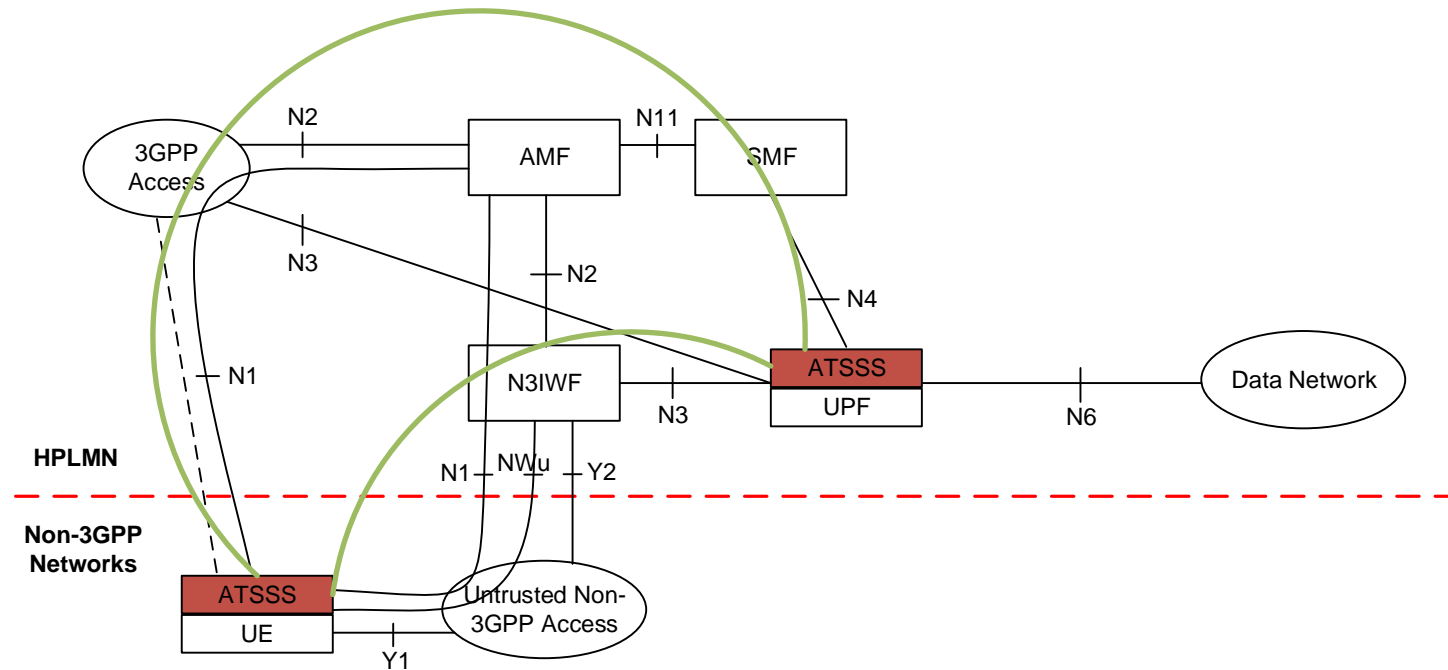# Some considerations for Release 17

3GPP TSG RAN meeting #85
Newport Beach CA
September 16-20, 2019

Introduction

- ATSSS (Access Traffic Steering Switching and Splitting) is an optional core network feature introduced in Release 16
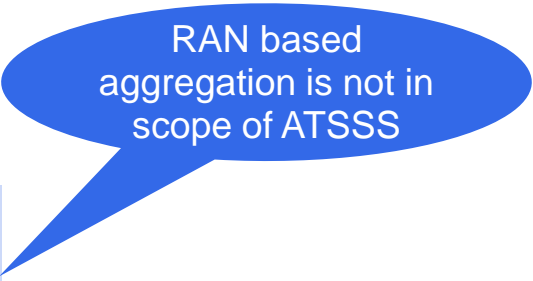
Some ATSSS details

- Enables the UE and the UPF to distribute traffic between 5G and Wi-Fi access networks based on PCF policy and local conditions

  - A multi-access PDU session is established

- Two types of "steering functionality" have been defined

  - Higher layer (above IP): Multi-path TCP
    - Applies to TCP traffic, based on MPTCP proxy in UPF

  - Lower layer (below IP): ATSSS-LL
    - Applies to all traffic including TCP, UDP, and Ethernet

- Currently the following steering modes are supported

  - Active-Standby, Smallest delay, Load balancing, Priority-based

RAN support for ATSSS

- We think ATSSS functionality can be enhanced with RAN support

    - Enhanced steering modes based on RAN and WLAN information (signal quality, HS2.0 metrics etc.)

    - Provide list of WLANs that the UE can connect to

    - . . .

- In LTE, RAN has previously considered such mechanisms

    - RAN assisted WLAN interworking (RAIWK)

    - RAN controlled LTE-WLAN interworking (RCLWI)

    - LTE-WLAN aggregation

    - LTE WLAN Radio Level Integration with IPsec Tunnel

- Proposal

    - Start a study to consider application of RAIWK and RCLWI ideas to ATSSS

RAN based aggregation is not in scope of ATSSS