**3GPP TSG-SA5 Meeting #145-e *S5-225256rev1***

e-meeting, 27 June - 1 July 2022

**Source: Huawei**

**Title: New Issue – Digital sobriety**

**Document for: Approval**

**Agenda Item: 6.9.2.1**

# 1 Decision/action requested

**Include the proposed text in TR 28.913**

# 2 References

[1] 3GPP TR 28.913: "Study on new aspects of EE for 5G networks phase 2"

[2] SP-211440: "New Study on new aspects of EE for 5G networks Phase 2"

# 3 Rationale

In SP-211440 [2], the fourth objective (“• On digital sobriety”) includes the following sub-objective: “Study which forms digital sobriety could take in SA5, e.g. minimize the volume of OA&M data (number of operation parameters in MnS APIs, input data to MDAF, etc.) to be transported and/or stored”.

This pCR proposes to introduce a corresponding new Issue into TR 28.913 [1].

# 4 Detailed proposal

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| **First change** |

## 4.X Key #X: Digital sobriety

### 4.X.1 Description

#### 4.X.1.1 Introduction

Mobile network operators have to decrease their network energy expenses. The energy consumed by network elements / network functions / management system has dependency on data / signalling / OA&M traffic volumes processed, transported, stored by the network elements / network functions / management system (see also key issue #1 in clause 4.1). Therefore, given that the cheapest energy is the energy which is not consumed, it is needed to study where and when it is possible to minimize data / signalling / OA&M traffic volumes processed, transported, stored by the network elements / network functions / management system.

This issue focuses on studying where and when it is possible to minimize OA&M traffic volumes processed and/or transported and/or stored by the network elements / network functions / management system, so as to render the 3GPP system more digitally sober.

It addresses digital sobriety from different perspectives, including (but not limited to):

# how can digital sobriety be considered when producing SA5 specifications

- at Stage 2, e.g. by minimizing the number and size of operation input / output parameters (which would minimize the OA&M traffic over the wire), by minimizing the required per-use case input data to NWDAF, etc.

- at Stage 3, e.g. when selecting solution set alternatives (some solution sets may be more verbose than others, leading to carrying more OA&M traffic over the wire), etc.

# how can digital sobriety take place in daily network operations, e.g. by recommending operational staff to minimize the number of performance measurements which are periodically collected and reported, to collect them if needed only, etc.

#### 4.X.1.2 Potential requirements

Editor’s note: this is FFS.

### 4.X.2 Potential solutions

#### 4.X.2.i Potential solution #<i>: <Potential Solution i Title>

##### 4.X.2.i.1 Introduction

Editor's Note: This clause describes briefly the potential solution at a high-level.

##### 4.X.2.i.2 Description

Editor's Note: This clause further details the potential solution and any assumptions made.

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| **End of changes** |