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**EREG Public Consultation Paper on
Draft Guidelines of Good Practice on
Regulatory Aspects of Smart Metering
for Electricity and Gas
Ref: E10-RMF-23-03, 10 June 2010**

Ladies, Sirs,

with regard to the above-mentioned Public Consultation document, I'd like to thank for the opportunity to contribute with a comment to a problem, which appears as being highly essential for a success-ful deployment of smart metering technology, but needing some urgent action to cope with problems building an obstacle for electricity suppliers' decisions on a possible roll-out.

As experiences from the past years in several European countries and following investigations have shown, smart meters (SM) with PLC transmission of data have been recognized

- as sources of EM disturbances to several sorts of other electrical equipment
- as victims of EM disturbances from other electrical equipment, resulting in wrong metering data.

It is essential to state that

- SM represent only an example for such – verified – EM interferences, occurring in a frequency range below 150 kHz, leaving open further sorts of equipment maybe prone to such disturbance effects
- PLC technology is applied for SM systems up to 80 % throughout Europe

Obviously, for certain shapes of voltage components as a result of related equipment operation, including SM, electromagnetic compatibility (EMC) is not ensured at present. As a background for these problems there appears the lack of normative limits for emissions as well as of immunity requirements for electrical equipment in the frequency range 2 kHz to 150 kHz – European as well as world-wide.

Such EM disturbance problems have been reported during several international conferences and are deal with in several publications [e. g. **1, 2, 3, 4, 5, 6, 7, 8, 9**].

A solution through enhancement of the immunity of SM equipment, as sometimes proposed in related discussions, would not really solve the EMC problem as a whole, also and in particular not for SM.

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Such a solution

- would not cover the EM disturbances caused by SM to other electrical equipment of whatever kind. To take mitigation methods only in a punctual way, i. e. in case of the occurrence of EM disturbances, would burden the electricity supplier with customers' complaints, financial efforts for mitigation and image loss.
- would generate the need for general additional efforts on immunity for SM without offering a solution for related EM disturbances to other electrical equipment – therefore offer only a part solution.

When looking for support options

- **for easing and broadening proliferation of SM, based on related management decisions on applier side,**
- **for a friction-free application of SM systems, from the applier's as well as from the customer's point of view**

it appears as indispensable to care for a quick closure of the given and recognized gap in standardization, without delay.

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With best regards,

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