

## **Source Separation and Electronic Warfare - The Challenges**

Stephen Clark, CEng FIET, Chief Technologist (Electronic Warfare) Selex ES Ltd

Signal separation is a necessary first step to allowing the sophisticated parameter measurement, classification and identification which ultimately allows for exploitation of the target. Signal separation is arguably the most challenging aspect of EW, where the benefit of knowing the waveform to be detected is not enjoyed. Given the diversity of waveforms present in the signal space an arsenal of techniques is required. While research into advanced algorithms must proceed unfettered within academia, industry has to deliver quantified and stable product to the end user that fits within space and power constraints.