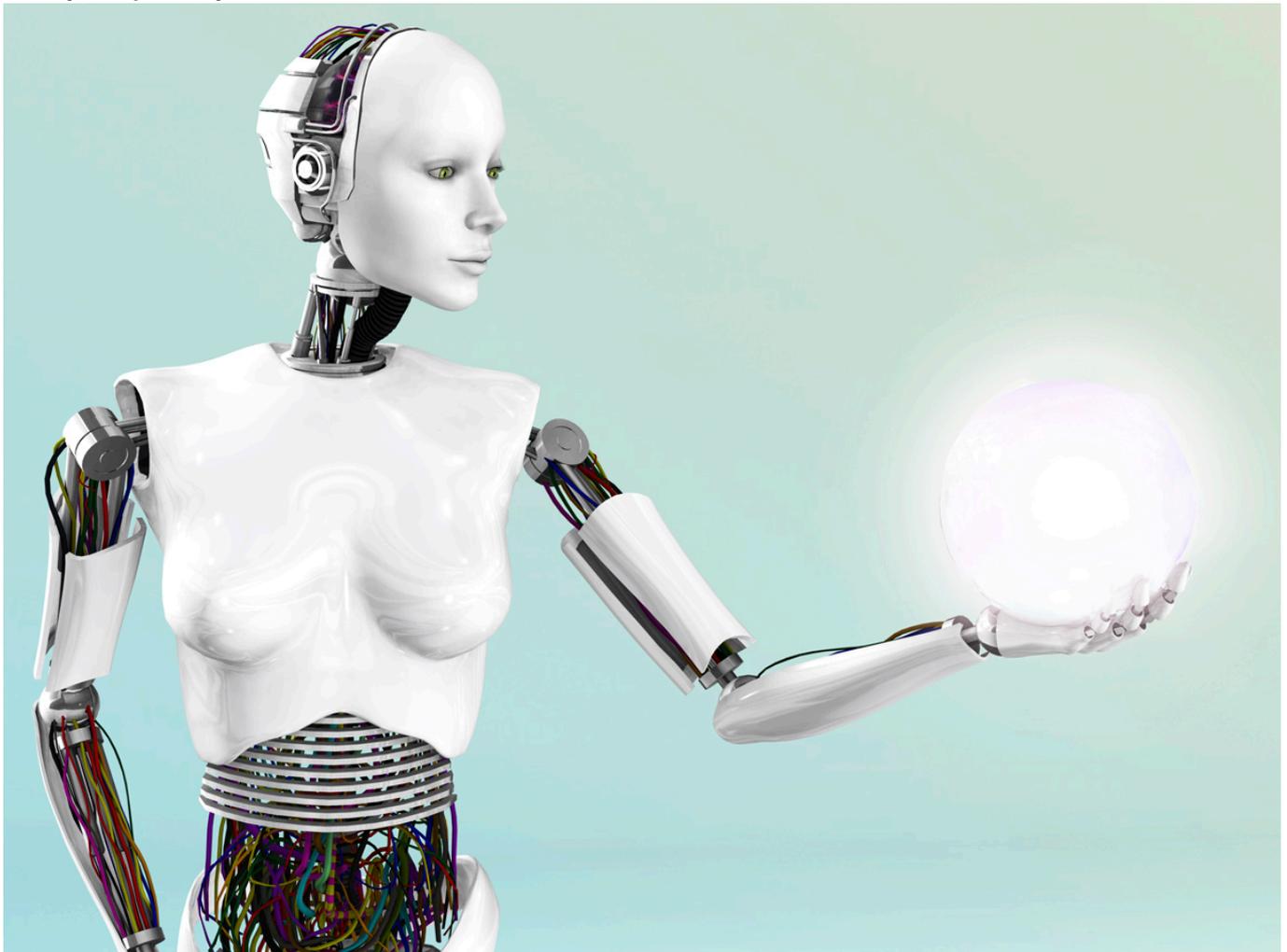




Published on *Horizon 2020* (<https://ec.europa.eu/programmes/horizon2020>)

Friday, 29 January, 2016



[1] Swarms of robots with emergent behaviours, evolving and shape-changing robots, or new multifunctional robots? This area is pushing science and engineering of robots beyond fiction.

**Complnnova** [2] will develop a novel multifunctional robot equipped with ultrasonic Phased Array (PA) and Infrared Thermography to detect, evaluate and repair damages on either metallic or composite aircraft components. This will contribute to reduce the cost and time for a heavy aircraft inspection while increasing flight safety.

**DREAM** [3] paves the way for a new generation of autonomous robots which incorporate sleep and dreamlike processes within a cognitive architecture for the discovery, optimization, re-structuring and consolidation of knowledge.

**FLORA ROBOTICA** [4] will study how plants can grow and develop through the progressive and

symbiotic guidance of a robotic system, and how such a plant-robot-human ecosystem can be adaptive to the human environment.

**GOAL-Robots** [5] proposes to create goal-based open-ended autonomous learning robots that could function as service robots and address important societal needs. To this end, robots will autonomously develop complex skills and use them to solve difficult challenges in real-life scenarios.

**PHOENIX** [6] will investigate a new line of technology that will enable the exploration of difficult-to-access environments exploiting a risky, highly-novel approach. The project's main objectives are: the development of a co-evolutionary framework, the design of versatile agent technology and the development of a dedicated human interface.

**socSMCs** [7] aims at the implementation of social behaviour in robots by modelling social interactions using sensory-motor patterns and action-effect contingencies, to achieve social human-robot interaction and cooperation.

**subCULTron** [8]'s objective is achieving long-term autonomy in a learning, self-regulating, self-sustaining underwater society/culture of robots in a high-impact application area: Venice, Italy.

---

**Source URL:** <https://ec.europa.eu/programmes/horizon2020/en/news/h2020-fet-projects-robotics>

#### Links

- [1] [https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/newsroom/robotics\\_-\\_artificial\\_life\\_image\\_11895\\_5.jpg](https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/newsroom/robotics_-_artificial_life_image_11895_5.jpg)
- [2] <http://compinnova.eu/>
- [3] <http://www.robotsthatdream.eu/>
- [4] <http://www.florarobotica.eu/>
- [5] [http://cordis.europa.eu/project/rcn/203543\\_en.html](http://cordis.europa.eu/project/rcn/203543_en.html)
- [6] <http://phoenix-project.eu/tiki-index.php#&panel1-1>
- [7] <http://socsmcs.eu/>
- [8] <http://www.subcultron.eu/>