



Challenge for zero outage network

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Background

- In the past 10 years, there were **several-times large-scale outages** that cause the service impact to millions to tens of millions of users among operators.
- Restoration from the outage have been studied so far, but **avoiding happening outage** has not been considered well enough.
- Therefore, it is important to study the use case to avoid happening outage for ***zero outage**.

*zero outage: the word raised in [Operators panel session of the 3GPP workshop on IMT2030 Use Cases](#)



Use case examples

- It was identified that one of the main causes of outage is **signaling storms** in the network.

- How to cope with signaling storms is one of the use cases of zero outage network.

- Following types of the scenarios are proposed to be considered.
 1. Restore quickly from signaling storms [reactive]

 2. Avoid happening signaling storms [proactive]



(Potential) Objectives

Study use cases and potential service requirements for future mobile network system to support use cases for zero outage network in 3GPP system.

The objectives include:

- Identifying possible use cases and service requirements related to quick restoration from outage
- Identifying possible use cases and service requirements related to avoiding happening outage



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