

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electric vehicle wireless power transfer (WPT) systems –
Part 1: General requirements**

**Systèmes de transfert de puissance sans fil (WPT) pour véhicules électriques –
Partie 1: Exigences générales**



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**Electric vehicle wireless power transfer (WPT) systems –
Part 1: General requirements**

**Systèmes de transfert de puissance sans fil (WPT) pour véhicules électriques –
Partie 1: Exigences générales**

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International Standard IEC 61980-1 has been prepared by Technical Committee 69: Electric road vehicles and electric industrial trucks.

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Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

The French version of this standard has not been voted upon.

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This part is to be used in conjunction with the appropriate part of IEC 61980 series.

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INTRODUCTION

The IEC 61980 series is published in separate parts according to the following structure:

Part 1 covers general requirements for electric road vehicle (EV) wireless power transfer (WPT) systems including general background and definitions (e.g. efficiency, electrical safety, EMC, EMF).

Future Part 2 will cover specific requirements for communication between electric road vehicle (EV) and wireless power transfer (WPT) systems including general background and definitions.

Future Part 3 will cover specific requirements for electric road vehicle (EV) magnetic field wireless power transfer (MF-WPT) systems including general background and definitions (e.g. efficiency, electrical safety, EMC, EMF).

The requirements described in Part 1 are general. The technical requirements for the various wireless power transfer (WPT) technologies are very different, they will be treated in technology specific parts of the 61980 series. A list of possible WPT technologies can be seen in 6.2. The requirements for magnetic field-wireless power transfer systems (MF-WPT) will be described in future Part 3. Further parts of this series will describe other technologies such as power transfer via electric field wireless power transfer systems (EF-WPT) or electromagnetic field-WPT systems also named microwave-WPT systems (MW-WPT).

Reference to "technology specific parts" always refer to the technology specific future Part 3 and further technology specific parts of this series. The structure of the "technology specific parts" will follow the structure of Part 1.

Electric road vehicle (EV) will be covered by ISO 19363¹.

¹ Under consideration.