3GPP TSG-SA WG1 Meeting #102
Berlin, Germany, 22 - 26 May 2023

S1-231322

Sensing and Security / Privacy Aspects

Source: Apple
Agenda item: 7.1

Introduction

- This discussion paper aims to check the understanding of the security and privacy requirements and if there is any gaps in the potential sensing requirements already documented in TR 22.837 v1.0.0

Documented requirements on security and privacy

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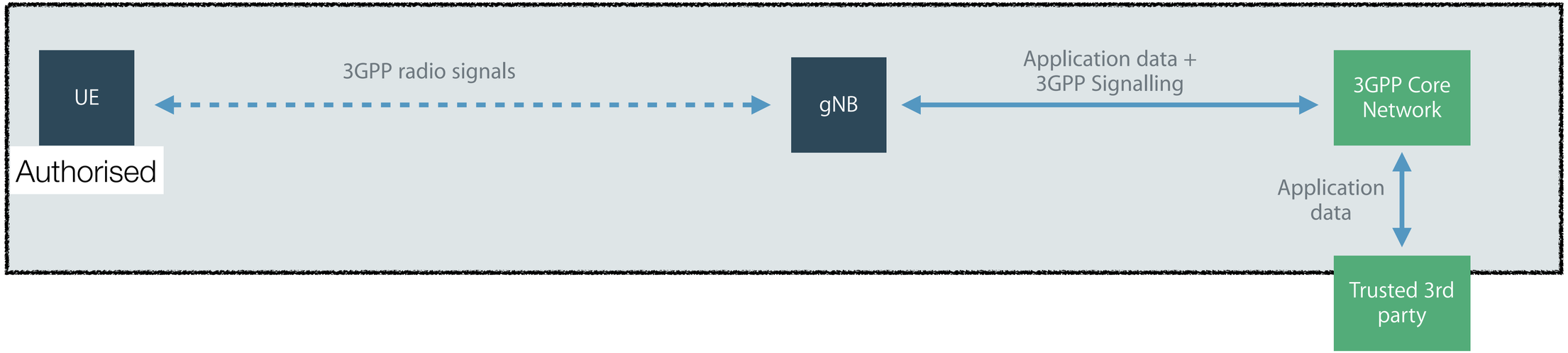
- [PR 6.1.2-1] The 5G system shall limit sending the sensing results only to third party authorized to receive that sensing results.
- [PR 6.1.2-2] The 5G system shall support encryption and integrity protection of the sensing result, to protect the data inside the 5G system and when used.
- [PR 6.1.2-3] The 5G system shall support appropriate level of sensing for both situations where consent can be obtained from the sensing targets, and where it cannot.
- [PR 6.1.2-4] Subject to regulation, the 5G system shall obtain user consent when sensing results and user identification are brought together for further processing.
- [PR 5.21.6-1] Subject to user consent and regulatory requirements, based on operator policy, the 5G system shall be able to support secure means for RAN entities and authorized UEs to provide 3GPP sensing data to a 5G network for processing
- [PR 5.23.6-2] The 5G system shall be able to provide a secure mechanism to ensure sensing result data privacy within the sensing service area.
- [PR.5.27.6-3] The 5G system shall support security and protection of the 3GPP sensing data, non-3GPP sensing data, and 3GPP sensing results.

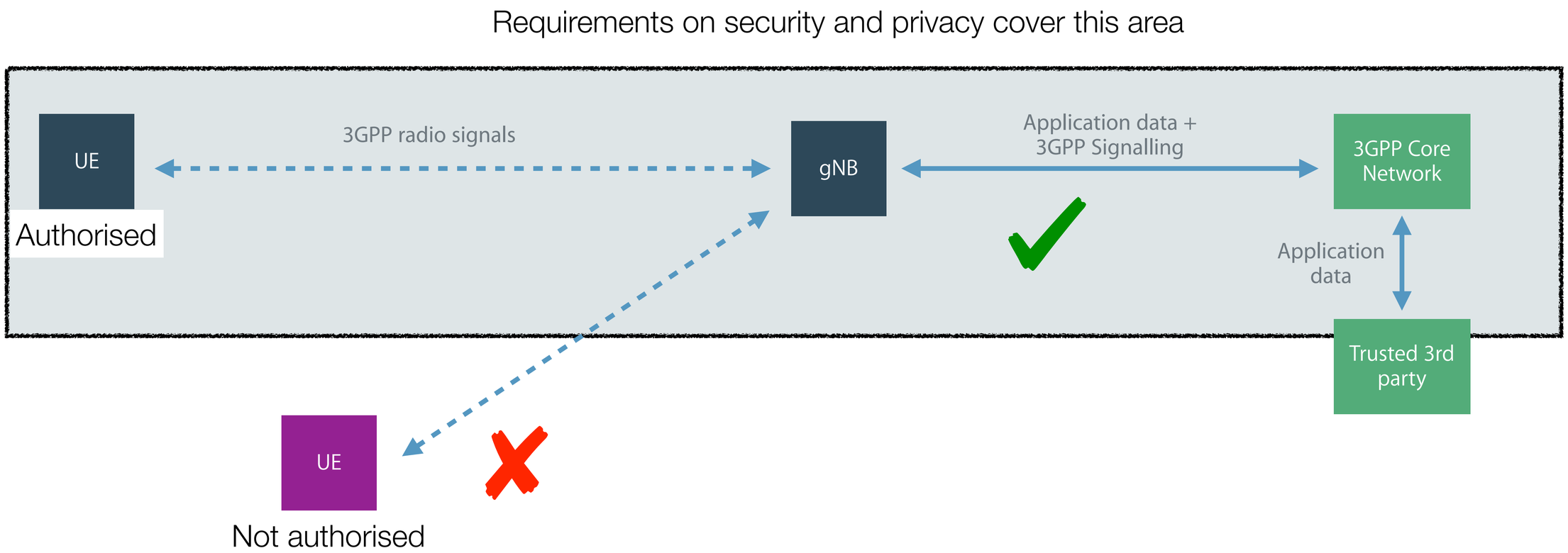
- 3 main areas covered:
  - protection of sensing results
  - protection of (non-)3GPP sensing data
  - Aspects related to user consent

Analogy with 5G communications - authorised UE

Requirements on security and privacy cover this area



Analogy with 5G communications - not authorised UE



Sensing security and privacy requirements

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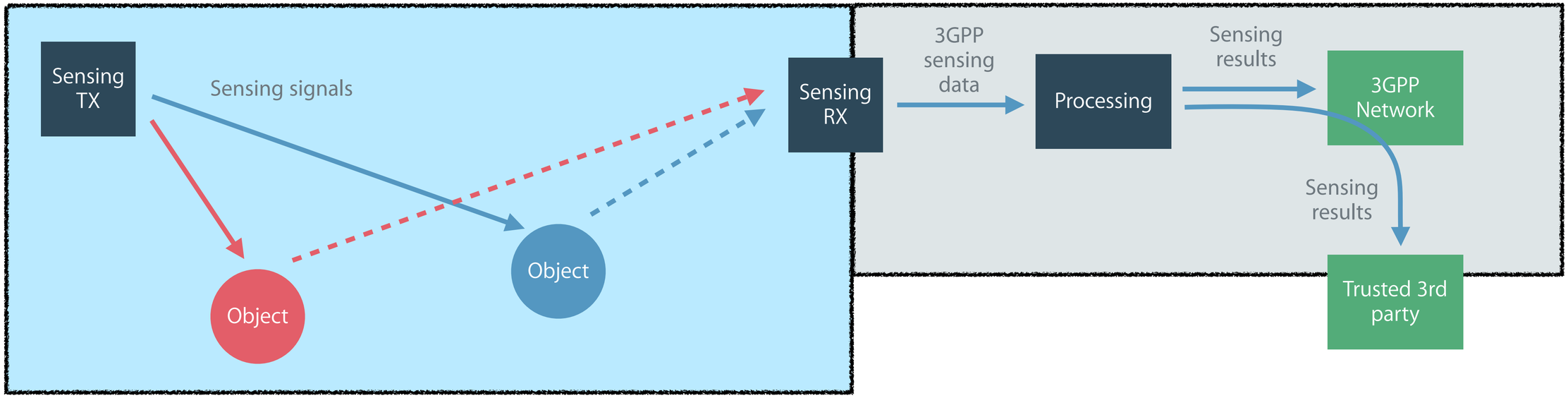
Requirements on security and privacy cover this area



Requirements on security and privacy ***do not*** cover this area

Is there a gap in sensing security and privacy requirements?

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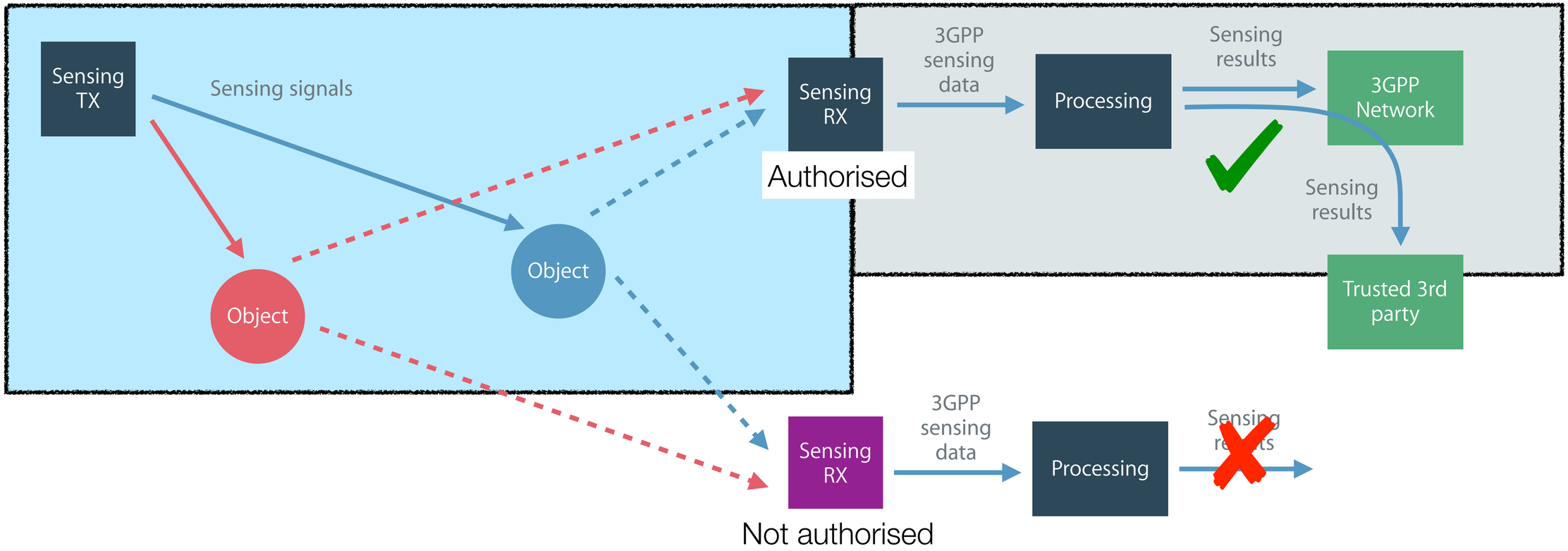

Question: Are requirements needed to avoid unauthorised sensing receivers the ability to obtain sensing results?