

Preface

Cooperative transmission aims to improve the reliability of wireless mobile communications through the use of diversity provided by additional relays assisting in the transmission between the source and destination nodes. This is possible as the rationale behind spatio-temporal processing can be rather easily and efficiently mapped onto networked systems. Autonomic cooperative networking studies the further evolution of this phenomenon by first involving the network layer routines and then, additionally, incorporating the notion of autonomic system design. This book provides both the description of evolution and incremental analysis of these concepts, starting from spatio-temporal processing and its translation into cooperative transmission in ad hoc environments. Following, routing related enhancements are proposed and the whole solution is positioned under the umbrella of autonomic cooperative system architecture. Then, the investigated concept is extended to autonomic cooperative deployments in relay enhanced cellular systems and, eventually, a new dimension is added by putting it in the context of emergency communications.

December 2011

Michał Wódczak

Autonomic Cooperative Networking

Wódczak, M.

2012, XIV, 100 p. 80 illus., Softcover

ISBN: 978-1-4614-3099-5