

**Amendment 9/rev**  
**Beatrix von Storch**  
 on behalf of the EFDD Group

**Report**  
**Mady Delvaux**  
 Civil Law Rules on Robotics  
 2015/2103(INL)

A8-0005/2017

**Motion for a resolution**  
**Paragraph 1**

*Motion for a resolution*

1. Calls on the Commission to propose common Union definitions *of cyber physical systems, autonomous systems, smart autonomous robots and their subcategories by taking into consideration the following characteristics of a smart robot:*
- *the acquisition of autonomy through sensors and/or by exchanging data with its environment (inter-connectivity) and the trading and analysing of those data*
  - *self-learning from experience and by interaction (optional criterion)*
  - *at least a minor physical support*
  - *the adaptation of its behaviour and actions to the environment;*
  - *absence of life in the biological sense;*

*Amendment*

1. Calls on the Commission to propose *the following* common Union definitions:
- *artificial intelligence is a computerised system able to simulate a part of human cognitive functions, such as learning and problem solving,*
  - *robots are programmed computer controlled physical machines capable of carrying out a complex series of physical actions automatically,*
  - *cyber-physical systems (CPS) are engineered systems that are built from, and depend upon, the seamless integration of computational algorithms and physical components,*
  - *autonomous systems are physical systems with embedded energy source(s) allowing it to operate without depending of one or more external sources of energy,*
  - *self-driving systems are programmed computer-controlled systems with physical captors giving local physical environment and position information of the system to the controller of this system, and able to control and operate physical self-*

*generated movements (shiftings) without human intervention,*

*- smart robots are autonomous robots with physical captors including cameras, scanning the local physical environment and providing geolocalisation data, data recording functionality (learning) associated with a programmed capacity to adapt the robots' behaviour and actions accordingly, taking into account both the environmental data and the data history stored by the robot itself,*

*- humanoid robots are robots with a partial or total human body physical appearance;*

Or. en

10.2.2017

A8-0005/10/rev

**Amendment 10/rev**  
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**Motion for a resolution**  
**Subheading before paragraph 36**

*Motion for a resolution*

*Amendment*

Human repair *and enhancement*

Human repair

Or. en

