TEOCO LEADING
5G INNOVATIVE COLLABORATION

TEOCO'S LONG COLLABORATIVE HISTORY WITH TM FORUM

TEOCO has 15 years of active participation within TM Forum.
Recent contributions include:

- **Leading the Open Digital Architecture (ODA) Production work stream (2018-Current)**
- **Collaboration to harmonization of APIs among different standard organizations (TM Forum, 3GPP, MEF)**

- **Actively leading and contributing to TM Form Autonomous Networks project (July 2019-Current)**
- **Actively contributing new REST APIs as part of the Interfaces project (2017)**
- **Leading several Catalysts projects (PoCs) (2012-2019)**

RECENT 5G/IOT AWARD WINNING CATALYST COLLABORATION

May 2018

5G Service Operations – Real Time Service Assurance

- Focus on two 5G based IoT use cases
- Explore the impact of 5G networks and network slicing on operations in creating and automating multiple parallel end-to-end network slices
- Demonstrating an efficient system to operationalize 5G slices using closed-loop assurance

May 2018

5G Intelligent Service Operations

- Exploring new services and innovation areas, demonstrating a sports event (Tour De France)
- Mobile and IoT data sources: Slices, Drones, Telemetry,..
- The use cases are showing operational agility using dynamic slice management
- An award winning catalyst project,

May 2019

5G Riders on the Storm

Show how 5G supports lifeline communications through extreme weather events

- CSPs providing an assured level of 5G services that enables first responders to do their job
- An award winning catalyst project

Dec. 2020

5G Ride On!

Business Continuity solution for Electric Vehicle (EV) charging infrastructure businesses

- Focus on resilience of network for EV charging stations
- Focus on delivering reliable data for customer EV applications
- An award winning catalyst project

TEOCO

tmforum member

★ Led by TEOCO

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TMFORUM CATALYST AWARDS

2018 - 5G Intelligent Service Operations

https://www.tmforum.org/catalysts/5g-intelligent-service-operations/

2019 - 5G Riders on the Storm

https://www.tmforum.org/about-tm-forum/awards-and-recognition/catalyst-team-awards/

2020 - 5G Ride On!

https://www.tmforum.org/5g-riders-storm/

Latest Award Winning Catalyst 2020

5G RIDE ON!

BUSINESS CONTINUITY SOLUTION FOR ELECTRIC VEHICLE (EV) CHARGING INFRASTRUCTURE BUSINESSES

5G RIDE ON! SOLVING A BUSINESS PROBLEM

Real-time Customer In-App Support

Reliable & Accurate Location Based Data

The CSP supports the need of the Charging App provider to ensure reliable data to EV users in its App at any time. This is done by automatically moving Road data application from the 5G Core to the MEC according AI input information

Solving for Business Continuity

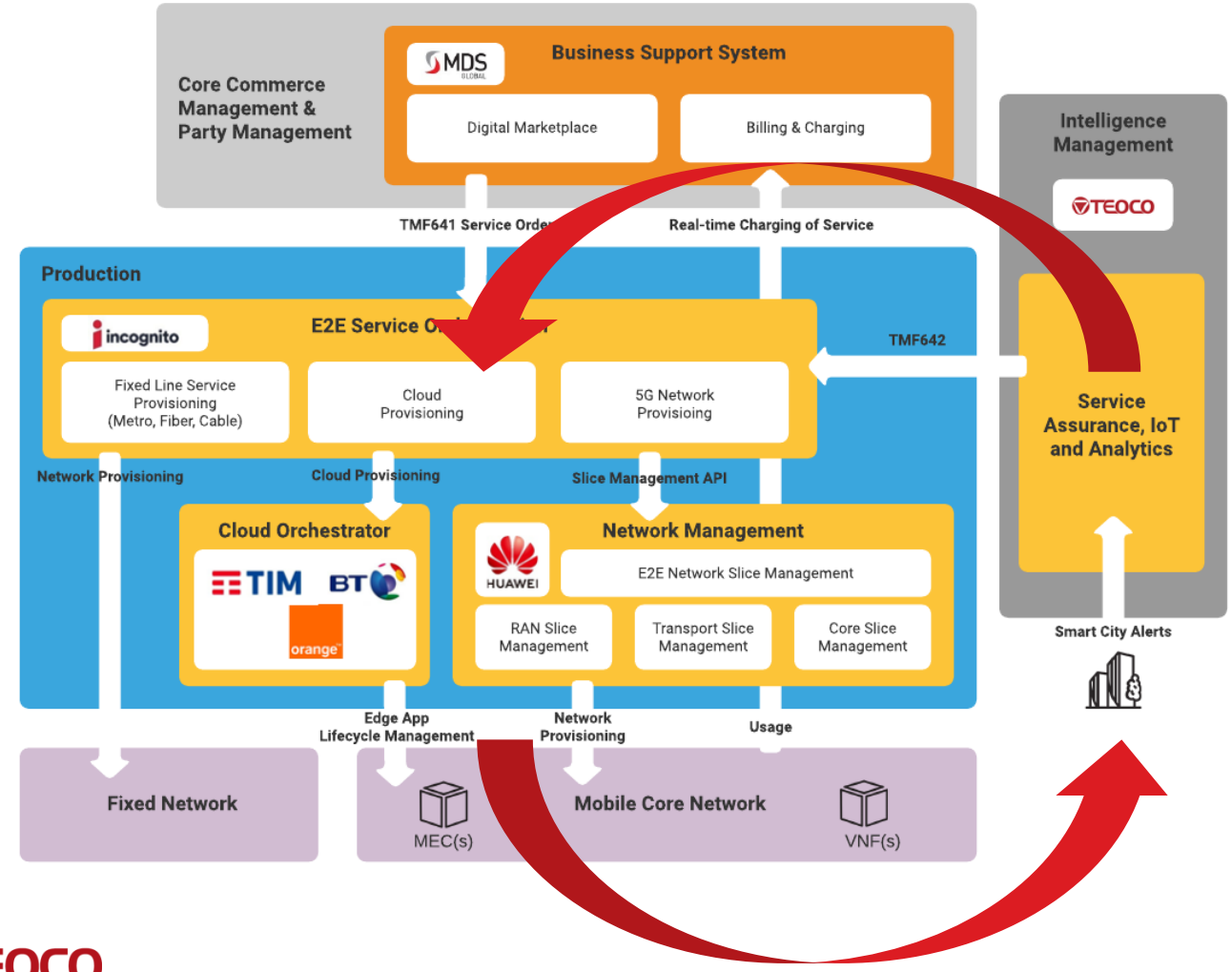
Reliable Connectivity Availability and Resiliency

Resilient Connectivity Across multiple Autonomous Domains

Out of home charging transactions require reliable communication: the CSP supports the need of the Charging Station Operators to provide reliable charging at any time

CATALYST'S BUSINESS DRIVEN OBJECTIVES

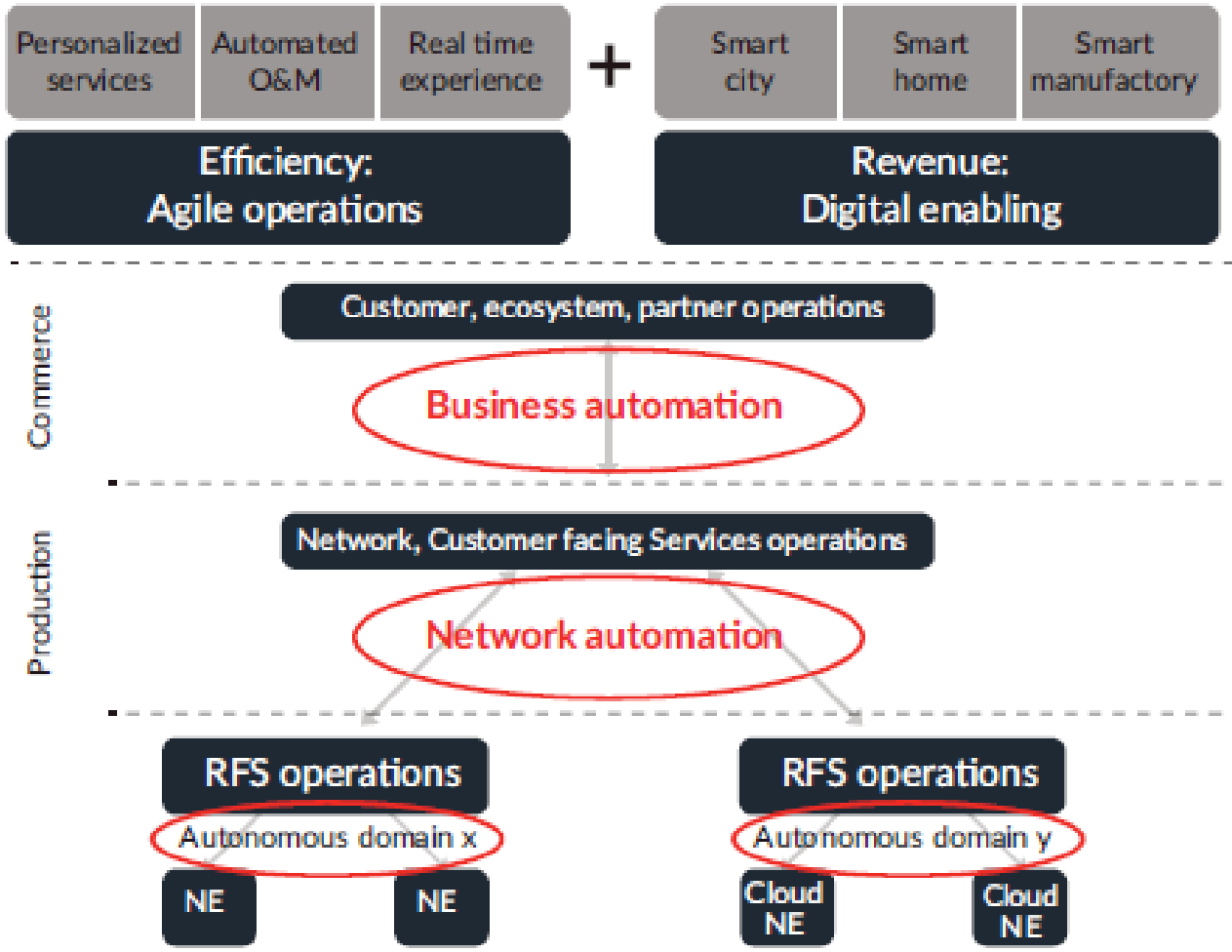
To aligned an autonomous service architecture that could support the complexity required to deliver a resilient and reliable system for the EV Charging Market



Requires:

- Integration between BSS and OSS systems
- Collaboration between vendors
- OpenAPIs for frictionless integration
- Seamless Process flow

TMFORUM'S FRAMEWORK FOR AUTONOMOUS NETWORKS



Business transformation

- ✔ On-demand business
- ✔ Ecosystem business

(Business) Operations transformation

- Customer centric
- Ecosystem oriented
- Collaboration enabled

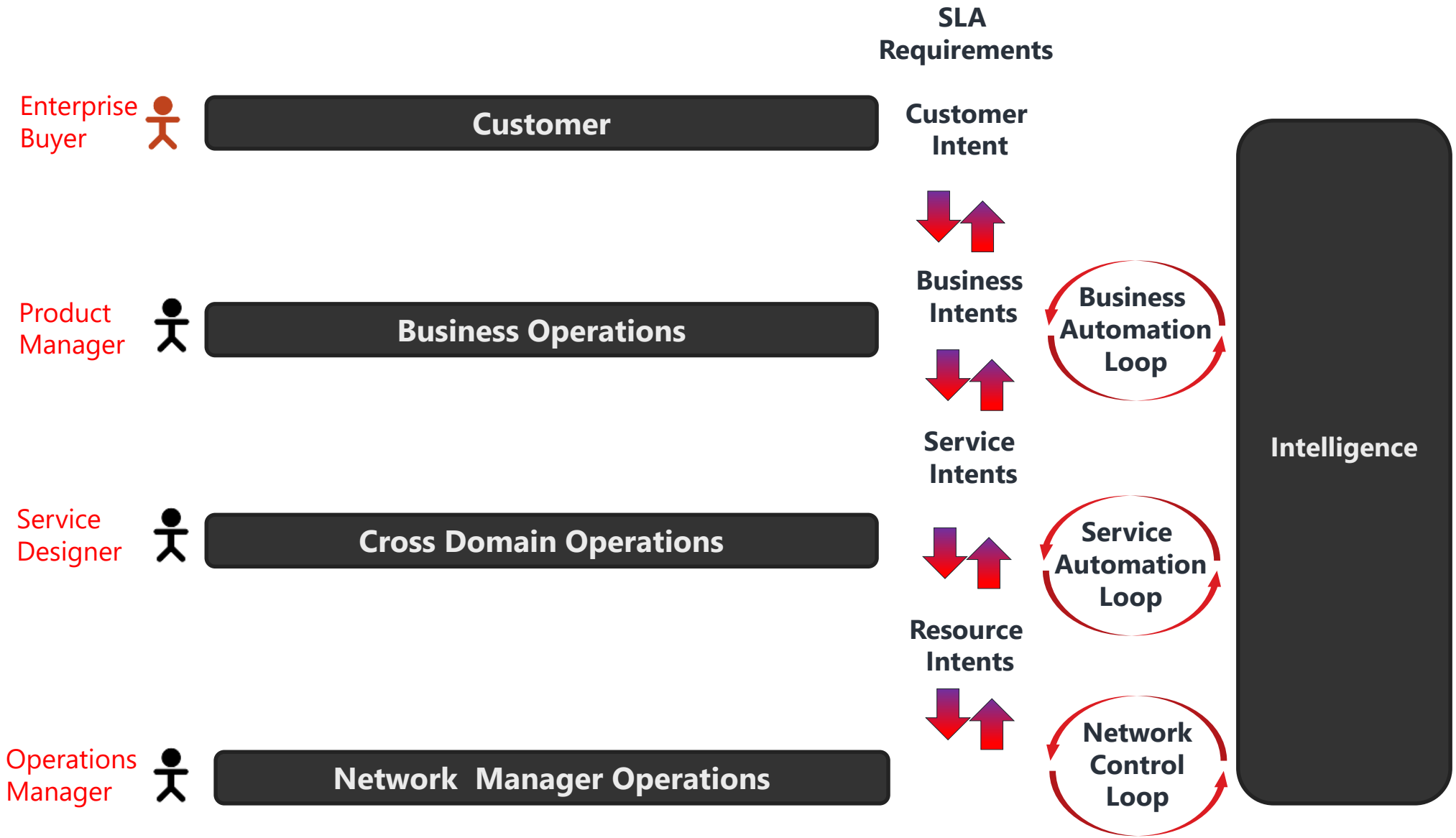
(Network) Operations transformation

- Full lifecycle automation
- Data/knowledge driven & platform based
- Knowledge as a service

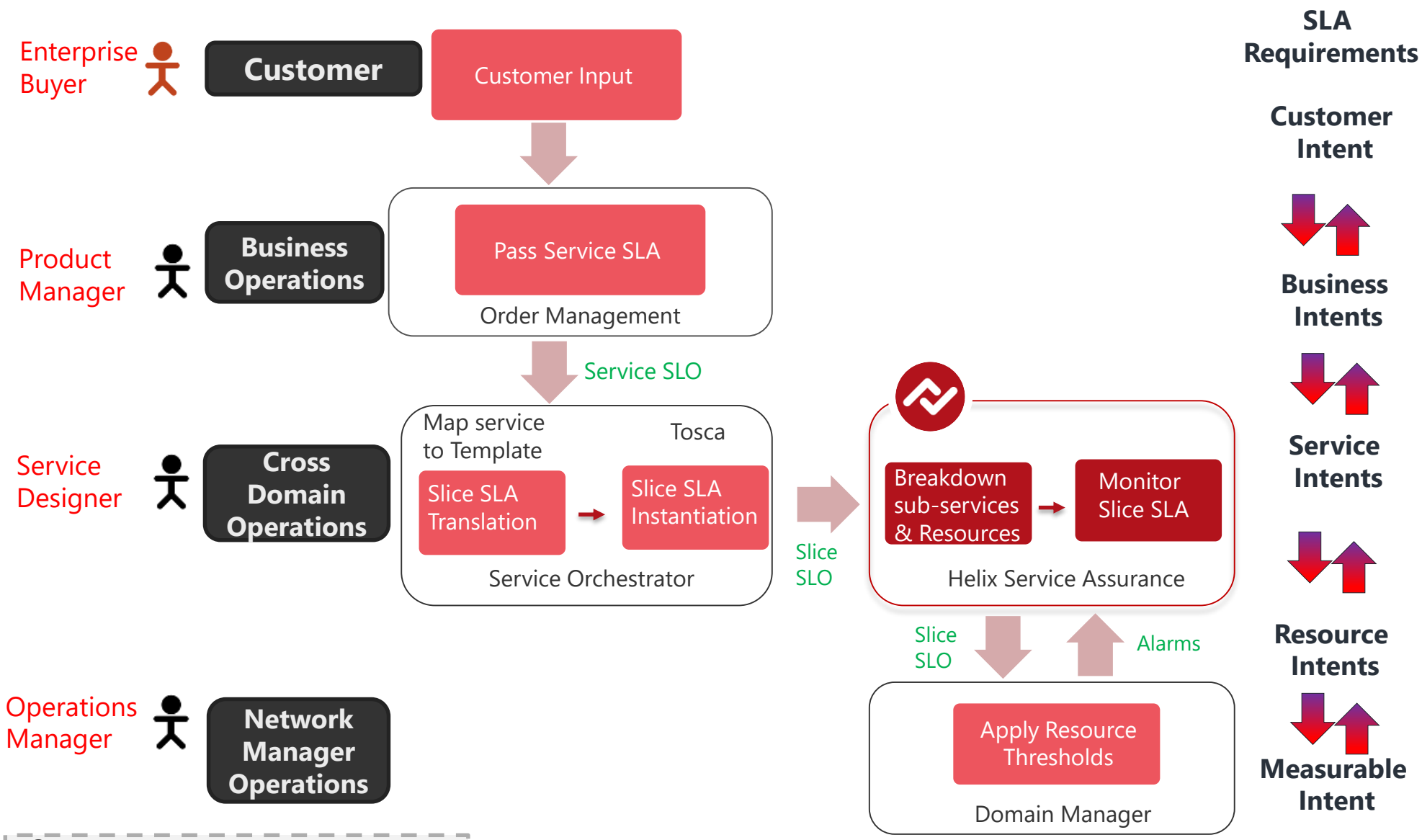
(Architectural) Network transformation

- Extremely simplified architecture
- Autonomous domains collaboration
- Enablement of on-demand production
- Support for collaborative production

DEFINING A CLOSED LOOP AUTOMATED NETWORK



AUTOMATING THE SLO / SLA DEFINITION PROCESS



CONFIRMED CATALYST BENEFITS

Orchestrate & monetise a **complex** eco-system

Demonstrates how a complex eco-system of partners, systems and business processes, as found in the EV charging market, can be orchestrated and monetised by a 5G CSP using an autonomous network framework.

Offers new & enhanced **assured** service

Showcases how CSP/DSP can offer an assured service with improved SLAs that self-heals from a network outage and assures service performance. A common community and enterprise IIoT need, prime for operationalisation and monetisation.

TMF **ODA and eTOM** aligned solution

Use of an ODA aligned architecture, covering fulfilment, assurance and billing eTOM processes that serves eco-system customers, suppliers and curators from order to production.

Deploy closed loop **autonomous network**

Created an autonomous network orchestrated network through a cognitive close-looped process using TOSCA templates and VNFs that route traffic to a fail-over MEC.

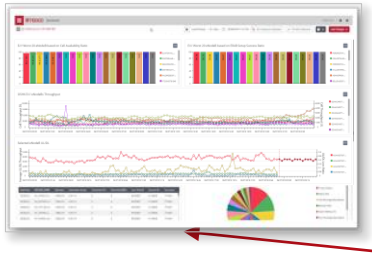
Employ new **3GPP and ETSI** Features

Employment of new 3GPP & ETSI standards, including 5G network slicing, multi-access edge computing (MECs) and virtual network functions (VNFs) to achieve desired result.

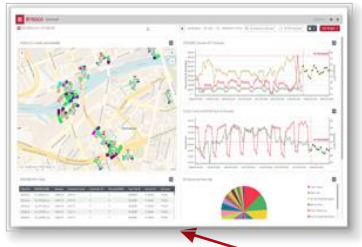
HELIX SERVICE ASSURANCE

Integrated Service Assurance for Enterprise Assurance

Executive Management

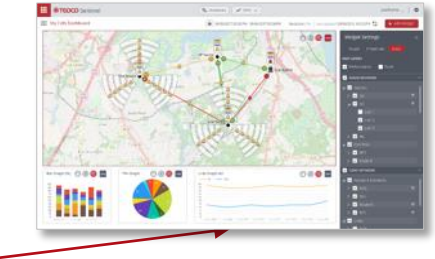


NOC/SOC



Engineering

Business & Customer Care



Analytical Intelligence | **Automation and Closed Loop** | **Visualization and Insight** | **Service and Customer 360**

HELIX SERVICE ASSURANCE SOLUTIONS

- **Fault Management**
- **Performance Management**
- **Service Management**
- **Future Proofed Scalable Mediation**

Multi-domain, Multi-vendor, Multi-tech Compliant

NFV / SDN /CNF | 5G | FWA | 2G, 3G, 4G | Enterprise | Consumer | IP | Wireline | IoT

Integrates Business Processes

Integrated Service Assurance

Complex Agile Network

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THANK YOU

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