



Wireless Power Transmission Technical Report Proposal

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Agenda

- Background
- Proposed title and scope
- Proposed contents
- proposed timeline
- Proposals and actions
- Project team leaders

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Background

- Wireless power transmission was discussed in the Madrid AGS and in other AGS meeting.
 - Proposed as a research session to find future standards
 - The AGS requested that interested members register
 - The CEA presented updates on wireless charging technologies
- Several architectures exist to support wireless power transmission, including
 - Electromagnetic induction :tightly coupled (defacto)
 - Electric field inductive coupling :tightly coupled
 - Highly Resonant Magnetic induction ; loosely coupled (relatively new emerging technology and many laboratory testing)
- Open issues: safety, regulatory, energy efficiency, signaling protocols, and others

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Background (cont.)

- Wireless power transmission is an emerging technology and market for the IEC TC100
- Country-specific regulations exist
 - Japan is working toward standards for highly resonant magnetic induction, many discussions & tests ongoing
 - The role of an IEC TC100 Technical Report would be to:
 - Raise awareness about this emerging technology
 - Report on the research, regulatory and safety issues
 - Summarize the state of the industry

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Proposed Title for a New Technical Report

Activities related to wireless power transmission for audio, video and multimedia systems and equipment

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Proposed scope

Information about wireless power transmission research and applications. Information about the regulatory environment for wireless power transmission. Observations and recommendations about the potential, future standardization within the scope of the IEC TC100.

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Proposed Contents

- ◆ Terms and definitions
- ◆ Reference documents
- ◆ Survey of the IEC TC100 members
- ◆ Reference models for one-to-one charging, one-to-many charging and other approaches
- ◆ Overview of various organizations' activities in wireless power transmission standardization and the status of their work

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Proposed Contents (cont.)

- ◆ The status of regulations in wireless power transmission
 - In the member countries of the IEC TC100
- ◆ Use cases in residential, commercial buildings and automotive
- ◆ General overview of devices
- ◆ Spectrum used and proposed
- ◆ Approaches to measurements

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Proposals and Actions

- Establish a Stage 0 project in the IEC TC100 for a new TR on wireless power transmission (anticipated, October 2011)
- Call for experts
- Call for contributions to meet the goals
- Establish liaisons with other TCs & SDOs to contribute to the work
- Kick-off survey (anticipated, January 2012)



Proposed Timeline

Draft 1.0 of the Working Draft: due in June 2012 for PT members review

- Survey results from the IEC TC100 members
- Observations
- Recommendations

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Project Team Leaders

- Shuichi Matsumura Japan
- John Suh USA

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Thank you for your time.
Any questions?

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