

SP-231605

# Emergency texting over IoT NTN

3GPP SA Meeting #102

Edinburgh, Scotland, 11-15 December 2023

# Introduction

- Growing interests in using satellites for emergency texting
  - Vast swaths of landmass do not have cellular coverage
  - Voice/high data rate services are not commonly available
  - Both 3GPP and non-3GPP based systems are operating today
- IoT NTN possesses many characteristics desirable for emergency texting
  - Long battery life
  - Secure communication
  - Delay tolerant
- Unsurprisingly, IoT NTN has emerged as the technology of choice
  - NOT originally designed for emergency services
  - How can IoT NTN be leveraged for emergency texting?

# Emergency texting over IoT NTN

- 3GPP support for emergency texting is very desirable
  - Ability to prioritize emergency services at both RAN and CN levels
  - Meet requirements of regulators and industry bodies; See for example [S2-2108296](#)
  - Open up possibility to offer specialized services (e.g. eCall)
  
- It is expected that relatively modest specification effort will be needed
  - Essentially reuse existing emergency-related mechanisms
  - Current specification text explicitly prohibits emergency services over NB-IoT (and hence IoT NTN)
  - But, this is mainly because emergency texting was not intended to be supported

# Proposal

SA is requested to discuss native 3GPP support of emergency texting over IoT NTN in Release 19 and provide guidance to SA WGs

- Only core network changes should be in scope of Release 19
- Other enhancements (e.g., for RAN) can be left for future releases