



European Commission  
Directorate General Enterprises & Industry  
Mr. Leoz – Argüelles  
Head of Department I/5  
Av. D'Audreghem 45

B-1049 Brussels

Amersfoort, January the 12<sup>th</sup> 2009

## **ESNA Recommends Support for MID and Smart Metering**

Dear Mr. Leoz – Argüelles

ESNA, The Energy Service Network Association, is an association formed by a group of companies who recognized the need for establishing an organization to promote the application of advanced energy management systems, including AMR/AMM, based on the NES platform and to build and expand the interoperability standard for utility networks. The main objective of ESNA is to bring together and form a platform for all those companies who in one way or another deal with NES technology in their day-to-day operations. ESNA brings together utilities, application designers, IT companies, hardware manufacturers and consultants.

As you are well aware, there has been growing concern about potential conflicts between the requirements of the Measuring Instruments Directive (MID), the implementation of the Energy Services Directive (ESD) and smart metering due to some smart metering based initiatives in some member states. ESNA believes based on our diverse membership that we are uniquely qualified to analyze the impact of these initiatives and provide recommendations in support of Measuring Instruments Directive (MID) as a uniform standard for meters as well as the implementation of ESD.

ESNA would like to offer our continued support of MID and the implementation of ESD. We believe that Member States should not be allowed to mandate individual interests and requirements that are counter to the goals and objectives of either MID or ESD.

The key objectives of MID are to remove barriers to trade in Measuring Instruments and harmonization of metrological regulation to provide confidence in measurement. The MID sets out requirements, which must be complied with before measuring instruments may be placed on the European market or put into use. In addition, the purpose of the ESD is to enhance the cost effective improvement of energy end use efficiency in Member States.



MID, which covers all utility meters: electricity, gas, water and heat, sets out the essential requirements that all meters must comply with. MID should provide for meter manufacturers to get their meters tested by any approved notified body within Europe, affix it with the MID symbol and then sell the approved meter in any European Member State. The purpose of MID is to provide a free market for utility meters across the EU. According to the Commission, no Member State can regulate for any higher functionality for the meter since this would create different specifications in different Member States that would impede the free movement of goods that the MID promotes.

Recently there have been some local smart metering based initiatives in some Member States that describe and propose to mandate unique technical requirements for all utility meters in specific countries. Three examples of Member States that are looking to mandate specific unique meter interoperability and requirements as part of their plans for a national roll out of smart metering are Spain, The Netherlands and the UK. These efforts are in contradiction to the intent of MID and ESD, and will ultimately cause harm to other EU members and the valuable benefits that can be achieved by enforcing uniform standards throughout the EU. Rather than Member States mandating specific unique requirements for their individual countries, any specific technical requirements should be specified at the utility level. This will allow utilities to have the flexibility to specify unique technical requirements without being financially responsible to implement mandated and costly country specific requirements. This approach allows all Member States to receive the benefits from MID and ESD by using one uniform set of standards, while still providing individual utilities the choice to specify unique technical requirements.

In essence, these initiatives by member states will create trade barriers by defining unique local and regional specifications. This approach seems to be in opposition of the basic policies for the market and also the intent of EU directives such as MID and ESD. Again, since the purpose of MID is to provide a free market for utility meters across the EU, this approach would certainly oppose that. Instead there should be uniform standards to allow the free movement of products with the EU. Also, these member specific initiatives will slow down the progress and implementation associated with ESD by increasing costs and creating unique local markets.

ESNA believes a better resolution is to enhance MID as a way to introduce and promote intelligent meters and support ESD. MID should be augmented to include reactive power measurements as well as other advanced metrology functionality including demand readings. This would avoid the need for Member States to require local approvals. Therefore to meet market needs, ESNA believes that MID should be enhanced to cover more Smart Meter features in order to eliminate all local limitations and approvals required for Member States that need more than just active power consumption for billing purposes.

ESNA also believes that Member States should not be mandating specific technologies. This approach has negative affects on the market place. There should be support within the community for innovation by not defining specific technologies. Through innovation, vendors and providers will be able to create and offer customers new applications and services that will support the objectives of the ESD. Innovation can reduce costs of solutions and also create improvements in energy efficiency. A further benefit from not mandating specific technologies within a Member State is that it allows each local market to



take advantage of world market products and associated larger volumes that will help all Member States achieve the goals for the ESD. One idea associated with mandating technologies has been to separate the communications from the meter and promote a modular approach to smart metering. This modular approach is in conflict with the purpose of ESD and will result in increasing solution costs for the public. The most cost effective solutions have been proven to be integrated products that combine the advanced metering components with the communications. This integrated approach allows vendors to leverage components and optimize design and manufacturing costs. An integrated approach should continue to be promoted and accepted in support of ESD. Innovation and integrated designs ultimately provide the most functionality and services at the lower cost. Encouraging innovation and leveraging the economies of scale from world markets will support and accelerate the implementation of the ESD.

In addition, individual member states should not be mandating how meters from different vendors and different smart metering based systems interface with each other. Again, this proposed mandate is counter to the objectives of MID. Instead, utilities should be free to implement interoperability on their own if desired and required by using the most cost effective interoperability method, which is at the system level rather than at the meter. Not only is using high level system interoperability for meters more cost effective but it also continues to support the objectives and purpose of MID and ESD. Allowing Member States to individually mandate unique metering requirements and interoperability standards will ultimately add more costs for the utilities and their associated electricity customers. It will also stifle meter innovation by forcing vendors to comply with specific unique mandated requirements.

ESNA believes the best direction for interoperability is to follow the NTA 8150 standard. This standard defines interoperability at the web services enterprise level and is being used by the Dutch. The NTA 8150 standard defines an API to a “virtual meter” which enables utilities to maintain and leverage their large investment in IT systems and applications and allow them the option to work with a variety of underlying metering systems. This approach allows utilities to take advantage of the largest competitive market possible and also enables them to take advantage of new technologies as they emerge from any potential vendor. Allowing utilities to select from the largest possible number of suppliers competing to win their business is the best way to drive the cost down. Interoperability at the web services layer along the lines of NTA 8150 will protect investment in infrastructure systems and is where the focus should be, rather than mandating some standard at the low level details within the metering system as some member states are considering. Interoperability is important and should certainly be supported and promoted but interoperability should be specified at the more appropriate and cost effective level, at system and enterprise level, not at a lower level.

In summary; ESNA believes that individual Member States with local initiatives should not be mandating unique technical smart metering and meter level interoperability requirements. ESNA strongly supports the continued use and compliance of MID by all Member States. ESNA believes that by enhancing MID to support reactive and other billing appropriate measurements, certain Member States will no longer need to implement local testing approvals and therefore they will become more supportive of MID. This will help to provide an open and cost effective market for utility meters throughout the EU that will promote the implementation of ESD. According to the Commission, no Member State



should be able to regulate any different functionality for the meter and ESNA strongly agrees with the Commission. ESNA believes that Member States must comply with the intent of MID in order for all Member States to share in the benefits associated with the free movement of metering goods.

In addition, ESNA supports the desire for interoperability, however we believe that interoperability needs to be implemented at the system and enterprise level using web services rather than at a lower level. Our approach produces more competition and therefore lower overall advanced metering system costs, as the alternatives. This is another important reason why ESNA values MID since it will help Member States to obtain the lowest cost and most innovative solutions to support and achieve ESD's objectives. ESNA's diverse memberships, which includes utilities, hardware vendors and IT companies, believe that the market will benefit best from the continued role of MID as a uniform meter standard applicable for all Member States, not only today but also in future, as smart metering systems will be deployed.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Frank Borchardt', with a long horizontal stroke extending to the right.

*Frank Borchardt*  
President

A handwritten signature in blue ink, appearing to read 'Mark Ossel', with a large, prominent loop at the end.

*Mark Ossel*  
Treasurer