## <u>Supercharging the MOD's Power Quality</u> <u>Management</u>

News story

From grid stability to dynamic power networks, help the Ministry of Defence understand the impact of poor power quality on its estates and ships, and how the market can supercharge power efficiency



The <u>Defence and Security Accelerator</u> (DASA) is pleased to launch a new Market Exploration called <u>Power Quality Management</u>, which aims to investigate the impact of poor power management on MOD estates, while also identifying ways in which the market can help MOD address power management inefficiencies.

This Market Exploration is being run on behalf of the <u>Ministry of Defence</u> (MOD) and seeks to understand the effect poor power quality, power factor, and harmonic distortion has on its estate and ships. In addition, the Market Exploration also seeks to understand the capacity campus sites to take on distributed power resources such as solar and EV fast charging, especially when multiples are stacked on the same local grid or site.

Can you help? Read the full Market Exploration now and submit your idea.

## Have a bright idea that will help MOD address inefficiencies in power quality management?

The MOD estate incorporates a wide range of sites including offices, data centres, workshops, operational bases and houses as well as the deployed environment. As these environments are continuously optimised with increasingly complex and sophisticated technologies being woven into them, such as long-range sensors, artificial intelligence/automation and integrated combat systems, it is critical to ensure that electrical systems are being efficiently managed.

The power management market has seen significant growth, with minimum electricity consumption being a priority in sectors such as manufacturing,

consumer electronics and the automobile industry.

The MOD understands there are products in the market which address power management inefficiencies, but are unaware of the full market offering or the benefits from the vendors, and how these can help MOD better manage power.

This market exploration seeks an independent analysis of the products and tools available and an assessment of their key benefits around:

- efficiency claims any independently verified tests
- holistic power quality management up to and including AC waveform reconstruction or maintenance on loaded circuits
- system phase balancing
- reaction to external fault
- ability to maintain benefits in a dynamic power network
- grid stability impact, including ability to support installation and operation of stacked DERs
- any restrictions on type or mix of loads
- harmonic (including supra) suppression and installation planning requirements
- size, weight, power and cooling requirements
- data capture and reporting capabilities

## Submit your innovation!

Do you have expertise knowledge in any of these areas? Read the full <u>Market Exploration document</u> and submit your idea.

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