











Scottish Industry has chosen UHF for Cattle EID

 Technology	UHF is a tag reading technology - reading the chip outside the animal
 Development	UHF continues to be developed, e.g. memory add, active tags, LoRaWAN
 Reading Distance	UHF tags can be read at several metres
 Antenna	Power outputs from the readers are variable to a reading distance of near touching if required
 Anti-collision	Multiple UHF tags can be read simultaneously
 Speed of Reads	UHF tags read very quickly - reading many animals moving down a wide pass
 Security	A transponder ID (TID) is 'burned' onto the silicon chip and cross referenced with the official ID when written
Non-interference	UHF tags will not interfere with existing RFID systems
 Magnetic Resonance	UHF tags/antennas are not compromised by magnetic resonance from steel penning
 Availability and Cost	UHF is widely adopted across economic sectors. Transponders, readers and antennae are readily available
 Timing and installation	UHF EID for traceability and supply-chain efficiencies can be realised rapidly

LIVESTOCK **TRACEABILITY**

EID RESEARCH

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The consultation on cattle identification and traceability in Scotland is now open

ScotEID have been leading the way on research and development around bovine EID systems for over a decade. **Our earlier work on Low Frequency (LF) technology for sheep EID revealed inadequacies for cattle, given their lifetime identities and the need for 100% read rates.** This led us to look at Ultra High Frequency (UHF) technology, which is widely used in other sectors. UHF offers advantages such as the ability to read animals one at a time or multiple animals together at a greater distance whilst moving. The latter offers efficiency but also health and safety benefits by reducing the need for close handling of cattle, which can be dangerous for both staff and animals.

We welcome the Scottish Government consultation on cattle identification and traceability, particularly the element around the electronic identification of cattle. Bovine EID provides improved reporting accuracy and real time reporting, which are crucial in the event of a notifiable disease outbreak. It also offers the chance to remove the need for cattle passports.

Please answer the consultation questions by scanning this QR code, or via the ScotEID website



Comparison between LF and UHF	LF	UHF
Reading distance and speed	Fixed, shorter and slow	Adjustable, shorter to longer and fast
No. of animals read at a time	One	One or many
Animals read when moving	Not easily or reliably	Yes
Affected by metalwork	Negatively, by reflections	Positively, by reflections
Affected by dampness	No	No
Staff Health and Safety	Worse	Better
Animal Welfare	Worse	Better
Reader availability and choice	Limited	Wide
Weight crate etc compatibility	Yes	Yes
Approved official EID tags	Not yet	Yes
Tag retention rates	Comparable to UHF	Comparable to LF
Tag prices	Comparable to UHF	Comparable to LF
International standards	Yes	Yes