's own environmental impacts" let's consider "what would Greta say"?
- Consider Sobriety doing more with less
- Converge our digital infrastructures (turn off old networks, phase out non energy-efficient tech.)
- Promote sustainable business (financing) models.

Session#04: What More Can Telecoms Do? – the way forward



Main Messages from the Session:

- ICT and specifically data centres create a significant carbon footprint
- There is a need for a clear framework and standards to avoid inaccurate 'claims'
- Net Zero considerations apply every stage of the journey for all organizations
 - Prepare / measure / target / reduce / Remove-offset / Report / Impact

Main Findings from the Session:

- ICT has a significant Carbon footprint < example 17 Mt CO2 eq. in France>
- There are numerous regulations and tax reductions schemes planned to reduce carbon emissions
- The UN called for greater action on the problem of 'greenwashing' in climate action and appointed a High-Level Expert Group to investigate this. Standards and clear frameworks can help clarify this.

Suggested Actions from the Session:

- Use of ISO Net Zero guidelines is of use for the development sustainable strategies
- Adopt an ecodesign (sustainability by design) approach
- Seek to have products that are long life, energy efficiency, recyclable, repairable

Workshop Overall Conclusions; Possible Next Steps for ETSI.



Main Messages from the Workshop:

- ICT is part of the (sustainability) problem and also very much part of the solution
- Focus on making ICT more sustainable first, it is the #01 priority for the industry today
- Study how digitization of other industries may help them become more energy efficient
- Much work on sustainability has already been done, and much remains to be done, focus on priorities
- Cooperation is essential to ensure global standards and frameworks that can be used to enable sustainable technologies in order to rapidly reach sustainable objectives
- "The cleanest energy is the one that is not consumed" energy efficiency and ICT sobriety are important areas to develop further
- Measurement, and the sharing of sustainability data are important steps in identifying potential and actual energy savings

Next Steps for ETSI

- Compile the dense input to the workshop so it may be be considered by all ETSI members
- Continue dialogue with other ESOs/SDOs/Industry Associations to encourage collaboration and avoid fragmentation of standards initiatives
- Consider having a second, longer, deeper, wider ETSI sustainability event in 2024->