Global Standards and EMC Regulation

Driving Wireless Power to EVs

Ky Sealy, WiTricity Fellow
February 2023

WiTricity®

Charge Happy™

Wireless power for light-duty EVs is standardized!

EMC Standards / Regulations

ITU · FCC · CEPT · IEC CISPR · ETSI

SAE J2954

GB/T 38775

ISO 19363 (5474-4)

IEC 61980-3

IEC 61980-1: EMC & Safety

UL 2750: Safety

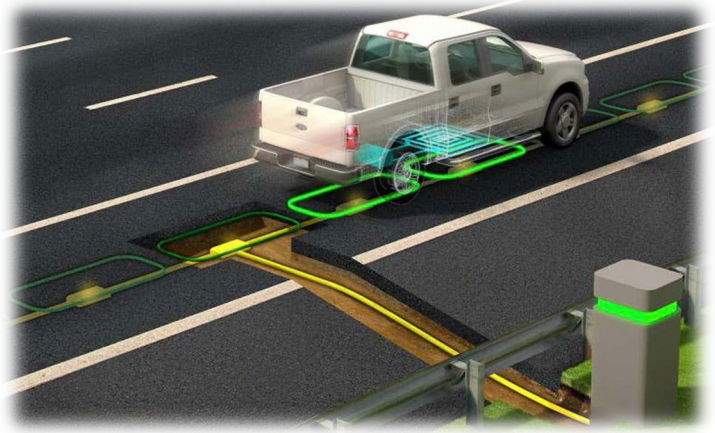
And next generation (heavy duty & dynamic) is on-going…

Heavy Duty WPT (20 kW – 500 kW):

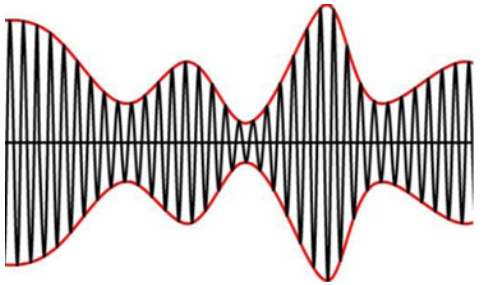
- SAE J2954/2
- IEC TC69 / PT 61980-4

Dynamic (In-Motion) WPT:

- SAE J2954/2
- IEC TC 69 / PT 63243 (IEC 61980-5)
- IEC TC 69 / PT 63881 (IEC 61980-6)



But some myths have propagated due to lobbying …



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Wireless EV Charging Could Pose Threat to AM Reception

New medium-frequency interference concerns are raised by Xperi

BY RANDY J. STINE

PUBLISHED: NOVEMBER 18, 2022

WiTricity

December 1, 2022

Does Wireless EV Charging Impact AM Radio Reception?

By Ky Sealy

One question that continually arises about wireless charging for electric vehicles is, "Does EV wireless charging interfere with AM radio?" The answer is, "No." WiTricity's wireless power transfer system for EVs (WPT-EV) does not interfere in any appreciable way with AM radio. Global radio regulations do not allow any devices with electronics to cause harmful interference to radio services with allocated spectrum, and wireless charging systems are no exception. Even though the world is split into three different regions for frequency allocation and channel separation of AM radio, the experience is always the same.

EMC

WiTricity continues to educate regulators

with support from SAE J2954 and others…

Successful EMC updates & publication of:

- Recommendation ITU-R SM.2110-1
- Report ITU-R SM.2451-1
- IEC 61980 -1 & -3
- Etc.

With lots of continued work in …

- CISPR (CISP/B, D ,H ,etc.)
- ITU-R SG1 & WP1A
- FCC RM-11815
- CEPT SE 24 & CEPT SRDMG WG WPT
- Etc.

Studies at EU's JRC

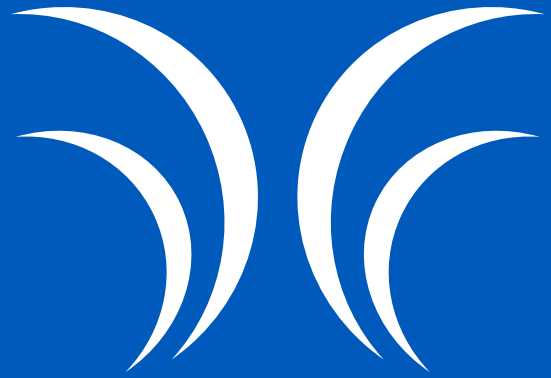
Studies with SAE at TDK

WiTricity SAE INTERNATIONAL

EMC Standards / Regulations

ITU FCC CEPT IEC CISPR ETSI

JOIN US AND SUPPORT!



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