



# We are the masters of our destiny

We live in a dynamically changing world of multiple new challenges and emerging technologies **that may induce a freezing fear from the unknown**. We can overcome this using the collective power of our minds.



**Because of the Smart Grid hype** a whole range of new acronyms are conquering the world by storm. I will not start a list of acronyms here, but it seems like our industry has finally embraced modern technology and is now stumbling to come up with sexy, techy names for the solutions that are being proposed.

The latest fad in the Smart Grid arena is that after making things smart they now also have to be “wide”.

## But what is “wide”, and why do we need it?

A few years ago adaptive relaying or adaptive protection was hot and it was, and still is, considered to be controversial. However, adaptive relaying is currently replaced as a hot topic by Wide Area Protection, or WAP. But is it any different because it is “wide” instead of adaptive? I dare to think that it may just be the same thing smartly repackaged to make it sound more of today.

**The latest and greatest** “wide” application is Wide Area Situ-



ational Awareness or WASA.

This also contains the word “wide”, but here I do believe it is something different. To me WASA is the next logical step when creating seamless communication architectures across the utility.

Through the communication we now have the means to have everything communicate with everything, which leads to really new possibilities to create in real time a more comprehensive overview

of the status and behavior of the power system and do truly smarter things with our infrastructure.

The operation of the power grid is expected to become significantly more complex due to an ageing infrastructure in combination with the “green hype” leading to a different use of transmission, distribution and even low voltage systems. Main causes for this include:

- the application of distributed generation
- electric vehicles
- large scale wind farms
- solar plants
- the continuing growth of electric energy consumption and
- the customer wish for more transparency regarding energy consumption, outages and tariffs

All in all this means that sooner or later we will need more “real time” information of all sorts about the assets that make up the electricity supply chain. I know that even though technology is providing us every day with more and better means, there still seems to be a lot of hesitation amongst the utilities to deploy these means.

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As I previously wrote in one of my columns there is of course always a reason to do nothing so maybe we should stop focusing on why things are impossible and focus on what would be required to make it work and build a solution around that.

This however requires that we allow ourselves to learn while we do and make incremental steps towards the solution we would like to have.

#### So how do we enable this?

It sounds pretty straightforward and simple to do even when it pertains to the complex issue of building solutions for a Smart Grid.

I suggest we take a slightly different approach and focus on the power of the human mind for a moment. We know that the human mind is powerful and that its possibilities are still largely unknown and unused. It is proven that one person, no matter how intelligent, can only achieve limited results unless, the

person starts sharing his ideas with others, allowing them to learn, debate, argue and improve the original idea. If a group of people focus on finding a solution something “magic” happens, the speed of the new development increases exponentially with the number of people involved focusing on the solution that is to be found.

When comparing this with an application like WASA there is a parallel in my opinion. If we start creating a broader and deeper awareness about the power system and in parallel challenge our peers, allow for new technologies to be introduced and try to improve whatever solution we come up with and bring in new ideas, we should be able to find solutions very quickly.

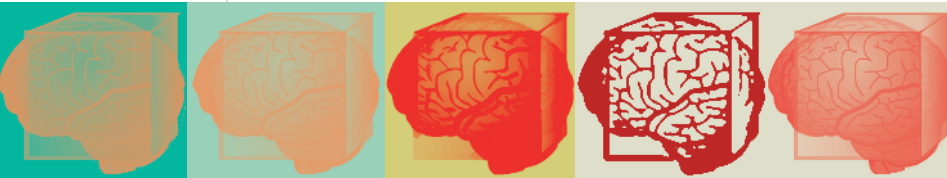
#### Of course, there is a catch...

Two things need to come together before we can make magic. First, we need focus but that is difficult as currently the Smart Grid discussions are all over the place.

Second, we need to start the development and this is in my opinion the biggest hurdle. It seems as if the fear of the unknown has the utility industry in a stranglehold. The fear in our industry to do new things and try things has a paralyzing effect on the pace at which new solutions can be found. Of course, there are exceptions and I applaud the people that have the guts, the vision and the drive to invest in new technologies and solutions, but we need more. We need a worldwide focus on the same challenges.

**However, the conclusion is encouraging...** There is hope for the future of the utility industry because the human mind is responsible for this future.

**So in other words we are the masters of our destiny!** Let us use this power to make things happen and create some exciting solutions involving new ideas, new technologies and a combination of things that have never been done before...



Therefore,

I look forward to seeing  
new developments for a Smarter Grid come at us  
like an explosion of positively focused brainpower put to work.