

SA5 active work items and study items at SA5#153

UID	Name	Acronym	Target date at SA5#152	% at SA5#150	WID	% at SA5#151	% at SA5#152	% at SA5#153	Agenda	Rapporteur	Related WGs
940030	Self-Configuration of RAN NEs	RANSC	SA#103 (Mar 2024)	65%	SP-211431	75%	90%	100%	6.4.1	Hu Yaxi, China Mobile Xu Ruiyue, Huawei	n/a
970031	Management Data Analytics phase 2	eMDAS_Ph2	SA#103 (Mar 2024)	50%	SP-220981	65%	87%	100%	6.4.2	Yao Yizhi, Intel Hassan Al-kanani, NEC	SA2, RAN2, RAN3
990119	AI/ML management	AIML_MGT	SA#103 (Mar 2024)	35%	SP-230335	55%	80%	100%	6.4.3	Yao Yizhi, Intel Hassan Al-kanani, NEC	SA2, RAN3
990030	Intent driven Management Service for mobile network phase 2	IDMS_MN_ph2	SA#102 (Dec 2023)	75%	SP-230180	90%	100%	-	6.4.4	Xu Ruiyue, Huawei Mark Scott, Ericsson	SA2, RAN3, ETSI ZSM, TM Forum
990026	Service based management architecture	eSBMA	SA#102 (Dec 2023)	10%	SP-230174	30%	55%	100%	6.5.1	Lan Zou, Huawei Robert Petersen, Ericsson Olaf Pollakowski, Nokia	n/a
940045	Network slicing provisioning rules	NSRULE	SA#102 (Dec 2023)	70%	SP-211449	70%	100%	-	6.5.2	Robert Petersen, Ericsson	n/a
980029	Management of Trace/MDT phase 2	5GMDT_Ph2	SA#103 (Mar 2024)	40%	SP-221163	60%	90%	100%	6.5.3	Swaminathan Sivaramakrishnan, Nokia	SA2, RAN2, RAN3

UID	Name	Acronym	Target date at SA5#152	% at SA5#150	WID	% at SA5#151	% at SA5#152	% at SA5#153	Agenda	Rapporteur	Related WGs
960025	5G performance measurements and KPIs phase 3	PM_KPI_5G_Ph3	SA#103 (Mar 2024)	80%	SP-220690	90%	100%	100%	6.5.4	Chen Xiumin, China Telecom Yao Yizhi, Intel	RAN2, RAN3, SA4, CT1, CT4
950031	Additional NRM features phase 2	AdNRM_ph2	SA#103 (Mar 2024)	88%	SP-220351	95%	99%	100%	6.5.5	Sean Sun, Nokia	SA2, CT4, RAN3
990031	Management Aspects related to NWDAF	MANWDAF	SA#102 (Dec 2023)	75%	SP-230181	90%	100%	100%	6.5.6	Niu Yuxia, China Telecom	n/a
950036	Enhanced Edge Computing Management	eECM	SA#102 (Dec 2023)	50%	SP-220154	60%	70%	100%	6.5.7	Deepanshu Gautam, Samsung	n/a
990027	Management Aspect of 5GLAN	5GLAN_Mgt	SA#102 (Dec 2023)	90%	SP-230175	90%	100%	-	6.5.8	Yushuang Hu, CMCC	SA2
990033	Management Aspects of NTN	OAM_NTN	SA#102 (Dec 2023)	30%	SP-230183	70%	100%	-	6.5.9	Sun Mingrui, China Unicom	n/a
1000007	Management of cloud-native Virtualized Network Functions	MCVNF	SA#103 (Mar 2024)	30%	SP-230764	80%	95%	100%	6.5.10	Guangjing Cao, China Mobile	ETSI NFV
1000012	Management Aspects of 5G Network Sharing Phase2	MANS_ph2	SA#103 (Mar 2024)	30%	SP-230629	45%	60%	100%	6.5.11	Wang Zhaoning, China Unicom	RAN3
950028	Management Aspects of URLLC	URLLC_Mgt	SA#103 (Mar 2024)	10%	SP-230631	12%	20%	100%	6.5.12	Wang Zhaoning, China Unicom	RAN3

UID	Name	Acronym	Target date at SA5#152	% at SA5#150	WID	% at SA5#151	% at SA5#152	% at SA5#153	Agenda	Rapporteur	Related WGs
1020029	Management aspects of 5G system supporting satellite backhaul	5GSATB_OAM	SA#103 (Mar 2024)	n/a	SP-231708	n/a	20%	100%	6.5.13	Wen Qi, China Telecom	n/a
930010	Access control for management service	MSAC	SA#103 (Mar 2024)	73%	SP-210859	74%	75%	100%	6.6.1	Clifton Fernandes, Nokia	SA3
940037	Enhancements of EE for 5G Phase 2	EE5GPLUS_Ph2	SA#102 (Dec 2023)	55%	SP-211441	70%	100%	-	6.6.2	Cornily Jean-Michel, Orange	SA2, RAN2, RAN3
990034	Management of non-public networks phase 2	OAM_NPN_Ph2	SA#103 (Mar 2024)	40%	SP-230184	60%	65%	100%	6.6.3	ZHANG Kai, Huawei	SA1, SA2, RAN3
1000014	Network and Service Operations for Energy Utilities	NSOEU	SA#103 (Mar 2024)	30%	SP-230632	60%	70%	100%	6.6.4	Erik Guttman, Samsung	SA1
940042	Study on enhancement of autonomous network levels	FS_eANL	SA#102 (Dec 2023)	85%	SP-211446	100%	100%	-	6.7.-	Cao Xi, China Mobile Xu Ruiyue, Huawei	SA2, RAN3, ETSI ZSM
940041	Study on evaluation of autonomous network levels	FS_ANLEVA	SA#103 (Mar 2024)	70%	SP-211445	70%	80%	100%	6.7.1	Cao Xi, China Mobile Xu Ruiyue, Huawei	SA2, RAN3, ETSI ZSM

UID	Name	Acronym	Target date at SA5#152	% at SA5#150	WID	% at SA5#151	% at SA5#152	% at SA5#153	Agenda	Rapporteur	Related WG _s
950039	Study on intent-driven management for network slicing	FS_NETSLICE_IDMS	SA#102 (Dec 2023)	85%	SP-220278	90%	100%	-	6.7.2	Robert Petersen, Ericsson Zhu Lei, Huawei	n/a
950035	Study on Fault Supervision Evolution	FS_FSEV	SA#103 (Mar 2024)	40%	SP-220153	60%	65%	100%	6.7.3	Wang Chen, China Mobile Zhang Jian, Huawei	n/a
970029	Study on Data management phase 2	FS_MADCOL_ph2	SA#100 (Jun 2023)	45%	SP-220842	65%	80%	100%	6.8.1	Olaf Pollakowski, Nokia	n/a
940032	Study on Key Quality Indicators (KQIs) for 5G service experience	FS_KQI_5G	SA#102 (Dec 2023)	65%	SP-211433	90%	100%	-	6.9.1	Man WANG, Huawei	SA4, RAN2, RAN3
940038	Study on Deterministic Communication Service Assurance	FS_DCSEA	SA#103 (Mar 2024)	60%	SP-211442	90%	92%	100%	6.9.2	Zhang Jian, Huawei	SA2, SA4, SA6, RAN2
1020008	Study on intent driven management services for mobile network phase 3	FS_IDMS_MN_Ph3	SA#105 (Sept. 2024)	n/a	SP-231737	n/a	n/a	5%	6.19.3	Ruiyue Xu (Huawei), Mark Scott (Ericsson)	-
1020009	Study on closed control loop management	FS_CCLM	SA#105 (Sept. 2024)	n/a	SP-231735	n/a	n/a	5%	6.19.4	Deepanshu Gautam (Samsung), Stephen Mwanje (Nokia)	-

UID	Name	Acronym	Target date at SA5#152	% at SA5#150	WID	% at SA5#151	% at SA5#152	% at SA5#153	Agenda	Rapporteur	Related WGs
1020018	Study on management aspects of Network Digital Twin	FS_NDT	SA#105 (Sept. 2024)	n/a	SP-231727	n/a	n/a	5%	6.19.5	Yushuang Hu (China Mobile)	-
1020010	Study on Cloud Aspects of Management and Orchestration	FS_Cloud_OAM	SA#105 (Sept. 2024)	n/a	SP-231781	n/a	n/a	2%	6.19.7	Bahar Sadeghi (Microsoft), Guangjing Cao (CMCC)	-
1020021	Study on energy efficiency and energy saving aspects of 5G networks and services	FS_Energy_OAM_Ph3	SA#105 (Sept. 2024)	n/a	SP-231723	n/a	n/a	10%	6.19.23	Jean-Michel Cornily (Huawei), Ashutosh Kaushik (Samsung)	-
1020022	Study on Enhanced OAM for management exposure to external consumers	FS_MExpo	SA#105 (Sept. 2024)	n/a	SP-231728	n/a	n/a	5%	6.19.24	Scott Probasco (Nokia)	-

OAM&P Rel-18 topics

6.4.1 Self-Configuration of RAN NEs (RANSC 940030)

WI/SI Progress with completion: 100%

- RANSC_WoP#1 %: 100%
- RANSC_WoP#2 %: 100%
- RANSC_WoP#3 %: 100%
- Draft TS email approval (yes/no): yes, TS 28.312 for approval

Target dates (if there is any update): no

SA/RAN/CT impacts and dependencies (if there is any update): no

Summary of Progress in THIS meeting:

1. Add concept, use case and requirements for network configuration data handling.
2. Update TS 28.310 to reference to TS 28.317 for the RANSC management
3. Make the normative yaml code in 3gpp forge
4. The RANSC WI is completed in this meeting and TS 28.317 is sent SA for approval.

Next steps: N/A

6.4.2 Management Data Analytics phase 2 (eMDAS_Ph2 970031)

WI/SI Progress with completion: 100%

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting:

- Discussion for eMDAS -Phase 2 (enhanced Management Data Analytics Phase 2 evolved around number of CRs addressing number of aspects as highlighted below:
 - Correction on configuration data used as enabling data,
 - Correction on MDA request and reporting workflow,
 - Add requirement for historical data used in resource analytics,
 - Add solution for MDA assisted service failure recovery,
 - Corrections for predictions of management,
 - Update control plane congestion analysis description.
- All CRs have been discussed and agreed after discussions and repeated revisions.
- The above agreed input CRs shall be implemented in the latest updated draft CR in S5-241074 and sent for e-mail approval. The final agreed draft CR shall be converted into CR in S5-240799 and sent to the forthcoming SA plenary for final approval into TS 28.104. Rel-19 progression of this topic is scheduled to be starting

in the forthcoming SA5#154 meeting.

- An updated WID has also been discussed and agreed in S5-240628 to remove objectives that have not been addressed by the Rel-18 work item.

Next steps: The work item can now be declared completed for Rel-18.

6.4.3 AI/ML management (AIML_MGT 990119)

WI/SI Progress with completion: 100%

- AIML_MGT_WoP#1 %: 100%
- AIML_MGT_WoP#2 %: 100%

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting:

- The meeting discussed use cases, requirements and/or solutions for AI/ML management for ML training data effectiveness, ML validation, AI/ML emulation, ML entity group loading, relation between AI/ML inference function and the AI/ML supported functions, and ML capabilities related to ML update and learning, inference condition, inference report, history inference outputs, and executed inference outputs. The meeting also addressed corrections and improvements of terms, descriptions and definitions on various parts. The group reached agreement on the following contributions as input to the Draft CR, and agreed to convert the DraftCR to CR and send it to SA plenary for approval:
 - Add AIML support for legacy features
 - Correction of References and definitions
 - Corrections of Issues for Request IOCs
 - AIML Inference Output
 - Add relations for NRMs related to AI-ML inference functions
 - Add relations for NRMs related to AI/ML inference capabilities
 - Add new term for ML joint training
 - Corrections for term of ML re-training
 - Corrections for descriptions of performance indicator selection
 - Add description of deploying a group of joint training models for ML entity deployment phase
 - Enhancement on attributes description and definition
 - Update NRMs stage3
 - Cleanup of Training Phase
 - Correction of NRM for ML training
 - Correct IOCs related references
 - Harmonize usage of ML model and entity
 - Improvement of ML Context description
 - Remove unused attributes from the attributes definition table
 - Add missing management capabilities description
 - AIML Inference History

Next steps: none

6.5.1 Service based management architecture (eSBMA 990026)

WI/SI Progress with completion:

- eSBMA_WoP#1 %: 100%
- eSBMA_WoP#2 %: 100%
- eSBMA_WoP#3 %: 100%
- eSBMA_WoP#4 %: 100%
- eSBMA_WoP#5 %: 100%
- eSBMA_WoP#6 %: 100%
- eSBMA_WoP#7 %: 100%
- eSBMA_WoP#8 %: 100%

Draft TS email approval (yes/no): yes: 28.111 and 32.161

Target dates (if there is any update): SA#103 (Mar 2024)

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting:

- draft FM TS 28.111: The OpenApi file for FM is divided into two. Use-cases were fully reworked, mostly editorial changes.
- Agreed to update Annex F Usage of CRUD operations and NRM fragments to support management capabilities in SBMA.
- Agreed to add annex with example for advertising NRM properties
- Agreed new method for specifying the scope of subscriptions.
- Agreed to add design pattern for error responses
- Agreed to add new HTTP error response format (REST SS)
- Agreed to add dataNodeSelector to getMOIAttributes
- Agreed to send TS 32.161 for SA information and approval.

- Agreed to send TS 28.111 for SA approval.
- Finish the Rel-18 WI.

Next steps: N/A

6.5.3 Management of Trace/MDT phase 2 (5GMDT_Ph2 980029)

WI/SI Progress with completion: 100%

Target dates (if there is any update): none

SA/RAN/CT impacts and dependencies (if there is any update): none

Summary of Progress in THIS meeting: Changes to User consent procedures agreed

Next steps: N/A

6.5.4 5G performance measurements and KPIs phase 3 (PM_KPI_5G_Ph3 960025)

WI/SI Progress with completion: 100%

- PM_KPI_5G_Ph3_WoP#1 %: 100%
- PM_KPI_5G_Ph3_WoP#2 %: 100%
- PM_KPI_5G_Ph3_WoP#3 %: 100%
- PM_KPI_5G_Ph3_WoP#4 %: 100%

Target dates (if there is any update): Mar 2024 (SA#103)

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting:

It's planned to focus on WoP#4 at this meeting. Sixteen contributions related to UE level measurements are submitted for discussion and approval. Since there are some CRs involves TSs (32.422, 32.423, 28.622 and 28.623) which were not listed as the impacted TSs in WID, the WID is revised to get these CRs for these TSs approved in SA plenary. This work item PM_KPI_5G_Ph3 has been progressed with completion 100% so far and the corresponding summary is expected, which will be submitted to SA#103(Mar 2024).

Next steps:

6.5.5 Additional NRM features phase 2 (AdNRM_ph2 950031)

WI/SI Progress with completion: 100%

- AdNRM_ph2_WoP#1 %:
- AdNRM_ph2_WoP#2 %:
- AdNRM_ph2_WoP#3 %:
- AdNRM_ph2_WoP#4 %:
- AdNRM_ph2_WoP#5 %:

Target dates (if there is any update): March 2024

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting:

- NRM enhancement for NfInfo and PscfInfo agreed.
- Control NRM split implementation done.
- Enhancement to clarify Network slice SLA requirement for inter-packet delay variation and Slice Validity agreed.
- Adding MCE ID has been discussed and agreed
- A few corrections CR discussed and agreed.

Next steps: AdNRM_ph3.

6.5.6 Management Aspects related to NWDAF (MANWDAF 990031)

WI/SI Progress with completion: 100%

- MANWDAF_WoP#1 %: 100%
- MANWDAF_WoP#2 %: 100%
- MANWDAF_WoP#3 %: 100%

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting:

- 2 CRs are agreed
 - S5-240484 Rel-18 CR 28.552 Add new measurements related to coordination among multiple NWDAFs
 - S5-240485 Rel-18 CR 28.552 Update use case on coordination among multiple NWDAFs

Next steps: N/A

6.5.7 Enhanced Edge Computing Management (eECM 950036)

WI/SI Progress with completion: 100%

- eECM_WoP#1 %: 100%
- eECM_WoP#2 %: 100%
- eECM_WoP#3 %: 100%

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting: Agreed on ECS sharing.

Next steps: close the WID

6.5.10 Management of cloud-native Virtualized Network Functions (MCVNF 1000007)

WI/SI Progress with completion: 100%

- MCVNF_WoP#1 %: 100%
- MCVNF_WoP#2 %: 100%
- MCVNF_WoP#3 %: 100%

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting: Double check what can be done and finish the WID.

Next steps: N/A

6.5.11 Management Aspects of 5G Network Sharing Phase2 (MANS_ph2 1000012)

WI/SI Progress with completion: 100%

- MANS_ph2_WoP#1 %: 100%
- MANS_ph2_WoP#2 %: 100%

Target dates (if there is any update): none

SA/RAN/CT impacts and dependencies (if there is any update): none

Summary of Progress in THIS meeting: Promote WoP#1 to approve and the contributions are agreed.

Next steps: Promote to approve on the SA Plenary

6.5.12 Management Aspects of URLLC. (URLLC_Mgt 950028)

WI/SI Progress with completion: 100%

- URLLC_Mgt_WoP#1 %: 100%
- URLLC_Mgt_WoP#2 %: 100%

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting: Promote WoP#2 to approve and all bullets of WoP#2 including performance management of reliability and coexistence scenarios are completed.

Next steps: Promote to approve on the SA Plenary

6.5.13 Management aspects of 5G system supporting satellite backhaul (5GSATB_OAM 1020029)

WI/SI Progress with completion: 100%

- OAM_5GSATB_WoP#1 %: 100%
- OAM_5GSATB_WoP#2 %: 100%

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting:

- 3 CRs are proposed to approval:
 - S5-240858 Rel-18 CR TS 28.541 Add new attribute to describe the mapping relationship between DNAI and satellite ID
 - S5-240859 Rel-18 CR 28.541 Add satellite backhaul information to AMFFunction

- o S5-240860 Rel-18 CR 28.552 Rel-18 CR TS 28.552 Add satellite backhaul category for performance measurements for UPP

Next steps: N/A

6.6.1 Access control for management service (MSAC 930010)

WI/SI Progress with completion: 100%

- MSAC_WoP#1 %: 100%
- MSAC_WoP#2 %: 100%
- MSAC_WoP#3 %: 100%
- MSAC_WoP#4 %: 100%

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting:

- MSAC_WoP#1: The information model (stage 3) for access control was finalized
- MSAC_WoP#2: It was clarified that authentication and authorization is SS specific and does not need stage 2 definitions.
- MSAC_WoP#3: The information model (stage 2) for access control was finalized
- MSAC_WoP#4: Summary of progress: The content agreed in previous meetings was moved to the new TS 28.319

Next steps: N/A

6.6.3 Management of non-public networks phase 2 (OAM_NPN_Ph2 990034)

WI/SI Progress with completion: 100%

- OAM_NPN_Ph2_WoP#1 %: 100%
- OAM_NPN_Ph2_WoP#2 %: 100%
- OAM_NPN_Ph2_WoP#3 %: 100%
- OAM_NPN_Ph2_WoP#4 %: 100%

Target dates (if there is any update): SA#103 (Mar 2024)

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting:

- Agreed the LS to 5G-ACIA on Management of non-public networks.
- Agreed the use case, reqs and solutions for shared and dedicated resources in NPN.
- Agree the solution for SLA monitoring and assurance in NPN.
- Rel-18 WI completed.

Next steps: N/A

6.6.4 Network and Service Operations for Energy Utilities (NSOEU 1000014)

WI/SI Progress with completion: 100%

- NSOEU_WoP#1 %: 100%
- NSOEU_WoP#2 %: 100%
- NSOEU_WoP#3 %: 100%
- NSOEU_WoP#4 %: 100%
- Draft TS email approval (yes/no): yes - TS 28.318 0.3.0 will be in S5-241064

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting:

- Completion of stage 2 aspects
- Addition of stage 3 aspects
- Internal alignment of stage 2 and stage 3 aspects
- Configuration (of DNs and other identifiers needed by the management service consumer)
- Scope reduction and annex to describe need for non-standard configuration
- Clarification of use of UPS information from ETSI specifications
- Figures are now editable & source code is provided for the UML based figures

Next steps: maintenance

6.7.1 Study on evaluation of autonomous network levels (FS_ANLEVA 940041)

WI/SI Progress with completion: 100%

- FS_ANLEVA_WoP#1 %: 100%

- FS_ANLEVA_WoP#2 %: 100%
- FS_ANLEVA_WoP#3 %: 100%
- FS_ANLEVA_WoP#4 %: 100%
- Draft TR email approval (yes/no): yes

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting: Add conclusion and make rapporteur clean up.

Next steps: Present TR 28.909 to TSG SA for information and approval.

6.7.3 Study on Fault Supervision Evolution (FS_FSEV 950035)

WI/SI Progress with completion: 100%

- FS_FSEV_WoP#1 %: 100%
- FS_FSEV_WoP#2 %: 100%
- FS_FSEV_WoP#3 %: 100%
- Draft TR email approval (yes/no):

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting: Agreed conclusion of issue1 and issue2, presentation sheet, rapporteur cleanup, and conclusion and recommendations.

Next steps: N/A

6.8.1 Study on Data management phase 2 (FS_MADCOL_ph2 970029)

WI/SI Progress with completion: 100%

Target dates (if there is any update): none

SA/RAN/CT impacts and dependencies (if there is any update): none

Summary of Progress in THIS meeting: Conclusions for Key issues have been agreed

Next steps: N/A

6.9.2 Study on Deterministic Communication Service Assurance (FS_DCSA 940038)

WI/SI Progress with completion: 100%

- FS_DCSA_WoP#1 %: 100%
- FS_DCSA_WoP#2 %: 100%
- FS_DCSA_WoP#3 %: 100%
- FS_DCSA_WoP#4 %: 100%
- FS_DCSA_WoP#5 %: 100%
- Draft TR email approval (yes/no):

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting: revised SID, adding rapporteur cleanup, abbreviation and presentation.

Next steps: N/A

6.19 OAM&P Rel-19 topics

6.19.3 Study on intent driven management services for mobile network phase 3 (FS_IDMS_MN_Ph3 1020008)

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting:

1. The skeleton and scope for TR 28.914 was discussed and agreed.
2. Two new use cases (radio network traffic performance assurance and network support for UAV pre-flighting preparation) were discussed and not further discussion.
3. 7 contributions are not treated due to the time limitation.

Next steps: continue according to the plan

6.19.4 Study on closed control loop management (FS_CCLM 1020009)

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting: TR Skeleton and Structure.

Next steps: Work on KIs

6.19.5 Study on management aspects of Network Digital Twin (FS_NDT 1020018)

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting: skeleton approved

Next steps: continue according to the plan

6.19.7 Study on Cloud Aspects of Management and Orchestration (FS_Cloud_OAM 1020010)

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting: Approval of initial skeleton and structure of the TR.

Next steps: development of technical content of the TR.

6.19.23 Study on energy efficiency and energy saving aspects of 5G networks and services (FS_Energy_OAM_Ph3 1020021)

Target dates (if there is any update): No change.

SA/RAN/CT impacts and dependencies (if there is any update): No change.

Summary of Progress in THIS meeting: 0 -> 10%

1. TR structure has been agreed. It's aligned with the template adopted for all Rel-19 TRs (based on use cases, potential requirements, potential solutions).
2. Two outgoing LSs have been discussed and approved:
 - LS to SA1 on energy states
 - LS to ETSI NFV on Containerized Network Functions
3. The group decided that the two proposed corresponding key issues should be noted, preferring to wait for the replies to these LSs
4. The proposed key issue on carbon emission and renewable energy information could not be discussed due to lack of time.

Next steps: wait for SA1 and ETSI NFV replies. Bring more use cases for discussion.

6.19.24 Study on Enhanced OAM for management exposure to external consumers (FS_MExpo 1020022)

Target dates (if there is any update): no change

SA/RAN/CT impacts and dependencies (if there is any update): no change

Summary of Progress in THIS meeting: skeleton was agreed. Overall progress 5%.

Next steps: continue according to the plan