# New TS Content Structure proposal

S2-1900682
SA2#130
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# Structure of the discussion

- Discuss in the Plenary the structuring of the new TSs (i.e. Slide 3) (preferably agenda 4.1)
- Discuss eNA specific aspects under eNA agenda (6.11)

# How to organize contents between 5G specs and new TSs

- For Release 16, SA2 has concluded to introduce new TSs for a number of WIs (e.g. V2X, eNA, 5WWC, eLCS)
- Existing 5G system has 3 base specifications (TS 23.501, 23.502, 23.503) focused on specific aspects of the system (e.g. overall functional description, procedures and SBI details, Policy control and charging aspects etc.).
- There is a need to establish a common set of rules on how the new TS will be structured, to reduce/avoid:
  - Duplication/repetition
  - Overlapping of scope
  - Redundant procedures
- An example of a good practice (here expectation is that the ongoing offline work among companies have lead to a good structure) is V2X TS where procedures and functions that are being used from existing specifications are referred to as applicable and not repeated/duplicated.
- 23.501 shall continue to maintain high level functions and any updates to existing functions shall be reflected in the existing part
- 23.502 shall continue to maintain all common overall procedures and SBI as it does currently and updated as needed
- 23.503 shall continue to maintain the overall policy related functions as it does today and shall be updated as necessary

# Discussion on how to document Analytics functionality – Propose template (level 1 and 2)

1. Scope
2. References
3. Definitions and abbreviations
4. Reference Architecture for Data Analytics
   - 4.1 Non roaming reference point architecture and service based architecture
   - 4.2 Roaming reference point architecture and service based architecture
     - Proposal: Reference architecture include both Nnwdaf Service and Nnf_eventexposure from NF
     - Proposal: Add a reference to TS 25.xxx for OAM for Data Collection or for Analytics consumer. Do not include it in the Reference architecture.
   - 4.3 Interworking with EPC ( not studied/not applicable)
5. Service Based interfaces and reference points
   - 5.1 Interactions between NWDAF and consumer NF
   - 5.2 Interactions between NWDAF and data providers NFs (reference to Nnf_ExposureService)
   - 5.3 Interactions between NWDAF and OAM for data collection (reference to 25.xxx series)
   - 5.4 Nnwdaf service description (moved from 23.502)
6. Functional Description
   - 6.1 Describe functionality that NWDAF provides as supporting function, i.e. statistics and predictions on “Expected UE mobility”, “Expected NF load”, “Observed QoE/Service MoS”. For each analytic type describe the input data needed and its sources.
7. Information flows
   - 7.1 Procedures to subscribe/request/unsubscribe to analytics,
     - Existing information flows in 23.502 (between a consumer NF and NWDAF) are moved.
   - 7.2 Procedures to data collection from OAM
   - 7.3 Add new procedures that are not listed in 23.502, e.g. detecting misbehaving UE, but reference 23.502 when existing procedures are used.
     - Proposal: Add Reference to EventExposure in 23.502 clause 4.15.4 for data collection.

# Discussion on how to document Analytics functionality for eNA

- Some of these topics were discussed in the external conference call on eNA (not documented in an SA2 Tdoc):
  - Impacts on TS 23.501:
    - Move Data Analytics architecture to new TS 23.288.
    - NWDAF Discovery remains in 23.501 (Note that the NF discovery is documented in 23.501)
    - NWDAF services refer to 23.288 (not to 23.502)
  - Impacts on TS 23.502
    - Move information flows on Network Data Analytics (clause 4.19 in 23.502) to the new TS 23.288.
    - Move Nnwdaf services (clause 5.2) to the new TS. 23.288.
    - No need to update 23.502 "main traffic procedures" to add NWDAF NF, instead the steps in the main procedures include a reference to the new TS 23.288 and the type of analytics consumed.

# V2x template according to S2-1900198


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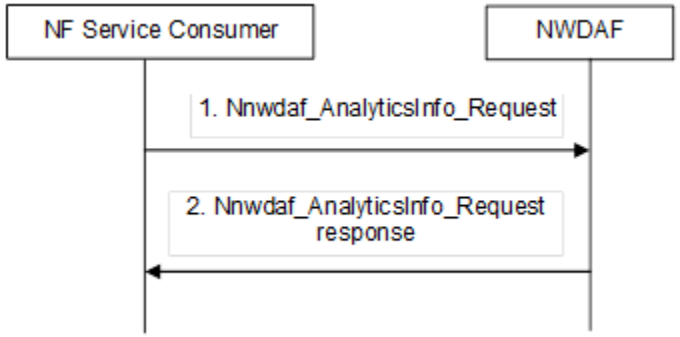
# Example for documentation of "traffic" procedures using analytics

- PDU sesión establishment in 23.502:
  8. If the Request Type in step 3 indicates "Initial request", the SMF selects an SSC mode for the PDU Session as described in TS 23.501 [2] clause 5.6.9.3. The SMF also selects one or more UPFs as needed as described in TS 23.501 [2] clause 6.3.3. The SMF may perform NW data Analytics request procedure for the UPF selection process for UE mobility as defined in TS 23.288 [x]. The SMF provides the EventID "UE mobility" , the Target of Event Reporting "SUPI". If the SMF is not configured with the list of UPFs then the SMF may perform NW data Analytics request procedure for the UPF selection process for UPF load as defined in TS 23.288 [x]. The SMF provides the EventID "NF load" , the Target of Event Reporting "UPF"....

- NW analytics request procedure in 23.288.




- Data collection Service from OAM procedure (TBD)