

# Self-Organizing Broad-Band Transport Networks

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## Motivation

- Network restoration with centralized control for restoration requires a redundant physically diverse telemetry network, collection and maintenance of a global database of network state with real-time integrity, and redundant network control and computation centers
- The conventional approach has a “software mountain” problem
- centralized control requires more time in restoration
- A self-organizing solution can alleviate these

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## Outline



- Overview of paper
- Transport networking environment
- Concepts and operation of the self-healing network (SHN) protocol
- Self-planning network
- Concept of self-organizing traffic adaptation or “self-traffic engineering” (STE)
- Conclusion

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## Overview



- Present the idea in which the logical configuration of a transport network can be managed in an ongoing self-organizing way
- Concepts and operation of the self-healing network (SHN) protocol which can be used in restoration of Transport network
- Extend idea to Self-planning network and self-traffic engineering (STE)

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