3GPP TSG SA WG 3 Meeting SA3#102bis-e S3-211118

Electronic meeting, Online, 1 - 5 March 2021

**Title:** LS on end-to-end protection of HTTP message for Indirect communication

**Release:** Rel-17

**Work Item:** Study on enhanced security aspects of the 5G Service Based Architecture (SBA) (FS\_eSBA\_SEC)

**Source:** **SA3**

**To: CT4**

**Cc:**

**Contact person: Tao Wan**

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**Send any reply LS to: 3GPP Liaisons Coordinator,** [**mailto:3GPPLiaison@etsi.org**](mailto:3GPPLiaison@etsi.org)

**Attachments:** None

# 1 Overall description

SA3 has started the study of security enhancements for Service Based Architecture (SBA) in release 17. In TR 33.875, key issue #5 is about the end-to-end protection of HTTP messages for indirect communication, i.e., where one or more Service Communication Proxies (SCPs) are present in the path between an NF service consumer and an NF service producer.

To address KI#5, SA3 would like CT4 to review HTTP parameters used in a service request and response and identify those which are NOT subject to modification, mediation, or alteration by an SCP and can be delivered as is to the other far end of the indirect communication. This exercise is critically needed for SA3 to evaluate whether providing end-to-end protection to these HTTP parameters would enhance the HTTP message(s) end to end protection over indirect communication. HTTP parameters include both HTTP headers and HTTP body attributes.

SA3 would like to ask CT4 to perform such review and provide SA3 with guidance and the details of such HTTP parameters. SA3 would like to bring to CT4 attention the fact that any HTTP parameter that is subject to SCP modification, mediation, or alteration cannot be provided with end-to-end protection. With this information, does CT4 anticipates any possible restriction to CT4’s ability to define new headers or functionalities? Note when CT4 chooses to add new 3gpp-header(s) or new mediation capabilities to SCP which modify an existing header that is under the end-to-end protection, CT4 would need to communicate with SA3 to remove such header from end-to-end protection to ensure that end-to-end protection is not broken.

# 2 Actions

**To CT4**

**ACTION:** SA3 would like to request CT4 to provide the feedback on the above request.

# 3 Dates of next TSG SA WG 3 meetings

SA3#103e 17 - 28 May 2021 Electronic meeting

SA3#104 23 - 27 August 2021 Electronic meeting