

ZSM-Based Automation for Dynamic Configuration and Monitoring of Packet and Optical Network Layers

Introduction and Problem Statement

Intro

The 6G networks encompass multi-domain environments with packet and optical network devices to achieve significant improvements in system performance

The Problem

Operators' requirements demand **advanced automation for end-to-end (E2E)** orchestration and configuration of transport (**optical and packet**) network

Solution based on the ETSI TeraFlowSDN Controller

New control and monitoring system based on the Zero Touch Network & Service Management (ZSM) architecture, utilizing closed-loop automation functionalities

1 Contributions

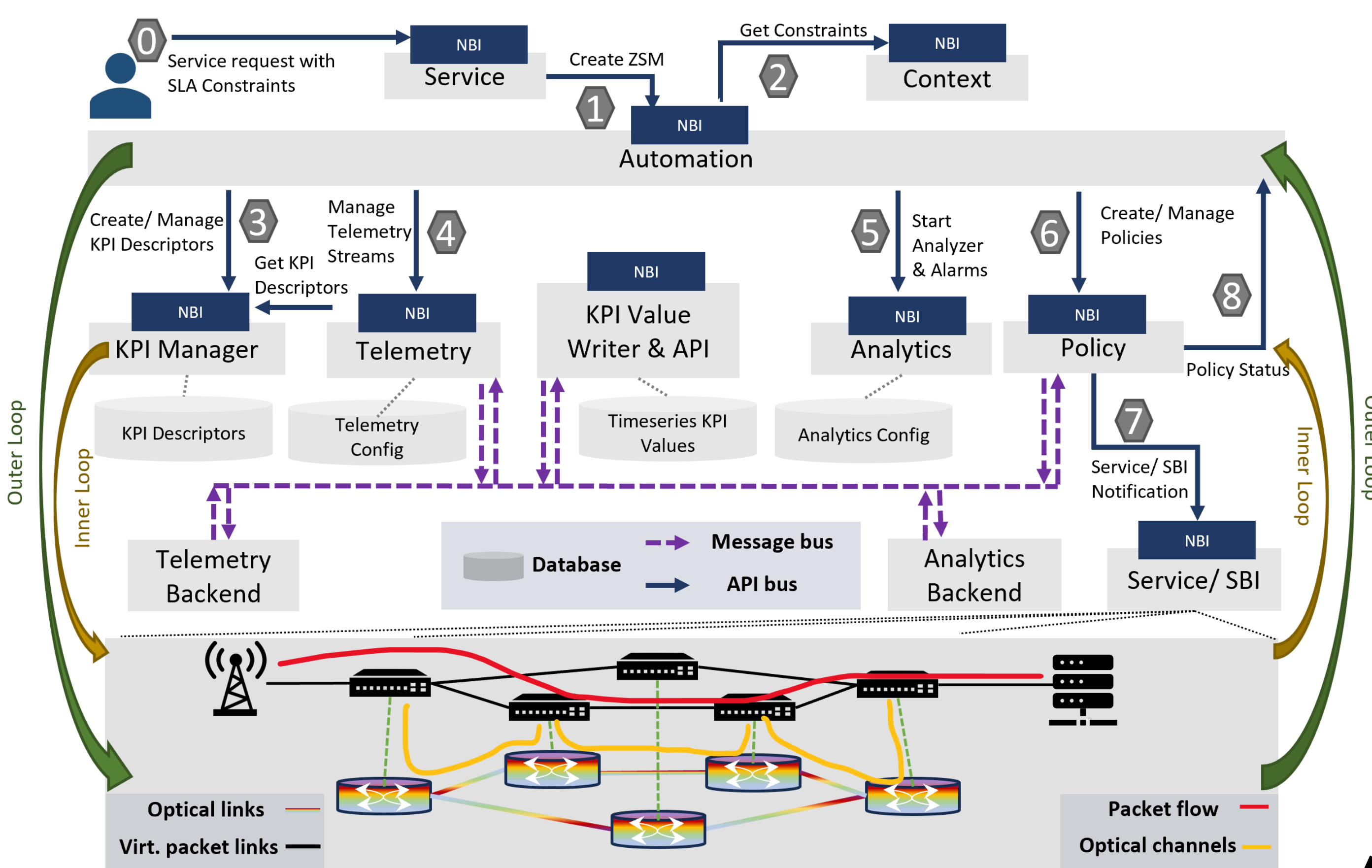
ZSM Automation

Real-time (re)-configuration of network entities across optical and packet domains

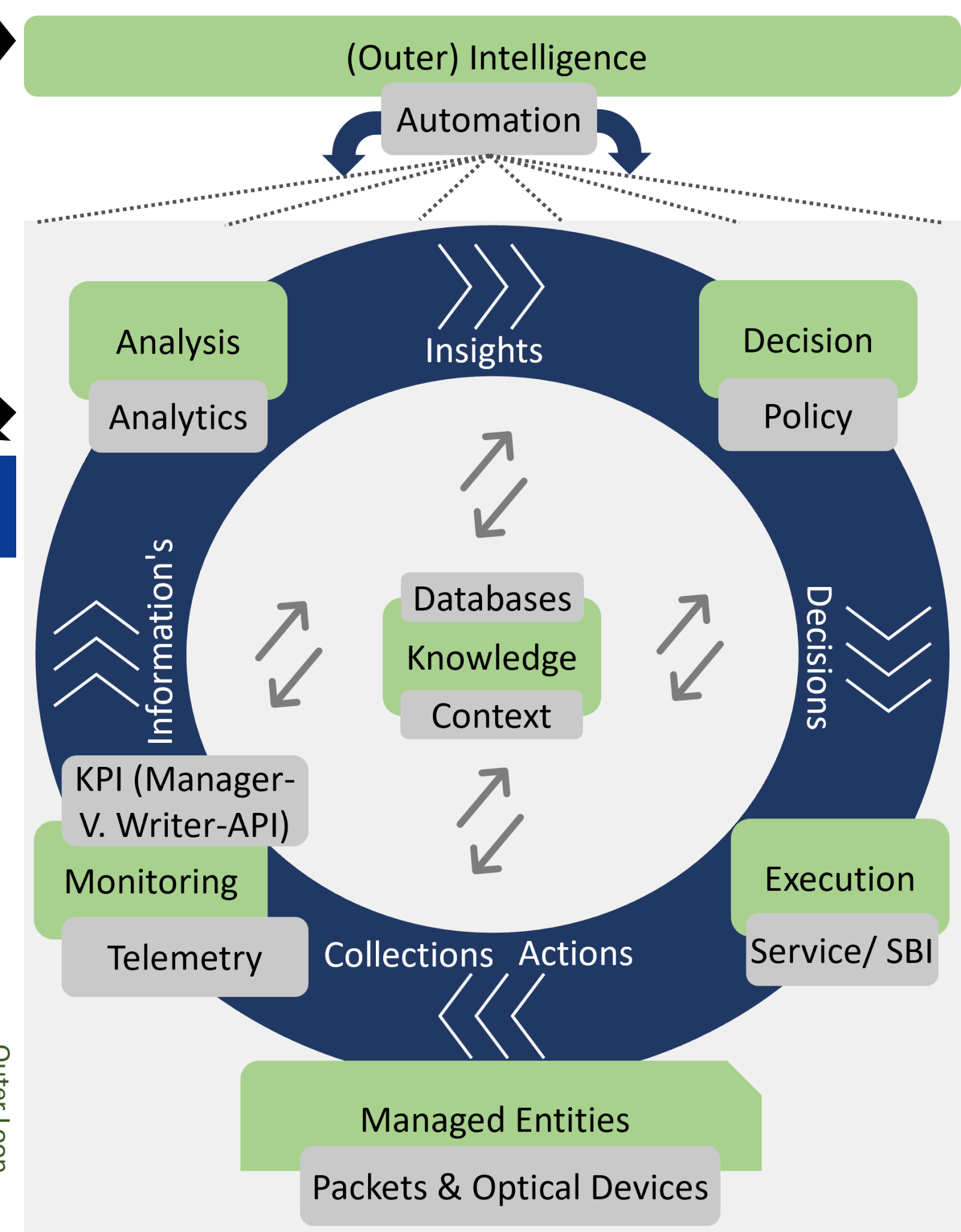
Monitoring & Policy

Efficient monitoring and handling of corresponding KPIs, alarms and actions

3 Workflow



2 ZSM Closed Loop



Service request with SLA
Automation component
Initiation of ZSM Closed Loops

4 Outcomes

- ETSI ZSM-compliant automation integrated into the ETSI TFS ecosystem
- **Autonomous** monitoring and dynamic adaptation across both **packet and optical domains**

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