

# Report from TSG SA WG5 to TSG SA on FMC Management

SA#50 Istanbul  
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A GLOBAL INITIATIVE

# Background

## NGMN Requirements

- At the end of 2009, NGMN Operators have produced Top 10 Requirements for network operations.
- Requirements are mainly focused on wireless networks operations with some aspects related to multi-technology networks.
- In September 2010, NGMN finalised this work as Top OPE Recommendations.

## Harmonization Program

- In January 2010, SA5 and TM Forum have initiated two joint work groups on Fault Management Harmonization and Modelling Alignment with objective to provide common recommendations (to SA5 and TM Forum) for approval and implementation.
- This program was not triggered by (is independent from) the work on “Top OPE Recommendations”.

## FMC Management

- In March 2010 NGMN workshop, operators expressed the need for a standardized solution for FMC Management available by the end of 2010 and requested SA5 and TM Forum to cooperate to achieve this objective.

## Related meetings

- 📶 Joint meeting SA5-TM Forum Lisbon January 25-26 2010.
- 📶 NGMN Workshop on OAM&P Top Ten Requirements Bonn March 29-30 2010.
- 📶 SA5 Ad hoc meeting on OAM&P Top Ten NGMN Requirements Montreal May 6-7 2010.
- 📶 SA5#71 Montreal May 10-14 2010.
- 📶 SA5#72 Bratislava July 12-16 2010.
- 📶 SA5#73 New Delhi August 23-27 2010.
- 📶 NGMN Workshop on TOP OPE Recommendations Vienna October 11-12 2010.
- 📶 SA5 Ad hoc meeting on Management of Converged Networks Vienna October 13-15 2010.
- 📶 SA5#74 Jacksonville November 15-19 2010.

# Status on NGMN Requirements



- 📶 Detailed analysis of the NGMN requirements showed that most of them are satisfied by existing SA5 specifications.
- 📶 Action plan to address remaining requirements was agreed at the ad hoc meeting in Montreal May 6-7 2010.
- 📶 Work items were created as needed to address requirements
  - Study on Alarm correlation and alarm root cause analysis (480045).
  - IRP Overview, Profiles, Usage Guide (480042).
- 📶 Work is still ongoing in SA5.
- 📶 SA5 progress on NGMN requirements is given in SP-xxxxxx.

# Status on Harmonization Program (1/3)



## Ongoing studies in SA5

- Study on Alignment of 3GPP Generic NRM IRP and TMF Shared Information Data (SID) model (460037).
- Study on Harmonization of 3GPP Alarm IRP and TMF Interface Program (TIP) Fault Management (460038).
- Study on Alignment of 3GPP PM IRP and TMF Interface Program (TIP) PM (480046).

## Bi-weekly calls SA5 – TM Forum on Fault Management Harmonization and Modelling Alignment.

## Status on Harmonization Program (2/3)



### Fault Management Harmonization

- No agreement on the way forward has been reached so far.
- SA5 analyzed TM Forum Fault Management requirements and identified necessary enhancements to the existing 3GPP Fault Management interface.
- TM Forum plans to add an alternative Fault Management interface for Mobile Networks and claims 3GPP Alarm IRP to be legacy.

### Modelling Alignment

- Initial alignment options discussion started (generic definitions / domain model relationship).
- SA5 recommends federated domain specific models maintained by separate organizations while promoting a generic model applicable industry-wide.
- TM Forum recommends inclusion of wireless definitions within TM Forum model (SID). TM Forum also plans to duplicate/copy and change 3GPP Models in TM Forum specifications without prior discussion with SA5.

## Status on Harmonization Program (3/3)



Several initiatives taken by TM Forum outside of the joint work groups weaken the cooperation.

- Recommendations on Interface Strategy issued by TM Forum before the conclusions of the related joint work group.
- Decision to extend TM Forum SID with Wireless models without any discussion in the related joint work group nor informing 3GPP SA5 about these decisions.
- Request for copyright of more than 50 SA5 specifications not discussed in the related joint work group.

# Status on FMC Management



- SA5 created a study on Management of Converged Networks (480047) to concretely progress on FMC management.
- SA5 held an ad hoc meeting on Management of Converged Networks Vienna October 13-15 2010.
- Initial contributions regarding the problem space and use cases are being addressed in SA5.

## SA5 Related Specifications

- TS 32.10x IRP Overview and Usage Guide.
- TR 32.828 Alignment of 3GPP Generic NRM IRP and TMF Shared Information Data (SID) model.
- TR 32.829 Harmonization of 3GPP Alarm IRP and TMF Interface Program (TIP) Fault Management.
- TR 32.831 Alignment of 3GPP PM IRP and TMF TIP PM.
- TR 32.832 Study on Alarm Correlation and Alarm Root Cause Analysis.
- TR 32.833 Study on Management of Converged Networks.

# Information for TSG SA



 TM Forum's intent, of the Harmonization Program and FMC Management works, is to copy the SA5-developed wireless resource management model, modify it and produce solutions, including one for wireless resource management.

## Way forward

### Need 3GPP to remind TM Forum about the SA5 responsibility for RAN/CORE/IMS networks OAM

- Only 3GPP publish 3GPP specs (re-use via reference, not copying).
- SA5 responsibility for OAM spans network and element management for all 3GPP defined domains, including related backhaul & FMC aspects (not just “wireless equipment”).
- SA5 has solutions in place that allow adoption of new/other network technologies (due to its inherent applicability and network technology independence).

### Need to find a structure for FMC management involving all concerned SDOs and Fora

- Need to continue harmonization and alignment efforts to reduce integration costs.
- Promote peer-to-peer cooperation between concerned SDOs and Industry Fora with mutual trust and reciprocal benefits (no self-proclaimed leadership).

Thank you!