

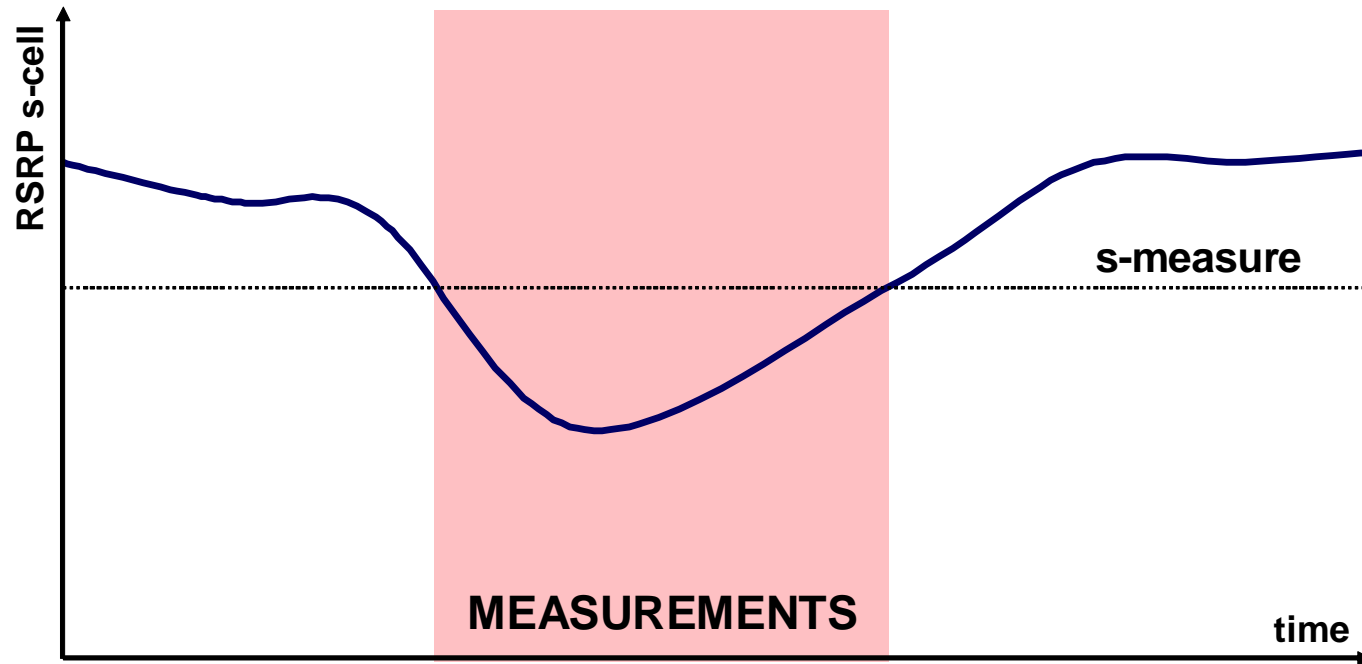
# LTE measurement events

**Date:** 12.03.2010  
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# Table of contents

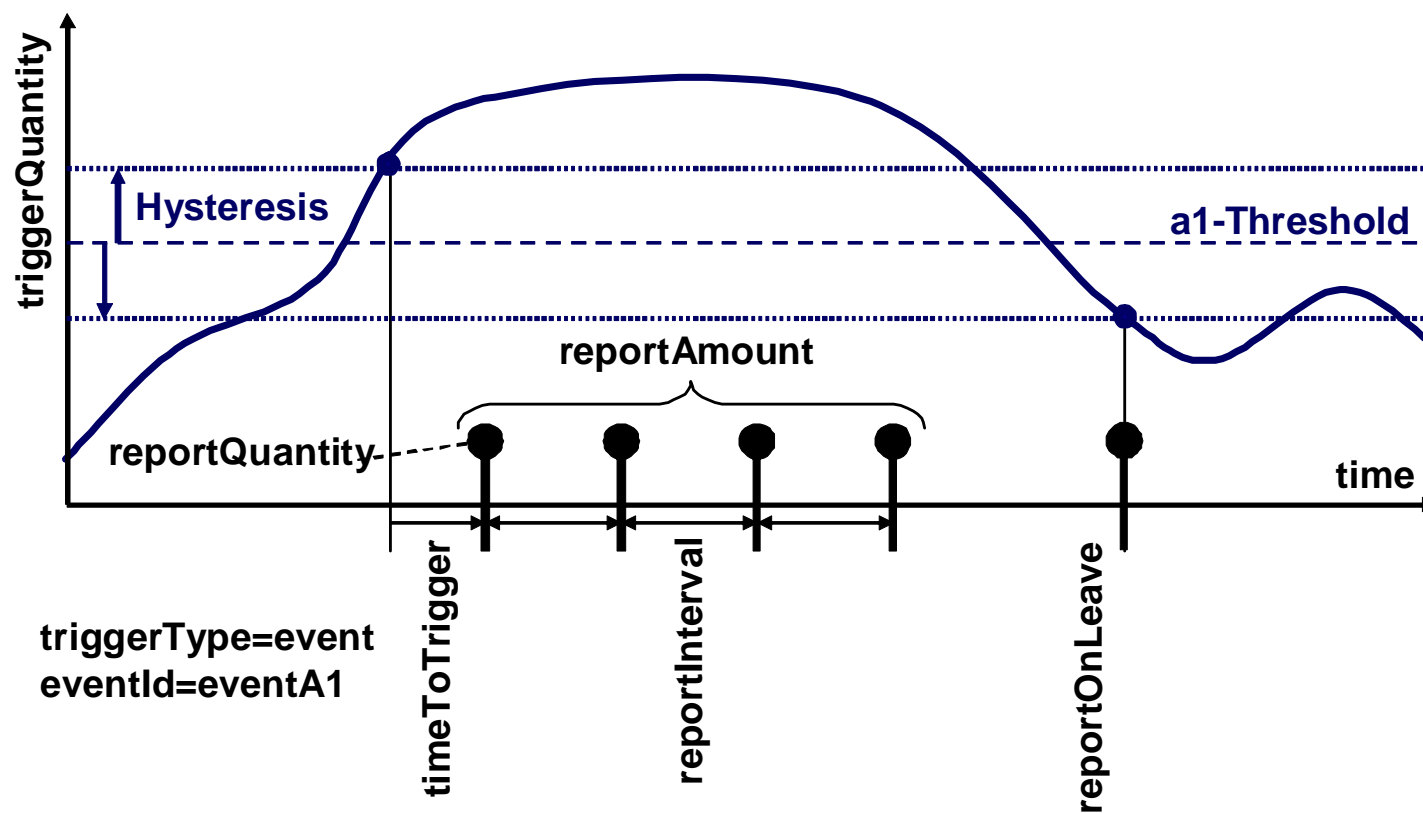
|   |    |
|---|----|
| Table of contents .....                                 | 2  |
| Parameter s-measure .....                               | 3  |
| Event A1 .....  | 4  |
| Event A2 .....  | 5  |
| Event A3 .....  | 6  |
| Event A4 .....  | 7  |
| Event A5 .....  | 8  |
| Event B1 .....  | 9  |
| Event B2 .....  | 10 |
| Speed dependant scaling of measurement parameters ..... | 11 |
| Acronyms and Abbreviations .....                        | 12 |
| References .....  | 13 |
| Disclaimer .....  | 14 |

# Parameter s-measure



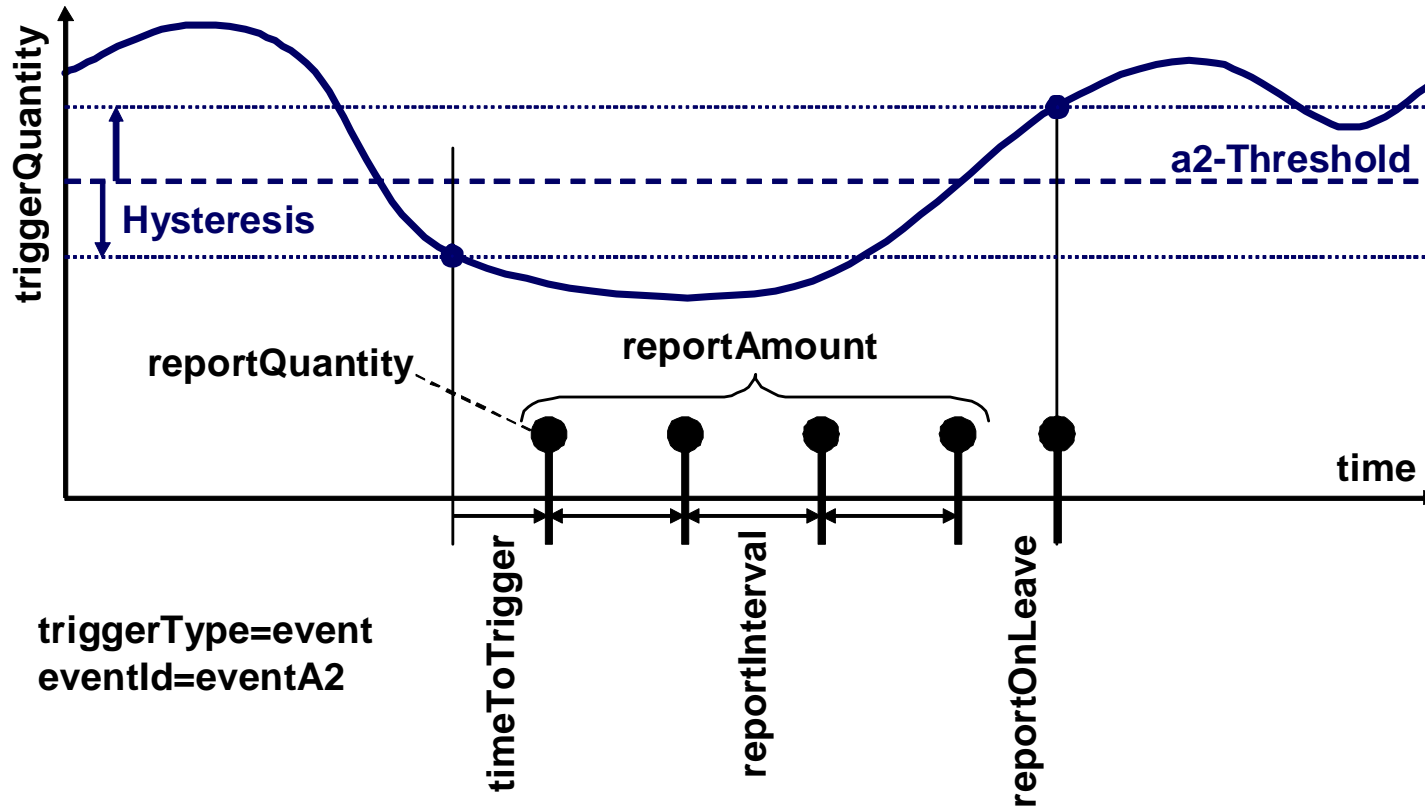
# Event A1

Serving becomes better than threshold



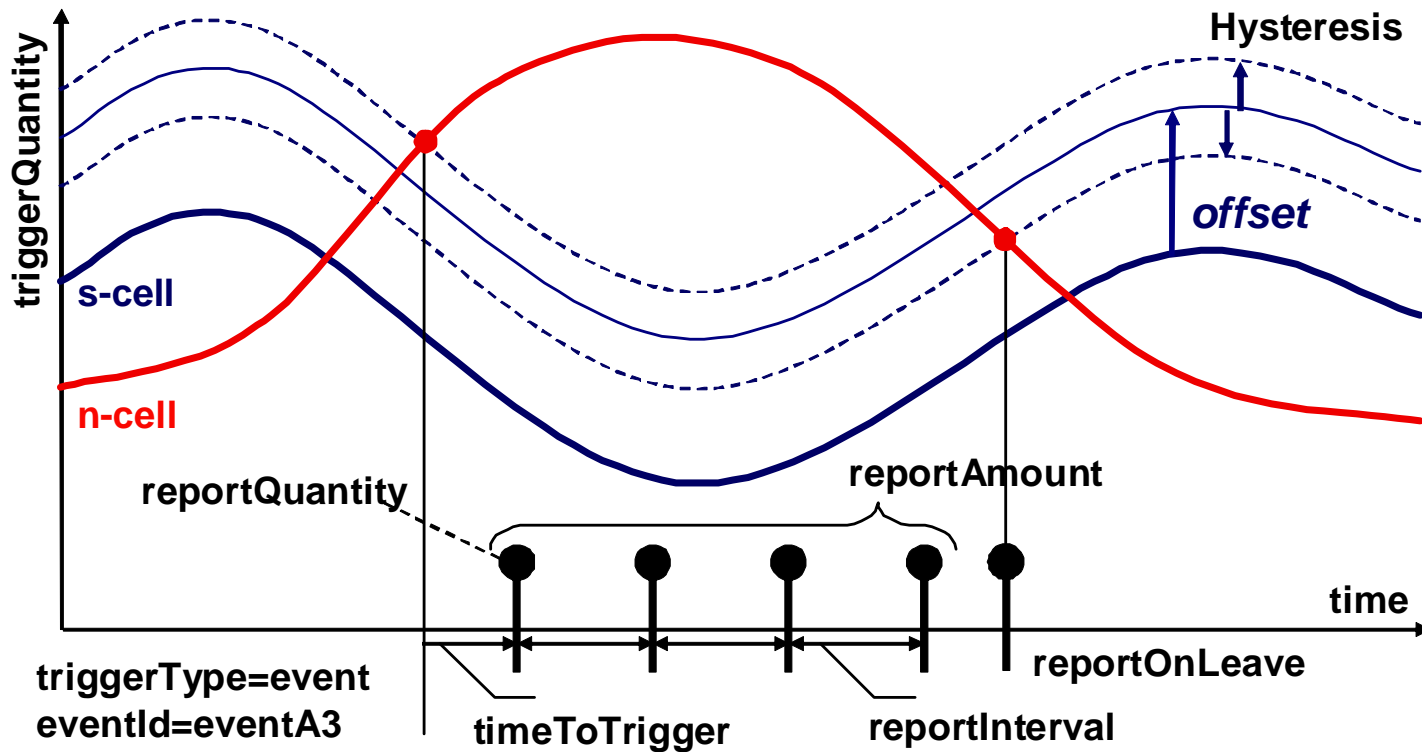
# Event A2

Serving becomes worse than threshold



# Event A3

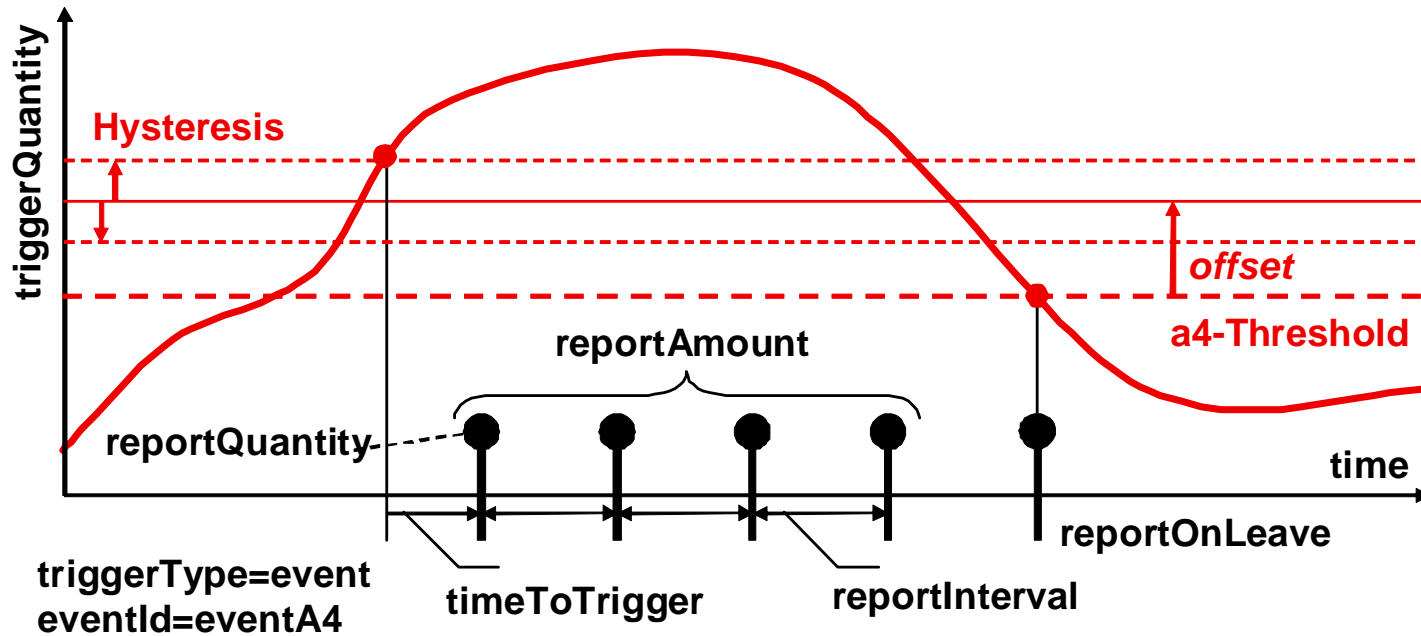
Neighbour becomes offset better than serving



$$Offset = a3\text{-offset} + offsetFreq_s + cellIndividualOffset_s - offsetFreq_n - cellIndividualOffset_n$$

# Event A4

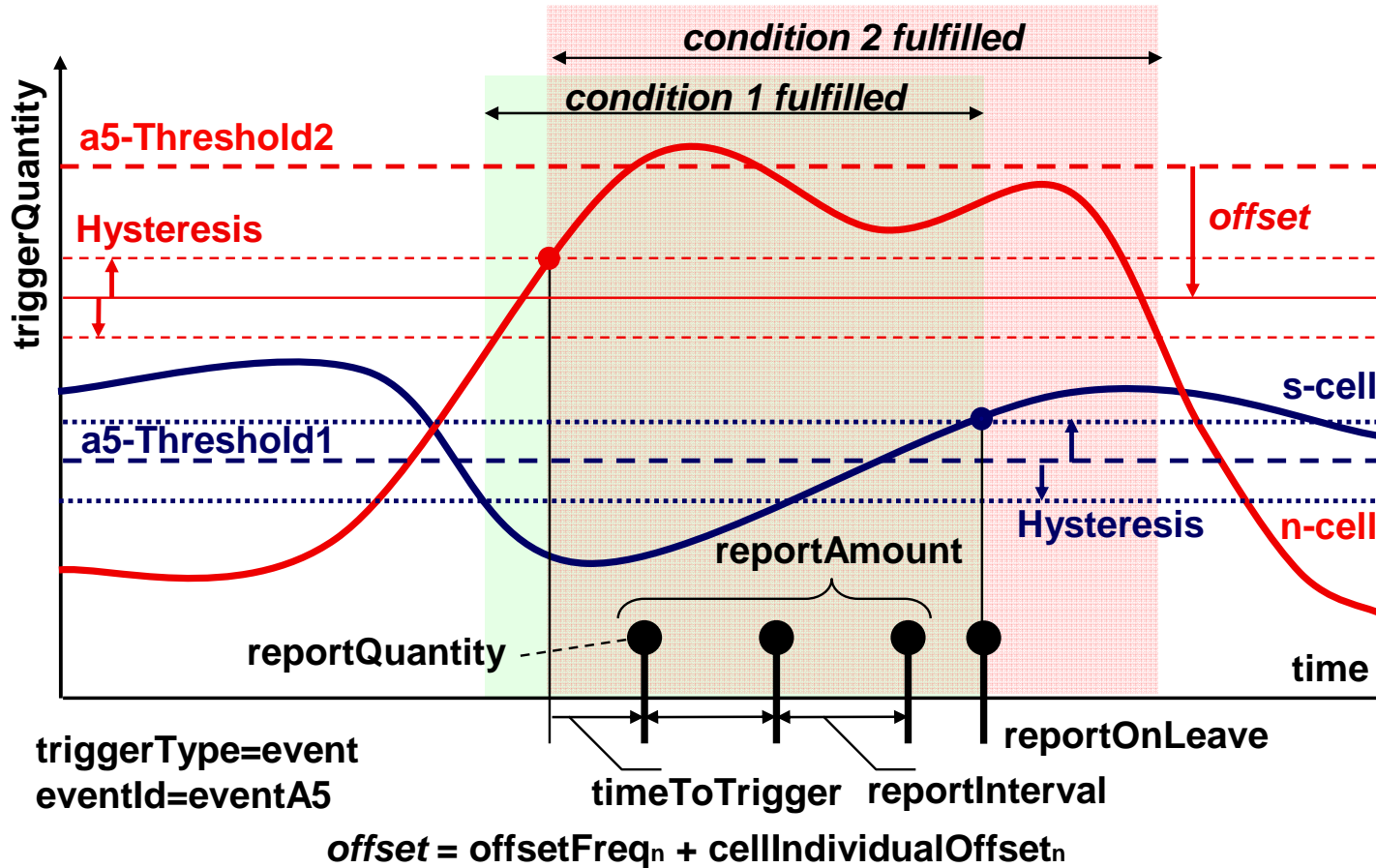
Neighbour becomes offset better than threshold



$$Offset = offsetFreq_n + cellIndividualOffset_n$$

# Event A5

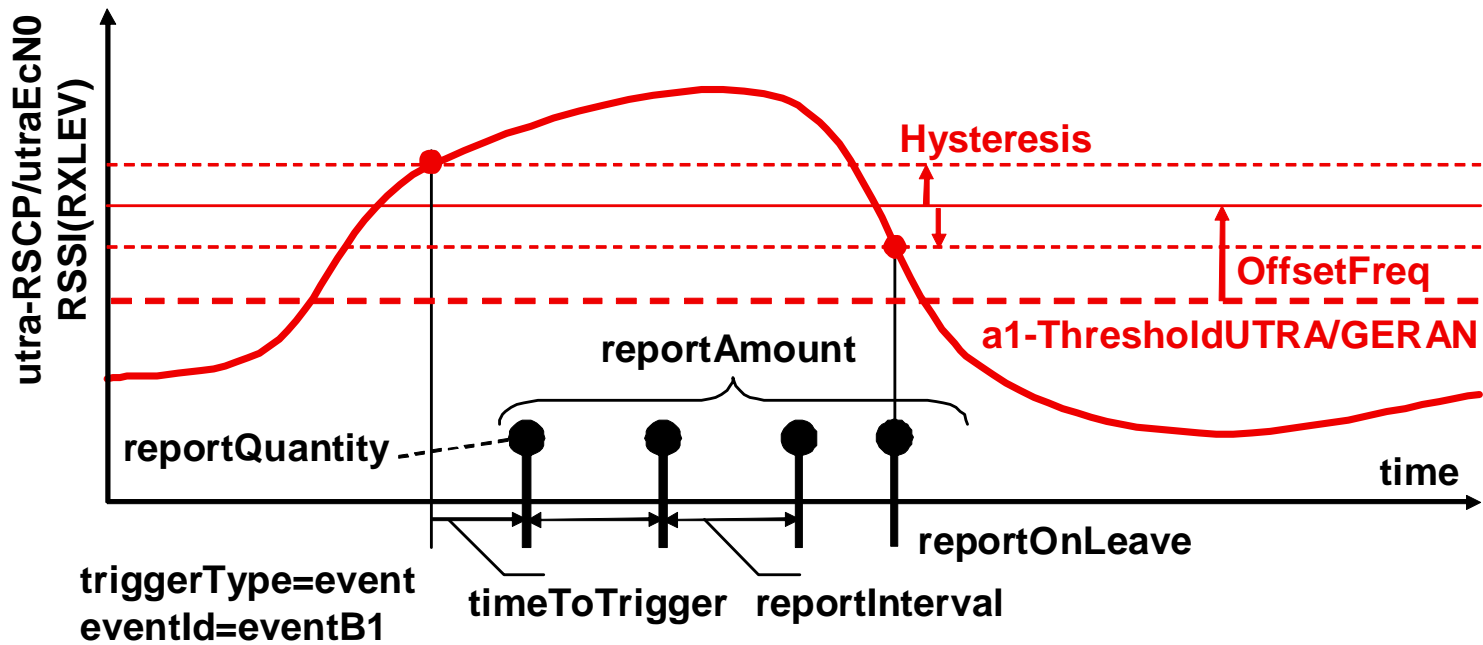
Serving becomes worse than thr.1 and neighbour becomes better than thr.2





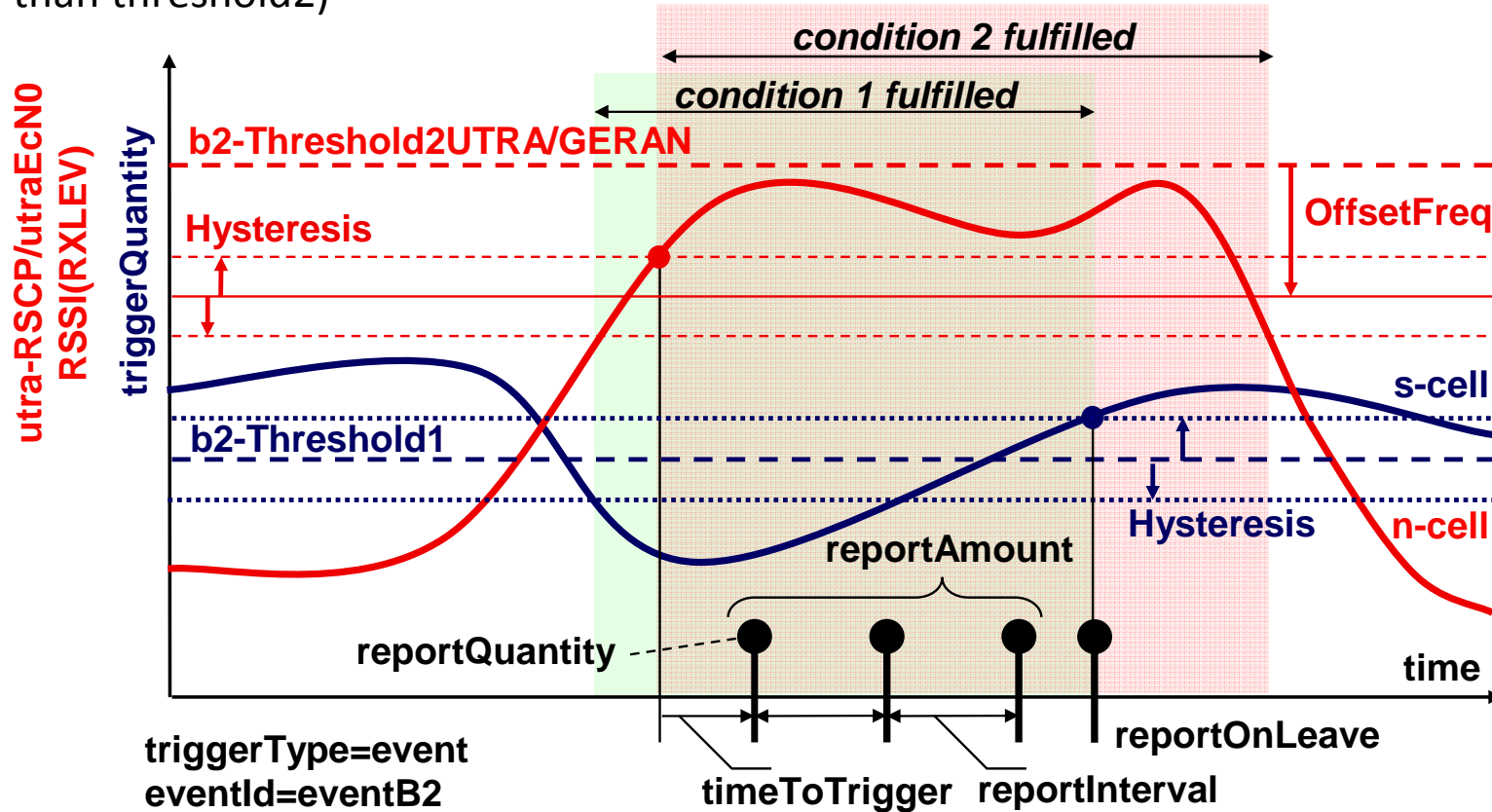
# Event B1

Inter RAT neighbour becomes better than threshold

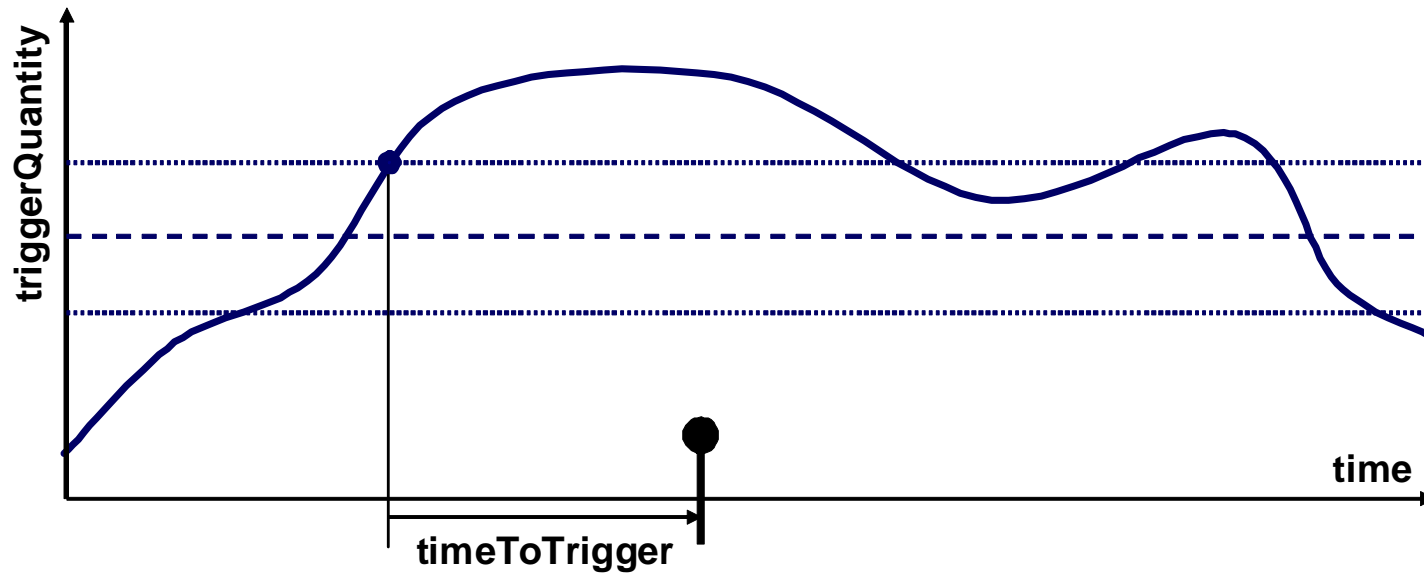


# Event B2

Serving becomes worse than threshold1 and inter RAT neighbour becomes better than threshold2)



# Speed dependant scaling of measurement parameters



$\text{timeToTriger} := \text{timeToTrigger} * \text{sf-Medium}$  (medium-mobility detected)

$\text{timeToTriger} := \text{timeToTrigger} * \text{sf-High}$  (high-mobility detected)

# Acronyms and Abbreviations

|       |   |
|-------|---|
| AKA   | Authentication and Key Agreement            |
| CCO   | Cell Change Order                           |
| CDMA  | Code Division Multiple Access               |
| DCCH  | Dedicated Control Channel                   |
| DL    | Downlink                                    |
| EGPRS | Enhanced General Packet Radio Service       |
| GERAN | GSM/EDGE Radio Access Network               |
| HO    | Handover                                    |
| MME   | Mobility Management Entity                  |
| NAS   | Non-access Stratum Signalling               |
| PCCH  | Paging Control Channel                      |
| PLMN  | Public Land Mobile Network                  |
| PSI   | Public Service Identity                     |
| RAT   | Radio Access Technology                     |
| RLC   | Radio Link Control                          |
| RNTI  | Radio Network Temporary Identifier          |
| RRC   | Radio Resource Control                      |
| RSCP  | Received Signal Code Power                  |
| RSRP  | Reference Signal Received Power             |
| RXLEV | Received Signal Level                       |
| TMSI  | Temporary Mobile Subscriber Identity Number |
| UE    | User Equipment                              |
| UL    | Uplink                                      |
| UTRAN | UMTS Terrestrial Radio Access Network       |

# References

This section contains the locations of various specifications, document references and useful information where you can learn more about this subject.

- [1] 3GPP TS 36.331 Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC); Protocol specification

# Disclaimer

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