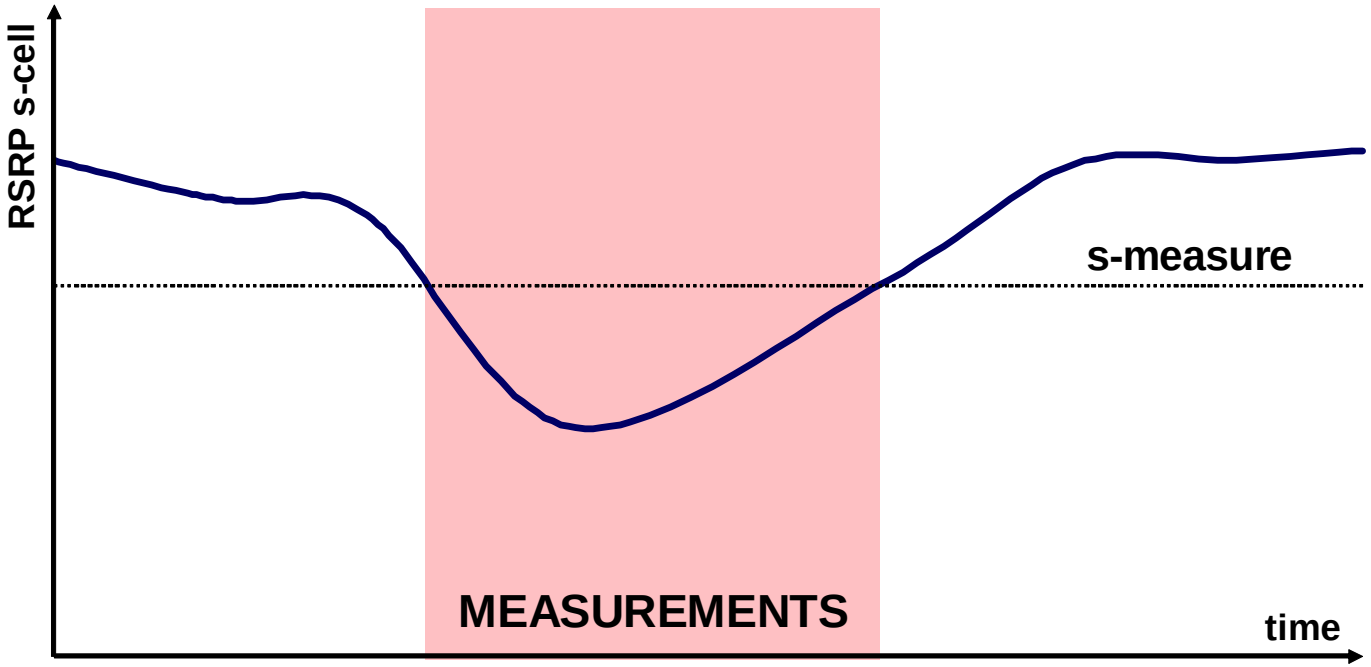
LTE measurement events

Date: 12.03.2010
Revision: 001/LME/010
Author: Jakub Bluszcz

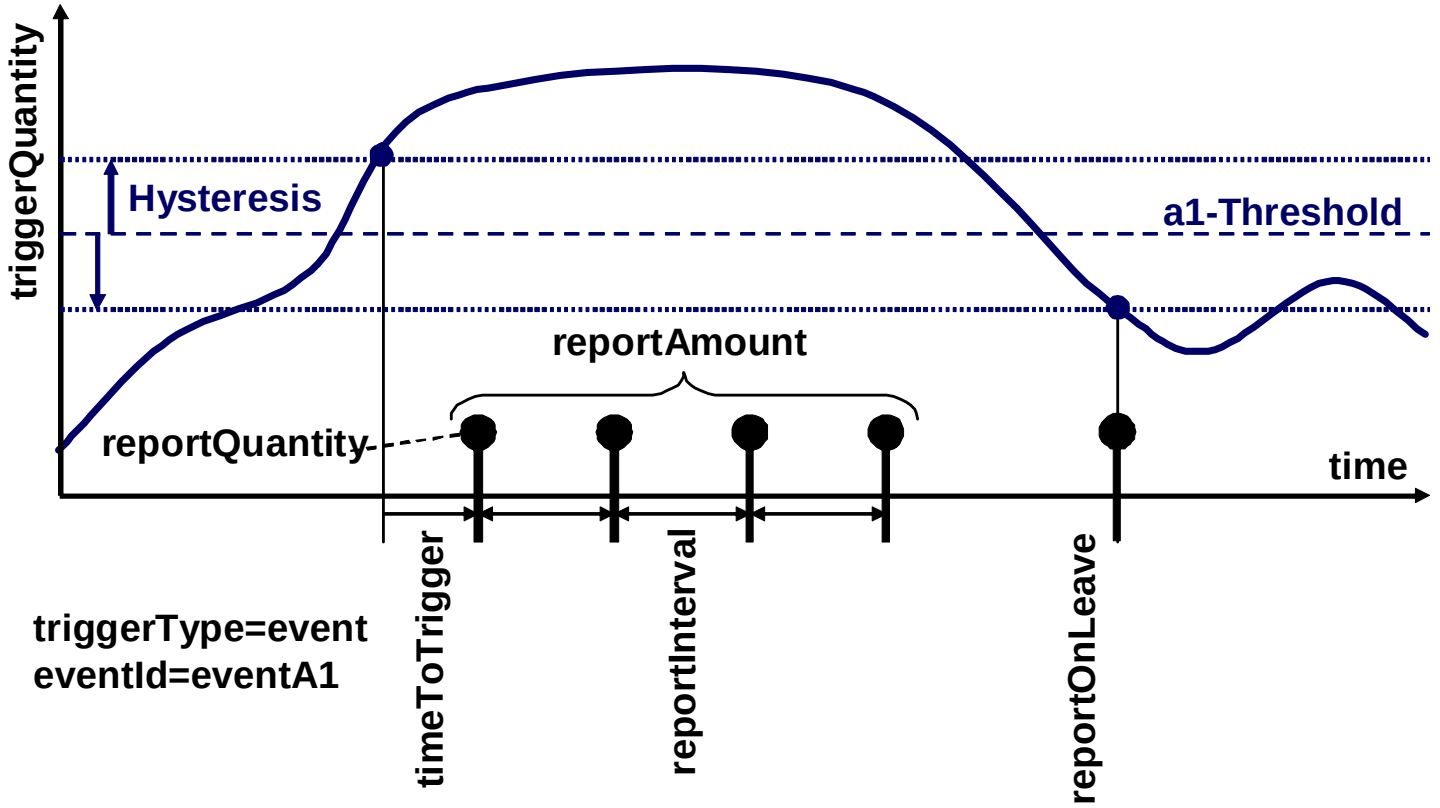
Table of contents

Parameter s-measure



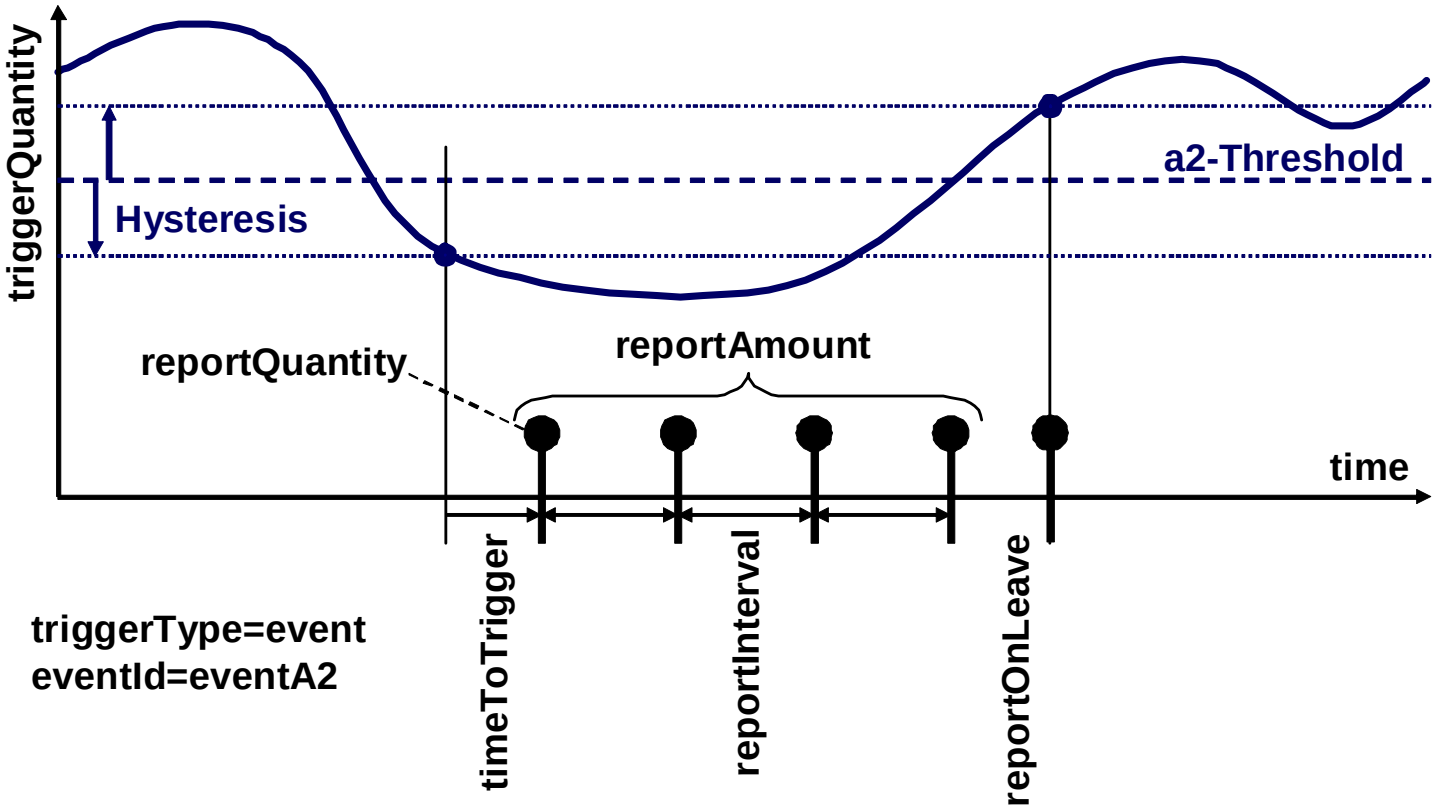
Event A1

Serving becomes better than threshold



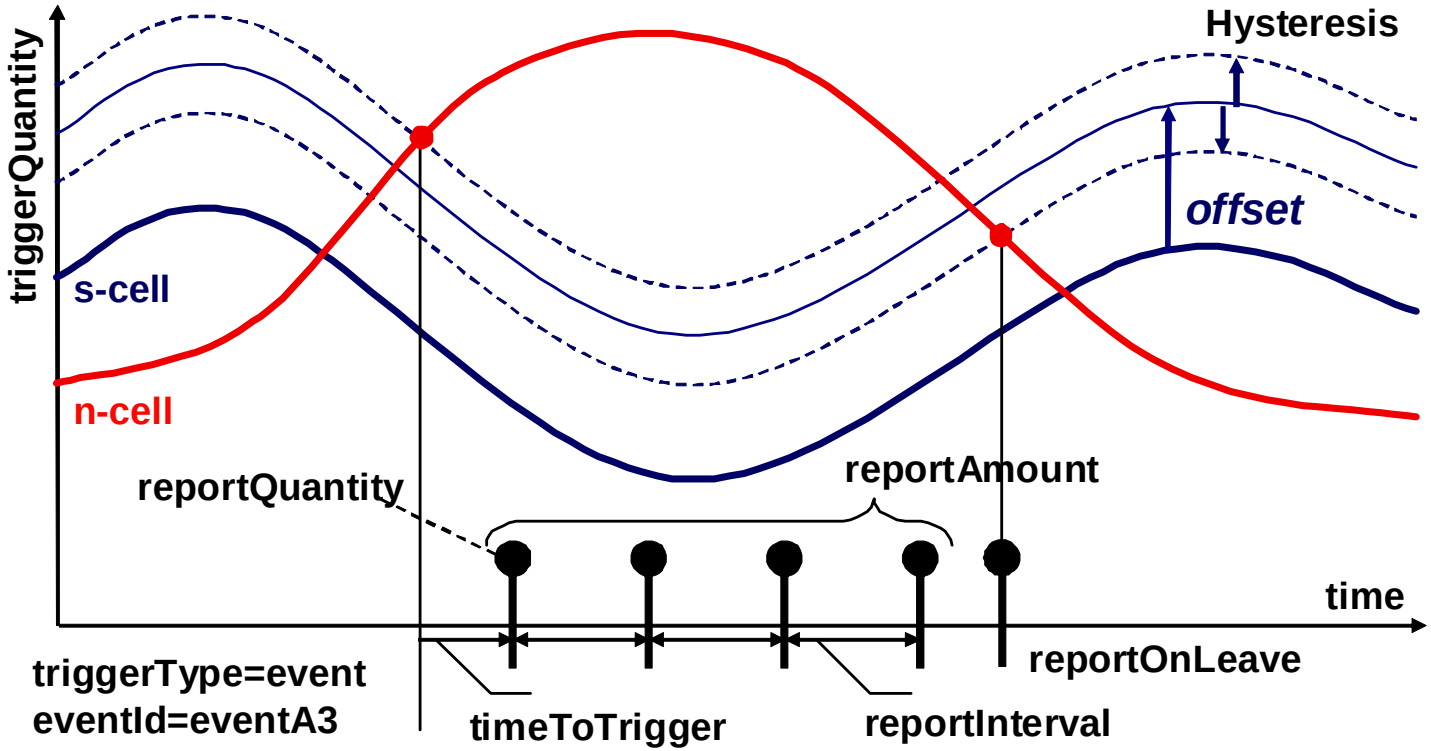
Event A2

Serving becomes worse than threshold



Event A3

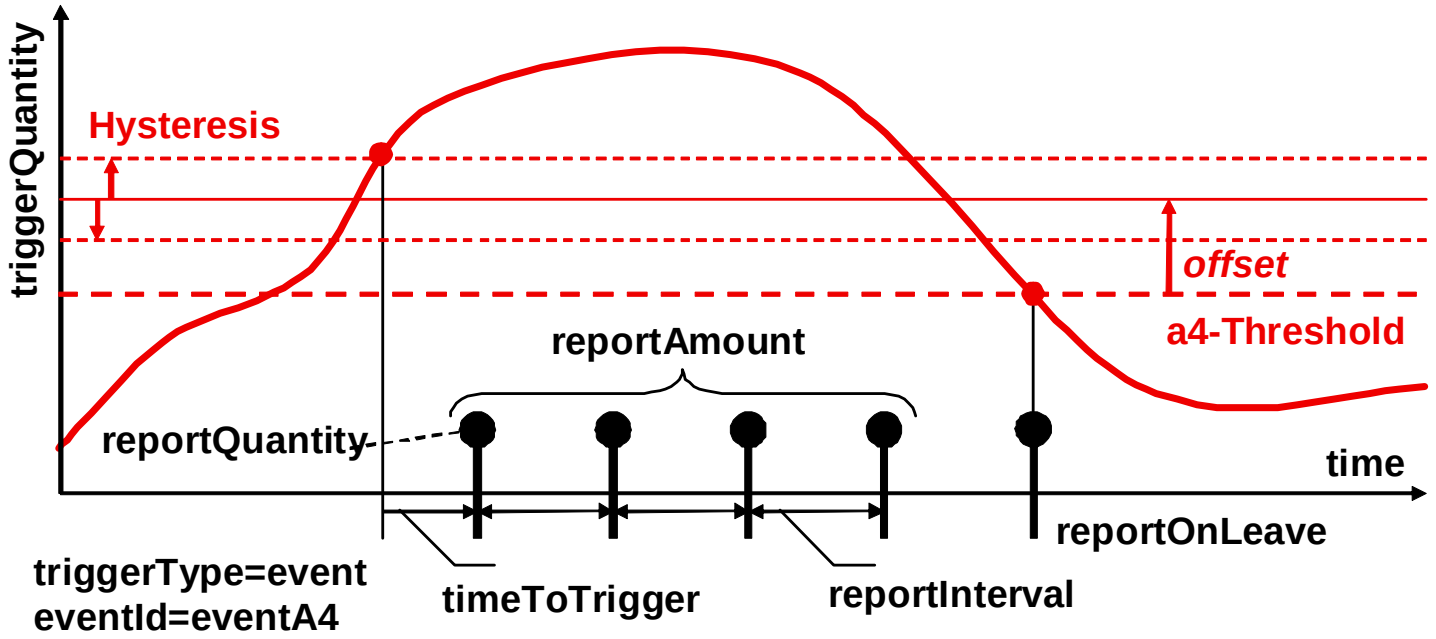
Neighbour becomes offset better than serving



Offset **= a3-offset + offsetFreq$_s$ + cellIndividualOffset$_s$ – offsetFreq$_n$ - cellIndividualOffset$_n$**

Event A4

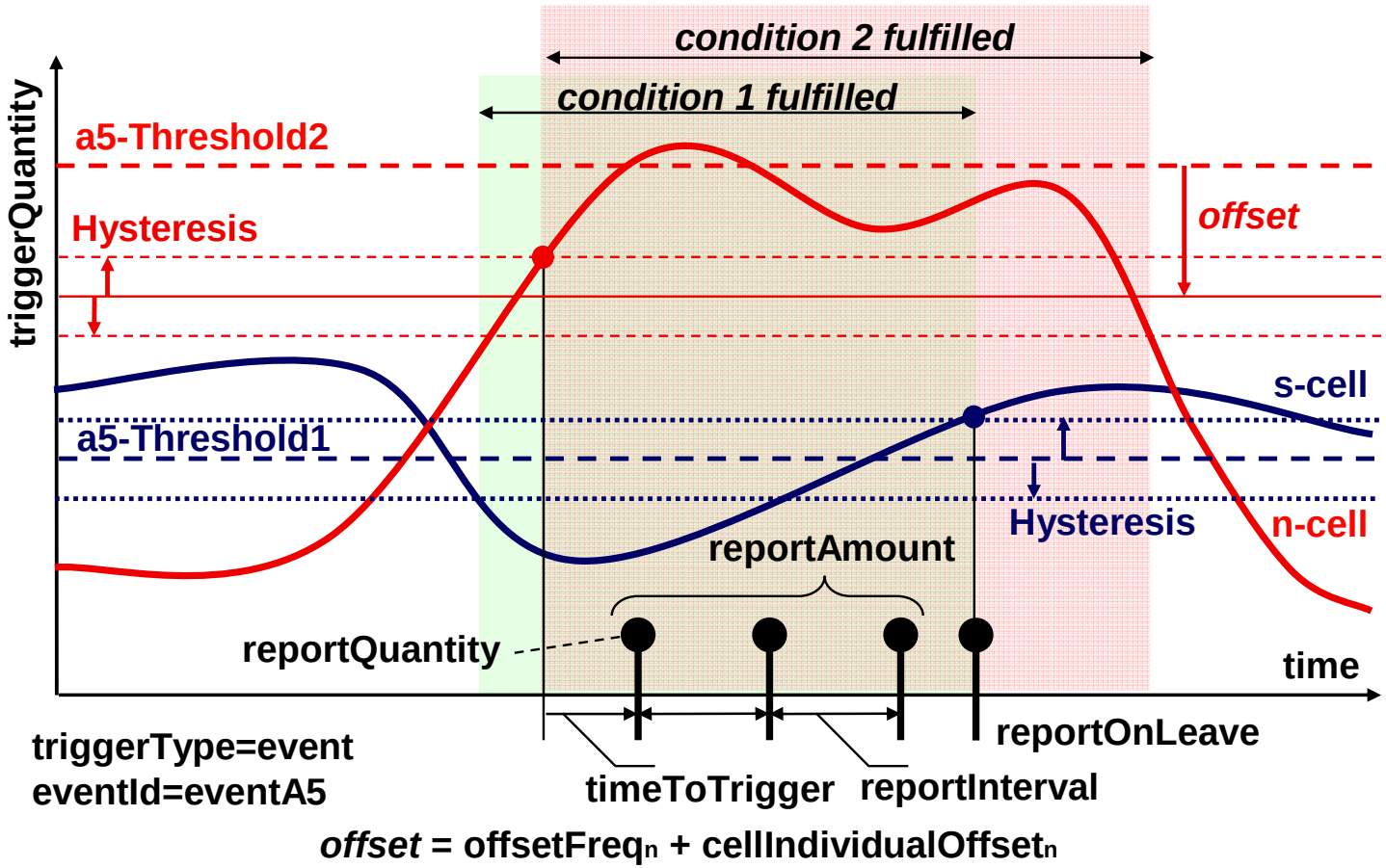
Neighbour becomes offset better than threshold



Offset = offsetFreq$_n$ + cellIndividualOffset$_n$

Event A5

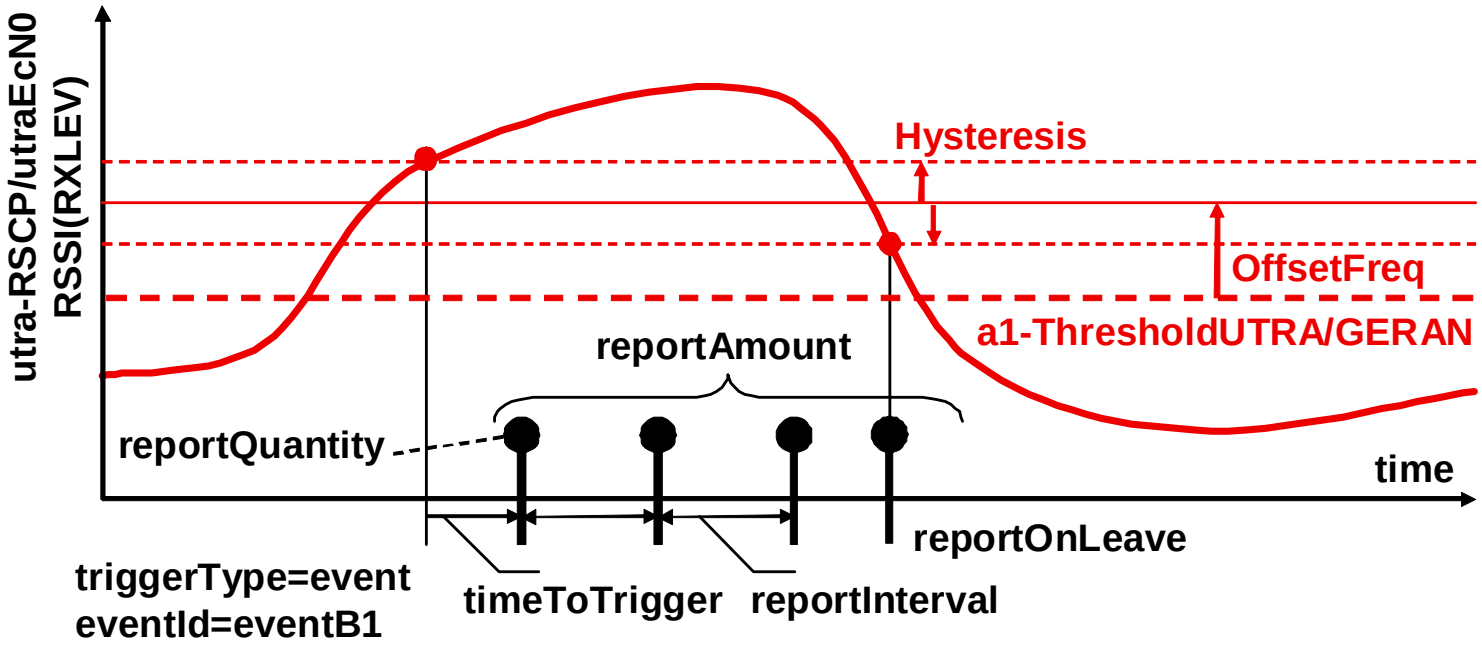
Serving becomes worse than thr.1 and neighbour becomes better than thr.2



offset = offsetFreq$_n$ + cellIndividualOffset$_n$

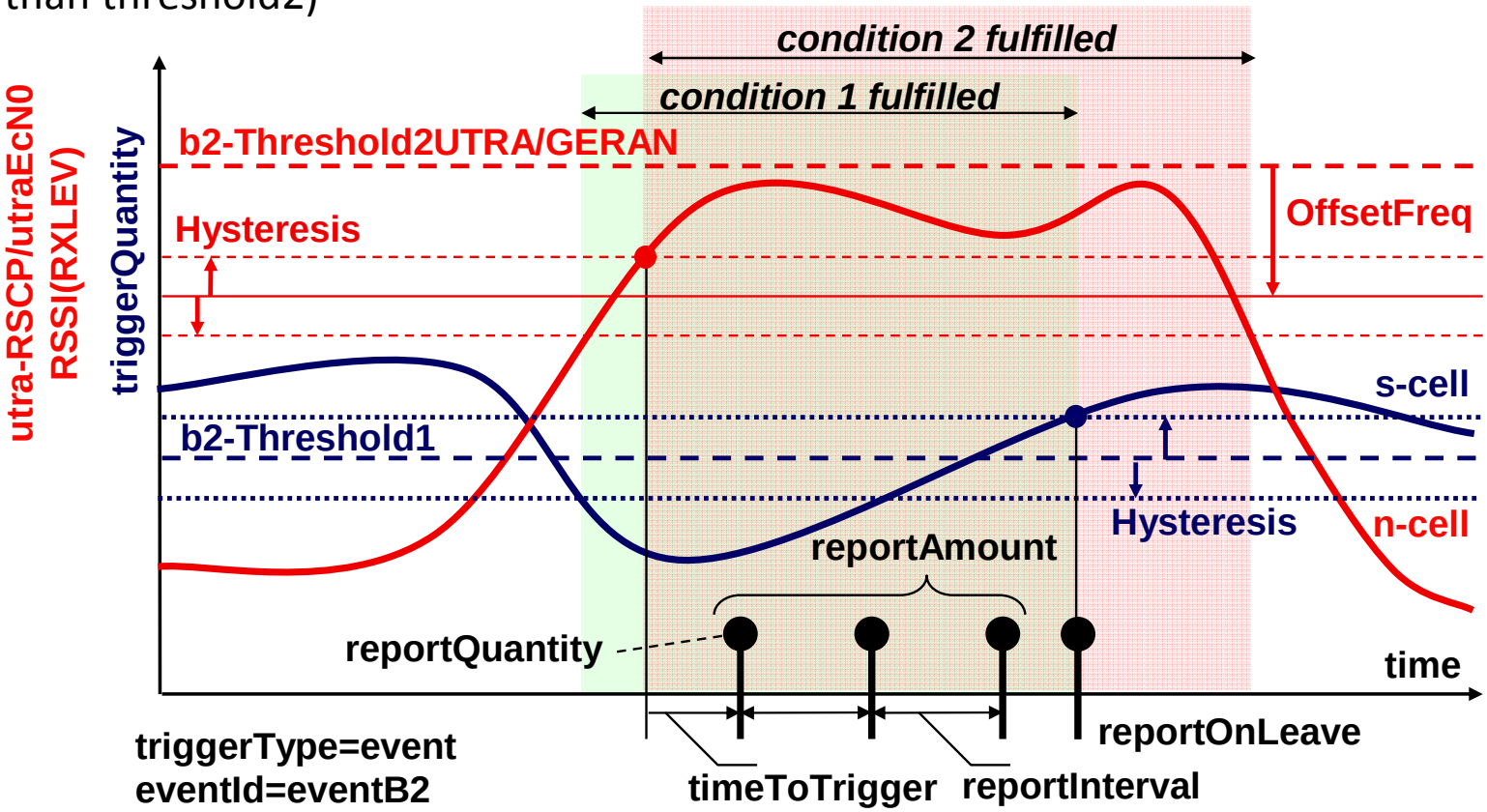
Event B1

Inter RAT neighbour becomes better than threshold

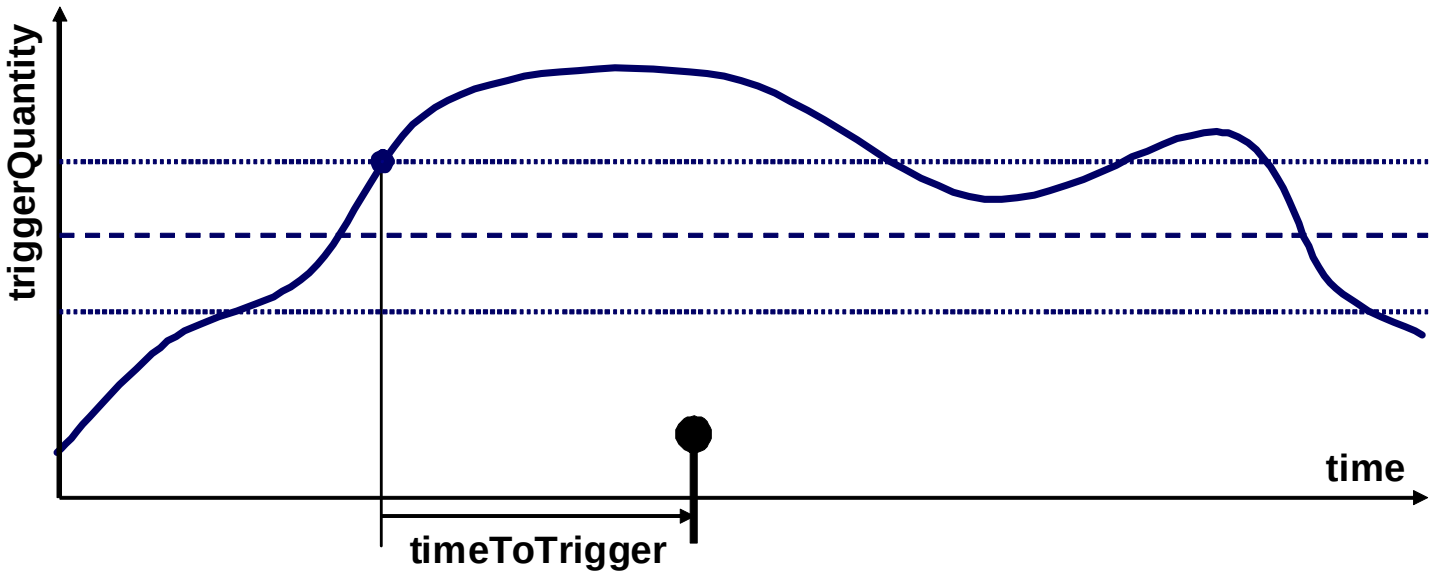


Event B2

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



Speed dependant scaling of measurement parameters



timeToTriger:=timeToTrigger*sf-Medium	(medium-mobility detected)
timeToTriger:=timeToTrigger*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

This document is based on Leliwa training materials.

Information in this document is subject to change without notice. Leliwa assumes no responsibility for any errors that may appear in this document.

This document may be freely redistributed. You can store it on any servers and make it available for public download. In such case it must be clearly indicated that it comes from Leliwa website www.leliwa.com

If you received only this file, you can download more Leliwa Technical Bulletins from the following address:

http://www.leliwa.com/downloads

If you want to be informed when the new bulletins are uploaded, please send a blank e-mail with Subject="Update_request" to bulletins@leliwa.com or click this link: bulletins@leliwa.com

Leliwa Sp. z o.o.

Plebiscytowa 1.122
PL-44-100 Gliwice
Poland
GPS: N50.2981°, E018.6561°

telephone: +48 32 376 63 05
fax: +48 32 376 63 07
Skype: leliwa_poland
email: info@leliwa.com

Leliwa Telecom AB

Orrpelsvägen 66
SE-167 66 BROMMA
Sweden
GPS: N59.3260°, E17.9464°

telephone: +46 8 4459430
email: info@leliwa.com