



DEFENCE AND SPACE
Intelligence

HumINT
**Breaking Down
Language Barriers**
Case Study

Challenge

Establishing an effective communication platform to overcome language barriers and enable writing recognition in the field

Solution and Results

Airbus has developed a portable device to facilitate communication between individuals who do not speak the same language, as well as an autonomous typewritten and handwritten word recognition device.

Benefits

Provides easy to use platforms to aid communication in the field and foster inter-nation cooperation

AIRBUS



Challenge

During army deployments, it is essential that operators are able to interact with their environment as soon as possible, without language-related challenges causing delays. This prerequisite is vital to satisfying several missions:

- Intelligence to reduce risk, prevent threats, and collect and transmit information
- Action to respond, manage emergency medical support, and protect VIPs
- Environment to train or advise foreign military units and communicate with locals

Solution and Results

In response to these challenges, Airbus Defence and Space has developed two bespoke systems:

A portable and autonomous dialogue device, which has been designed to provide operational communication between two individuals who do not speak the same language (French vs. Arabic; English vs. Arabic; Pashto vs. French) – without using a human interpreter. Delivering results in real-time, the system allows for voice files to be acquired and transcribed into the target language, as well as the verbalisation of the text using synthetic voice capabilities.

An autonomous typewritten and handwritten word recognition device that was developed to provide information retrieval capabilities (in Arabic or French) on digitised paper documents written in Arabic. It allows users to recognise Arabic-written sentences, to translate them to the target language, to extract named entities and relevant information, and then to index them for information retrieval and alert.

Conclusion

Both these devices are now being used in the field, with excellent feedback having already been received. They demonstrate the important role Airbus is playing within military communication and intelligence, and highlight the value that partnerships and collaboration with commercial operators, such as Airbus Defence and Space, offers to military forces.

Benefits

- Autonomous, fast and robust solutions deployed on ruggedised laptops for use in the field
- Specifically adapted to military and security scenarios and environments
- Designed to be easy to use with minimal training - aiding inter-nation communications and mission cohesion