



**IoT – AI – Robotics**

**towards**

**Intelligent Internet of Robotics Things**

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## Combination of AI, Robotics and IoT.

- "The only way to keep up with this IoT-generated data and gain the hidden insight it holds is with machine learning." (WIRED)
- Intelligent Internet of Intelligent Things
  - **Centralised & Distributed AI**

# Combination of AI, Robotics and IoT

- IoT will move from massive sensing platform to actuation – possibly real time
- Requires AI: understand and control
- Current call IOT-03 (deadline April 25<sup>th</sup>):
  - Focus on both **actuation** and **smart decision**.
  - "embedded intelligence, and smart networks"*
  - "Platforms should provide connectivity and intelligence"*
- Common standards and interoperability in IoT (connectivity, platforms, APIs)
  - **Increase scenarios & business opportunities.**
  - **How to fit robotics?**
- Future Large Scale Pilots calls
  - Will ask for combination of AI, Robotics and IoT.

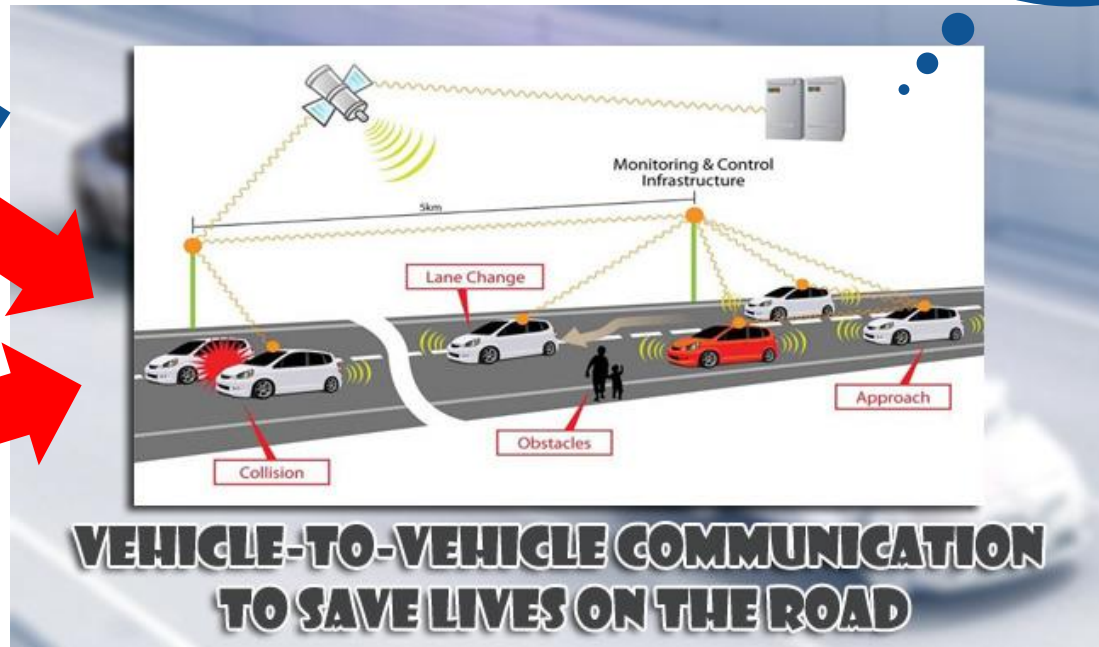
# Combination of AI, Robotics and IoT



## IoT SERVICES

AUTONOMY

IoT  
(connectivity)



**IoT: example of Autonomous vehicles in a connected environment: optimal combination of local & distributed information and intelligence**

AUTOPILOT - AUTOMated driving Progressed by Internet Of Things – Large scale pilot – 20M€ funding

# Combination of AI, Robotics and IoT.

IoRobotic Things

Robotics: benefit from IoT – information/knowledge

- **Self-Awareness - adaptation**

Robots – part of the IoT:

- **sharing knowledge / re-using knowledge**
- **as a sensing/actuating device**

# AI: Intervention logic and EU added value



**Issue 1: Scattered European S&T excellence**

**Issue 2: Huge investment abroad**

**Issue 3: AI potential not fully exploited in Europe**

**STRATEGY\*: Develop the AI on-demand platform**

→Join forces in Europe: Build an AI Platform -> ecosystem integrating knowledge, capacity and access to data

→Invest in R&D in areas where Europe can lead

→Boost European industry competitiveness with AI and make European citizens benefit from AI (ageing, transport, etc.)

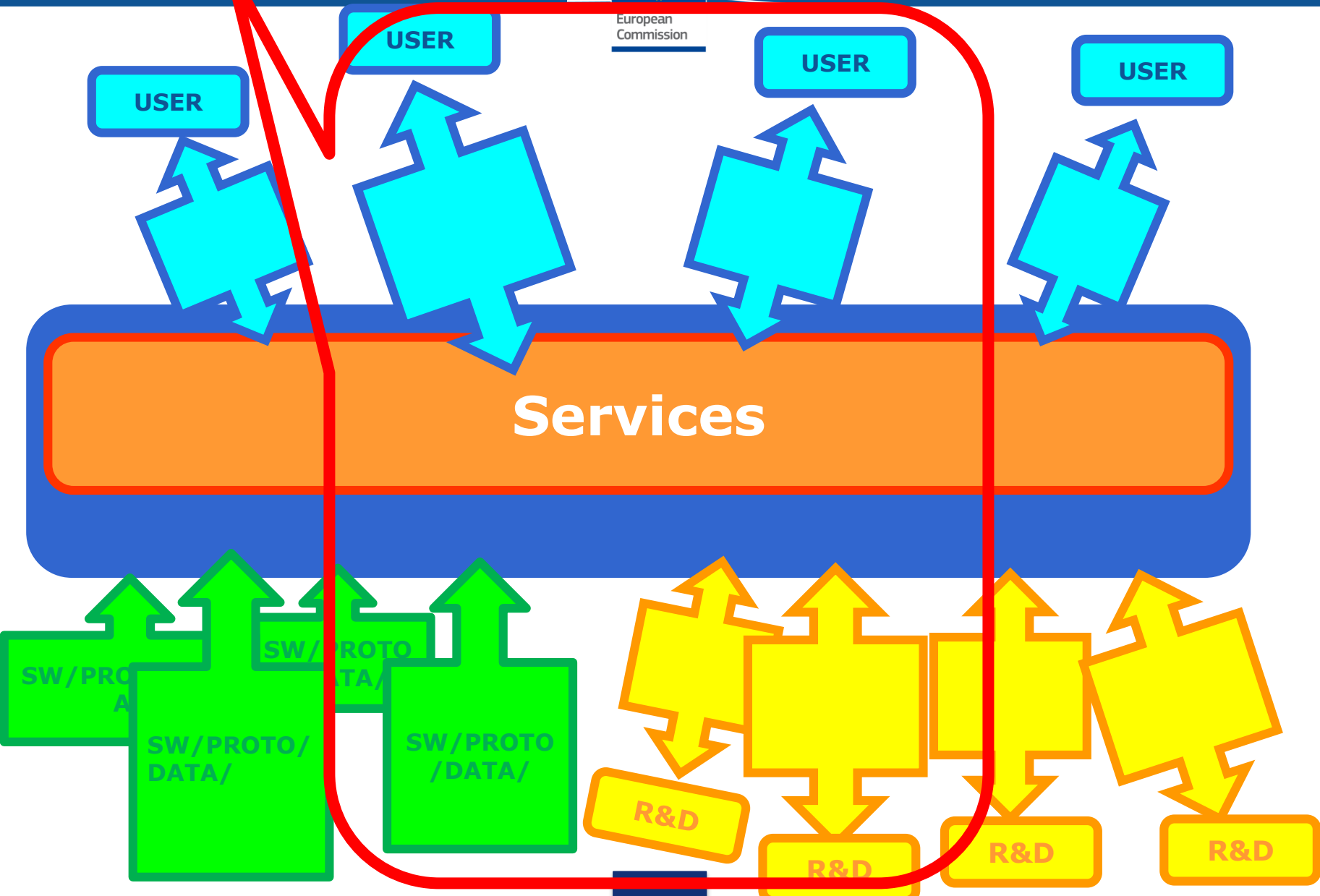
**"One-stop shop"**

**- integrating tools and resources**

**- offering solutions and support to all users of AI to integrate such technology into application, products and services**

\* Under discussion – not approved yet

# Robotics & IoT in the AI on-demand platform





European  
Commission

Thank you