

Europe's Internet of Things Policy

The EU actively cooperates with industry, organisations and academia to unleash the potential of the Internet of Things across the EU and beyond.

IoT transforming traditional industries
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The Internet of Things (IoT) merges physical and virtual worlds, creating smart environments. It represents the next step towards the digitisation of our society and economy, where objects and people are interconnected through communication networks and report about their status and the surrounding environment.

Europe's IoT Policy

A set of supporting policy actions have been adopted by the European Commission to accelerate the take-up of IoT and to unleash its potential in Europe for the benefit of European citizens and businesses.

The Alliance for Internet of Things Innovation (AIOTI) was launched in 2015 by the European Commission to support the creation of an innovative and industry driven European IoT ecosystem. The European Commission is working closely with AIOTI and all IoT stakeholders and actors towards the establishment of a competitive European IoT market and the creation of new business models. Currently, the AIOTI is the largest European IoT Association.

The European Commission published a staff working document 'Advancing the Internet of Things in Europe' in 2016. This document is part of the 'Digitising European Industry' initiative and specifies the EU's IoT vision, based on 3 strands:

- a thriving IoT ecosystem;
- a human-centred IoT approach;
- a single market for IoT.

For a better understanding of the ecosystem, the Cluster Study (2019) has investigated the landscape of physical and virtual clusters. These includes clusters of enterprises, research organisations and academia working on the innovation, development and market deployment of IoT technologies and applications.

A potential obstacle for the achievement of a single market for IoT has to do with issues linked to the capacity to handle a large diversity and very large volumes of connected devices, and the need to securely identify them and be able to discover them so that they can be plugged into IoT systems. In this context it is important to promote an interoperable IoT numbering space for a universal object identification that transcends geographical limits. It is also important to promote an open system for object identification and authentication. Some aspects of numbering are already addressed in the 2016 review of the EU's telecoms rules.

The 'European strategy for data' contributes to the creation of a European single market for IoT. This strategy proposes policy and legal solutions concerning the free flow of data across national borders in the EU, and liability issues in complex environments such as the IoT one. Liability is crucial to enhancing legal certainty around IoT products and services. To provide a first mapping of liability challenges that occur in the context of emerging digital technologies, including IoT, the European Commission published a staff working document on liability for emerging digital technologies.

IoT research & development and innovation

For the period 2014-2020 under Horizon 2020, the European research and innovation programme, the EU will have invested almost €500 million in Internet of Things-related research, innovation and deployment.

In order to support IoT research and innovation (R&I), Europe promotes the idea of open and easy accessible IoT platforms. In 2016 the 'IoT European Platform Initiative (IoT-EPI)' was launched.

The European Commission is currently supporting twelve Large-Scale Pilot projects under the focus area Digitising European Industry in Horizon 2020, with a financial contribution of more than €200 million.

Next-Generation Internet of Things (NGIoT)

NGIoT and Edge Computing Strategy Forum

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The Commission has adopted an Implementing Decision to harmonise radio spectrum for short-range devices within the 874-876 and 915-921 MHz frequency bands. It will facilitate a variety of applications in support of the Internet of Things (IoT) and Radio Frequency Identification (RFID).

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Mapping Internet of Things innovation clusters in Europe

A study carried out on Internet of Things (IoT) clusters in Europe provides a deeper understanding of dynamics, drivers and success factors in this area.

Secure solutions for the Internet of Things

The Commission is working to ensure more robust and resilient security frameworks for IoT devices and the networks of which they are a part.

See Also

Next Generation Internet initiative

The overall mission of the Next Generation Internet (NGI) initiative is to re-imagine and re-engineer the Internet for the third millennium and beyond.

Blockchain Strategy

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