



INTERNATIONAL ELECTROTECHNICAL COMMISSION

MARKET STRATEGY BOARD

SUBJECT **Meeting 8, Shanghai, agenda item 7.1**

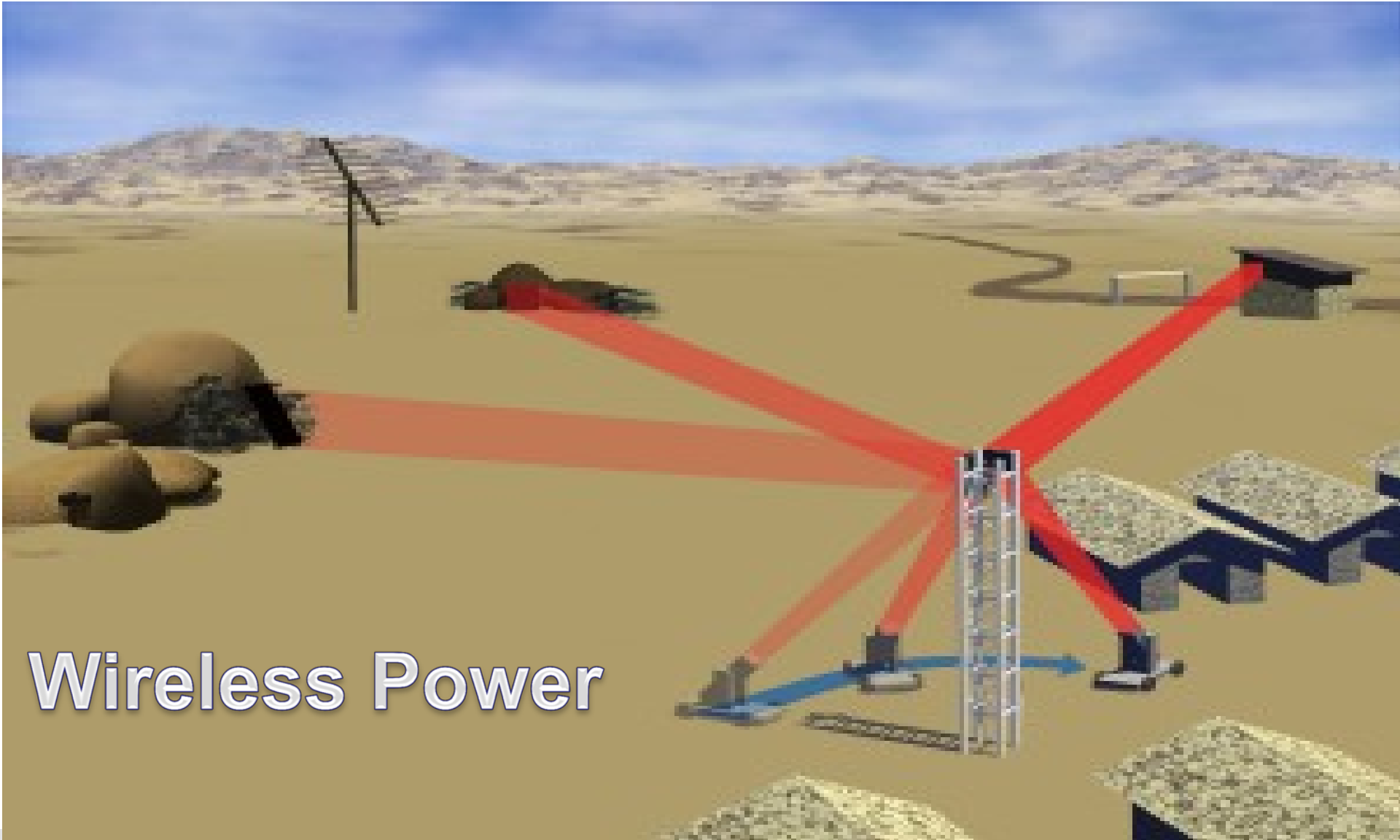
Presentation on the proposed MSB project on Wireless Power

BACKGROUND

Further to the round table discussions which took place at the Boston meeting in June 2012, Mr Fogal is pleased to present his proposed project on Wireless power transmission.

ACTION

This document is for information and discussion at the Shanghai meeting.



Wireless Power

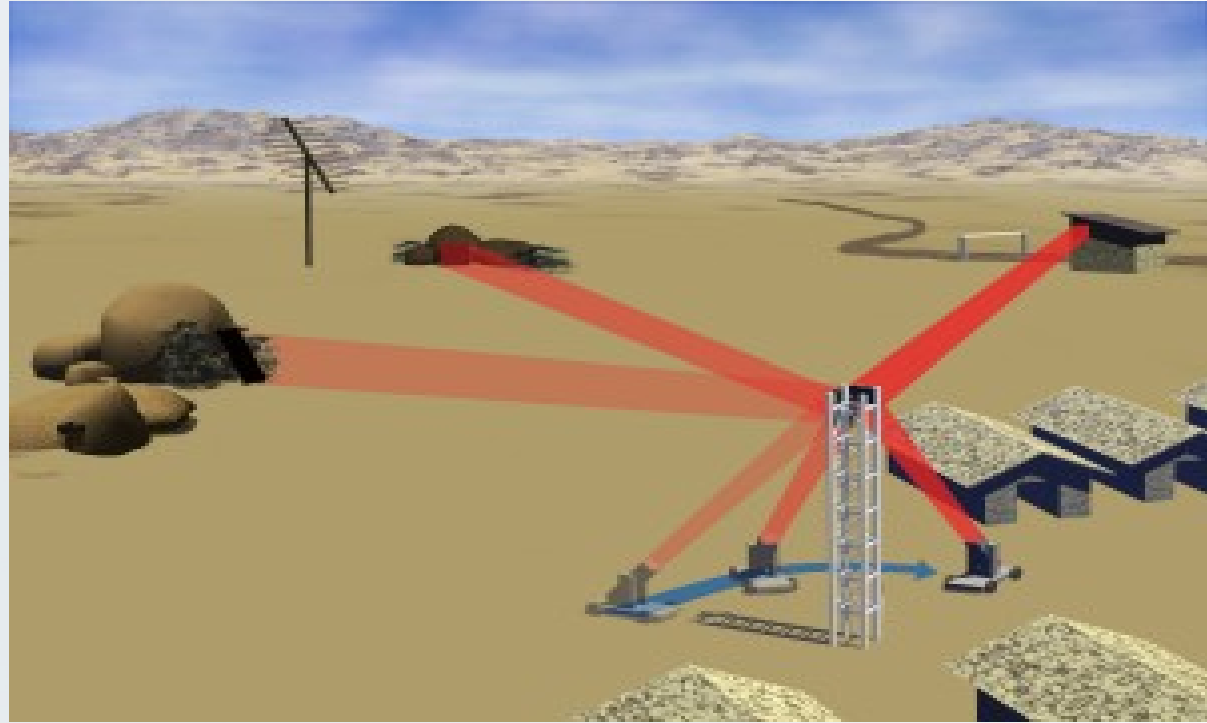
**Daryll Fogal
Eaton**

**MSB Meeting
May 2013**



**INTERNATIONAL
ELECTROTECHNICAL
COMMISSION**

Agenda



1. Present Wireless Power (WP) Market Situation
2. Present WP Standards Situation
3. Future WP Market Opportunities
4. Future WP Standards Needs
5. IEC WP Project Recommendation

Present WP Market Situation

Close Range Power Transfer

Focused on two main areas:

1. Small electronics
2. Electric vehicle charging



Market Drivers:

- Convenience
- Safety



Present WP Standards Situation

Existing standards for Close Range applications

Specific to 'applications', such as:

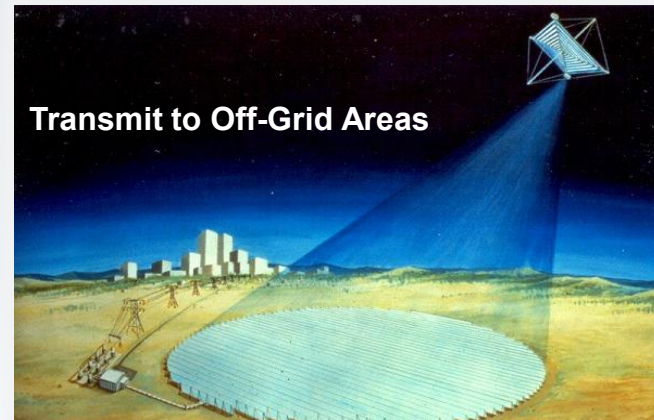
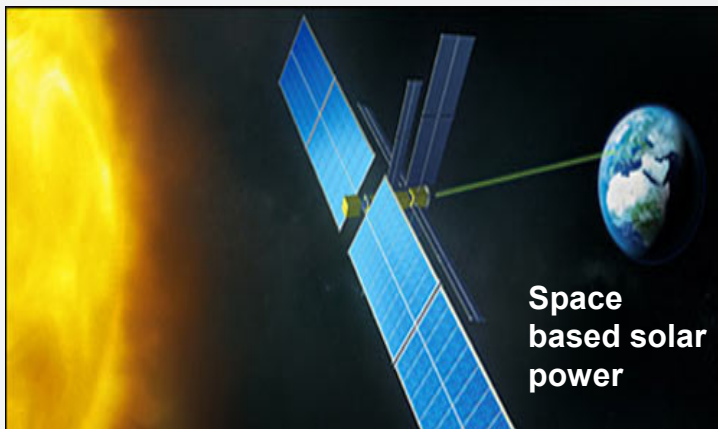
- ✓ IEC 62827, Management protocol of wireless power transfer for multi-devices
- ✓ IEC 61980, Electric Vehicle Wireless Power Transfer Systems
- ✓ IEC 61000, Electromagnetic Compatibility (EMC)
- ✓ ISO/IEC 17568 (and its companion ISO/IEC 17569), Close Proximity Electric Induction Wireless Communications
- ✓ Dozens of others, from organizations such as:
 - *CENELEC, the European Committee for Electrotechnical Standardization*
 - *CISPR, Comité International Spécial des Perturbations Radioélectriques*
 - *ISM, Industrial Scientific and Medical*
 - *ANSI, American National Standards Institute*



Future WP Market Opportunities

Long Range Power Transfer

- **Transmission to Off-Grid Inaccessible Areas (due to safety, geographic, etc.)**
- **Remotely Powered (un-manned) Aircraft**
- **High Altitude Solar Generation**

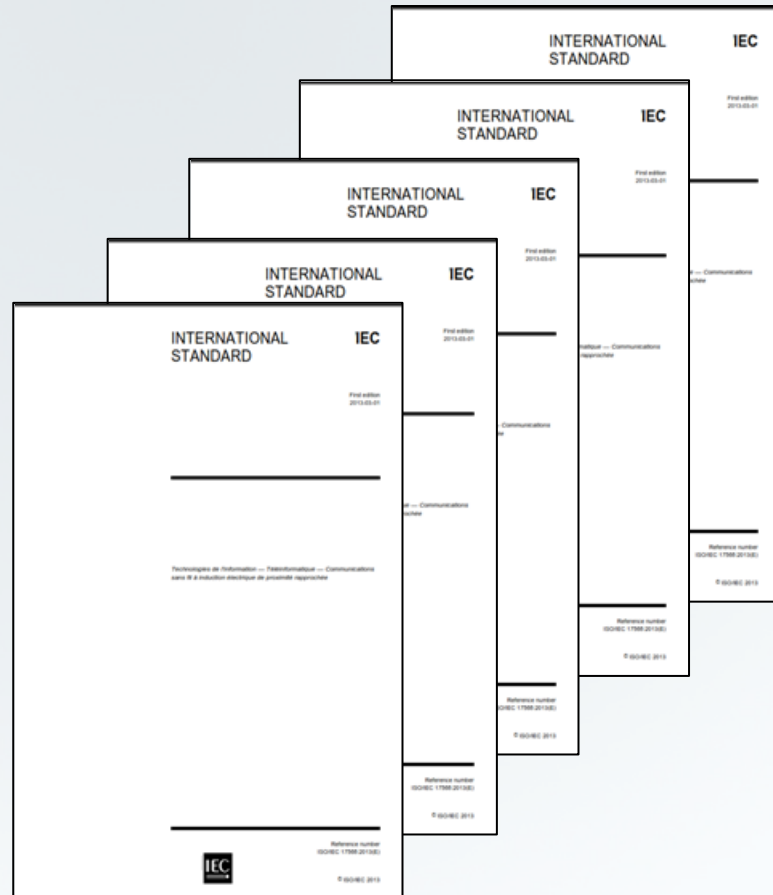


Future WP Standards Needs

Standards Gaps for Long Range applications

Lasers & Microwaves likely applicable technologies

- ✓ Safety
- ✓ Interoperability
- ✓ Security
- ✓ Environmental impact
- ✓ Efficiency
- ✓ Etc.



IEC WP Project Recommendation

The main objectives of this proposed project are:

- **To assess potential worldwide application needs for wireless power;**
- **To identify the trends in related technologies and markets;**
- **To review and assess the associated technologies;**
- **To evaluate the standards needed to support widespread commercialization of wireless power;**
- **Timeline – to be determined**

THANK YOU



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