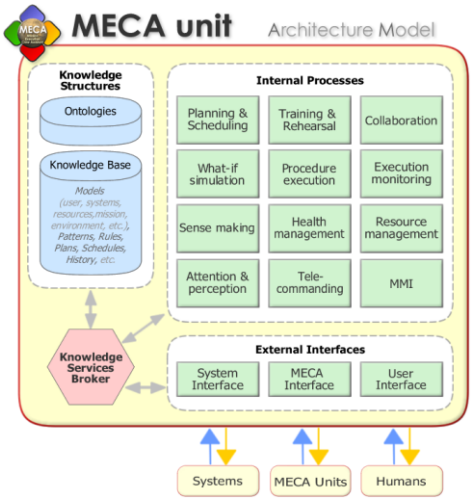
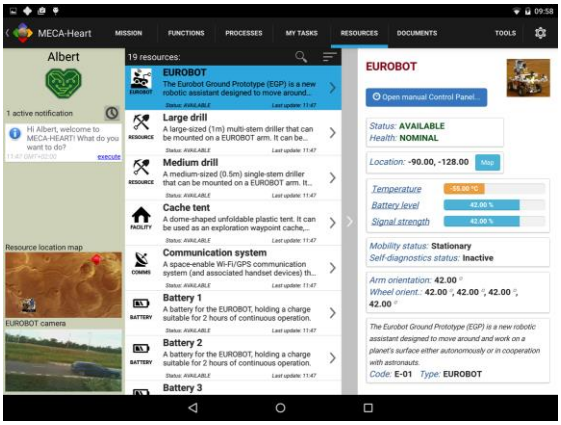
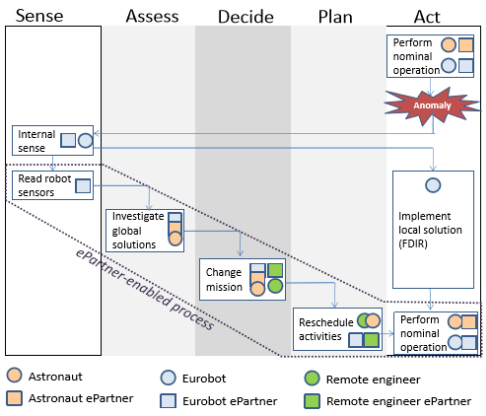
Users	Software developers for CPSs that require human interaction.
Key Features	• Modular and extensible framework for projects related to human-machine interaction. • Integrated decision-making support. • Allows autonomous CPSs alone. • Provides situation awareness execution for CPSs.
Benefits for the User	• Enables fast prototyping for human-machine applications. • Allows customers to solve more complex problems with the human in the loop. • Increases the efficiency of human-robot teams.
Inputs	• High level model describing the actors' capabilities. • Interfaces for commanding CPSs.
Outputs	• Plan for coordinated execution for the human-robot team. • Explanation of the decisions made by the system.
Block Design	A MECA deployment is composed as one or more MECA units interconnected (typically one per CPS). Each unit provides decision support and situation awareness. 
Example of Usage	MECA has been deployed in an astronaut-Eurobot team for planetary exploration tasks, allowing the astronaut to cooperate with the robot in order to achieve different cooperative tasks such as samples collection or payload deployment. The interaction is done using a tablet with a friendly graphical environment.  

Role in the Toolchain	MECA is the interface between CPSs and the user, allowing the user to be part of the system-in-the-loop.