



# Army sparks up 'electrifying' plan for future battlefields

**In an era of constant competition across the globe, the British Army has announced a major step-change in its commitment to ultra-modern warfare with the publication of its new *Battlefield Electrification Approach*.**

The ambitious vision sets out detailed plans for electrifying the battlefield over the coming decade, a period when we will be relied upon to protect our nation and undertake a range of wider activities overseas.

The drivers for the approach include massive societal change at a time our adversaries invest ever more heavily to challenge our own technological edge and threaten our national interests.

The adoption of innovative technologies, commercial and military, at pace, is critical to achieving competitive advantage as the British Army modernises and transforms.

While future research and experimentation will focus on diverse areas including Artificial Intelligence and Machine Learning, Robotics and Autonomous Systems, Networked Sensors and Effectors, Novel Weapons Robotics and Autonomous Systems (RAS) – it is the electrification of the battlefield that will be the underpinning enabler of the new paradigm with lighter, more mobile forces and increased human-machine teaming achieving far more while reducing the risk of harm to our soldiers.

The aim and key to it all will be delivering the right power, in the right place, at the right time, with electrification providing the spark that will ignite the British Army's transformation.

Electric vehicles will enable significant advances in stealth mode capabilities, with reduced thermal and noise signatures, as well as enhanced mobility over challenging terrain.

A key part of the Army's Future Soldier vision, the battlefield electrification approach sets out how the Army, over a 15-year period, will focus on an increase in the use of batteries, hybrid electric drives and other technologies across its vehicle fleet.

With future military land capabilities expected to become increasingly power hungry with the introduction of new weapons, active protection, and an increase in computer processing, the performance of these capabilities will depend on the ability to power, charge and sustain them.



Jackal. Photo © Crown Copyright.

The Army has already invested £10million fitting hybrid electric drives to Man SV, Jackal and Foxhound vehicles with their performance currently being evaluated.

In the future, one hybrid electric MAN SV vehicle capable of producing over 500 kilowatts of power will be able to replace nine generators.

This means two and a half hybrid MAN SV vehicles could power an Army Field hospital or provide emergency power to relief teams in a disaster zone.

It is just one example of the advantages of the innovative vehicle technology being tested and revealed by the Army's new approach to battlefield electrification.

The electric motors can also immediately pick up rapid speed which will be a real tactical advantage when accelerating up steep gradients and escaping the enemy.

Trials of pre-production models are currently taking place, including assessments on how to fully recharge electric uncrewed, autonomous systems. ■