

**AUTOMATIC SYSTEM CONTROL OVER TIME
DELAYED COMMUNICATION SYSTEMS**

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Abstract: This article introduces a method which is used in order to apply standard algorithms of automatic system control and supervision for systems using as communication channel an in-place network with inherent time-delays. This theory focuses on leveraging usage of new wireless technology in automatic control. Whereas new wireless technologies are more and more widely used in consumer data transmission, they are still rather unavailable for industrial communication because of the poor application and protocol support. Introducing methods which intend homogenise the application layer regardless of the physical data bearer might increase the use of modern communication systems and drop the costs of these automation solutions.

Keywords: communication, wireless, time delay, supervision, automatic control.