



## ARTEMIS-IA releases strategic research agenda

<http://www.paneuropeannetworks.com/government/artemis-ia-releases-strategic-research-agenda/>

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**The ARTEMIS Industry Association has released its 2016 strategic research agenda, which focuses on digitisation in Europe.**

The announcement comes in anticipation of an upcoming European Commission communication on digitisation, and offers several initiatives designed to move Europe towards the internet of things (IoT). Particularly, the agenda says, companies and institutions should begin to focus on the connections between technologies rather than considering them in isolation.

The organisation wishes to use the IoT to ensure greater automation of functionalities, and add more artificial intelligence into devices to facilitate this automation. The association argues that greater research focuses are needed on the ways machines can automate functions that were previously necessary for humans to undertake, and therefore to study and have machines mimic human behaviour, as well as process large amounts of varied and complex data, known as deep learning.

ARTEMIS has also developed a framework named Arrowhead, which promotes collaborative automation driven by software and distributed through the IoT. The framework has a dedicated Wiki where potential users can find architecture, code and working systems through which to implement IoT automation. The organisation reports good results from the framework so far, including the development of a smart rock bolt at Luleå University of Technology.

The rock bolt, which is used to stabilise rock excavations in mines, can monitor seismic activity and generate optical alarms using LEDs and wireless alarms in mine control systems. ARTEMIS says that the technology has a wide variety of applications, and it hopes for more products to be developed using the framework in the future.