## **Coordination of Platform and Manipulator in Telerobotics**

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**Abstract:** Under term of mobile manipulator we understand a manipulator assembled on mobile platform. Advantages of this combination are many. Platform enlarges work space of manipulator and adds additional degrees of freedom into the whole system, as well as redundancy of such a system is increased. Mobile manipulators can be used mostly as service robots, rescue robots, as fire fighters and also in future as helpers in a household. Mobile manipulators are nowadays often used in bomb squads or in nuclear power plants saving health or even life of their operators. Intelligence of telerobotic system is on very low level, which brought us to idea of intelligent telerobotic system. Main idea is to offer more comfort in operating mobile manipulator and enabling operator to focus on primary goal. Control system will take care of other task e.g. obstacle avoidance, joint torque optimization, stability maintenance and others.

This article presents some control algorithms base on stability, kinematical control decomposition and dynamical control decomposition and their usage in performing secondary tasks along with primary tasks. Control decomposition is necessary for independent controlling of movement of platform and manipulator.