Sitraffic sX Developer Workstation

Glossary V1.0
A001

SIEMENS

Preface

Most of the general road traffic terms are defined in

RiLSA. (1992/2003). RiLSA - Guidelines for Traffic Signals - English Version of RiLSA with minor Modifications [FGSV-Nr. 321/S]. fgsv-verlag.

http://www.fgsv-verlag.de/catalog/start.php?language=en

We do not redefine these terms but only reference this document.

A

Actual status

The status of the controller that is active after all checks were performed (prioritization, shifting, signal monitoring ...).

B

BAZ

Hand panel of the Sitraffic sX controller. A virtual copy of it is available in the bottom right corner of the Sitraffic sX GUI.

Best switching point

The point of time within a signal program when it is possible to switch to another signal program.

C

CBC

The signal monitoring unit of the Sitraffic sX controller.

CBC simulation

The simulation of the signal monitoring unit. It only simulates some basic features to let the virtualized Sitraffic sX OMC operate. See document Sitraffic_sX_Control_Model_en.pdf for details, please.

CBU

Sitraffic sX Base Unit: The main board of the Sitraffic sX controller.

C-Control

The interface name of the Sitraffic sX for traffic actuation components or traffic control center interface implementations.

Configuration

The summary of settings of a Sitraffic sX controller. Basic settings like IP addresses and road traffic specific setting like signal group definitions, detectors, signal programs ...

Control level

A single layer from a layered control

method. Choice of a level overlays all controlling levels with a lower priority. See document Sitraffic_sX_Control_Model_en.pdf for details, please.

Controller

Road junction equipment with the task of switching signals following the example of the planning concerning traffic engineering and monitoring the safety of the signal

Cycle time

(RiLSA, 1992/2003)

D

Developer Workstation

A set of applications, tools, source code and manuals to support the development of a Sitraffic sX traffic actuation component or a traffic control center interface.

E

F

Fixed time signal program

Signal program with pre-assigned signaling changes within the cycle time.

G

H

I

Idle stage

A defined stage of fully adaptive stage-oriented control logics. The signaling of this stage is active until a triggering detector activates a stage transition to a target stage.

Intergreen time

(RiLSA, 1992/2003)

Intergreen time matrix

(RiLSA, 1992/2003)

J

K

L

Local time schedule

A scheduler implemented at traffic controllers to select signal programs dependent on time of day (and sometimes dependent on day of the week or even a specific date, too).

M

Main direction

(RiLSA, 1992/2003)

Main intersection

A traffic light controlled intersection consists of one main intersection and one to four partial intersections. The first partial intersection is identical with the main intersection. The main intersection and all partial intersections run the same signal program but each partial intersection may be switched off separately. See OCIT outstation standard for detailed information (German only).

Manually blocked

A control level, normally used by a service technician to keep a desired status of a controller (e.g. yellow flashing in case of a construction area).

Minimum green time

(RiLSA, 1992/2003)

Minimum time

(RiLSA, 1992/2003)

Minimum red time

(RiLSA, 1992/2003)

N

O

OCIT

Open Communication Interface for Road Traffic Systems: Several interface standards for road traffic systems

(www.ocit.org).

OMC

Outstation Main Controller: The hardware unit of the Sitraffic sX controller, where the Linux part is installed. The Sitraffic sX image (virtualized Sitraffic sX) is in fact a virtualized OMC running a signal monitoring simulation.

P

Partial intersection

Main intersection

Q

R

Requested status

All status a control source (like TCC, BAZ, TA ...) tries to set. A requested status may or may not become the actual status dependent on conditions like other requested status with higher priority.

S

Shifter

A component of the Sitraffic sX that may shrink or stretch signaling.

Side road

(RiLSA, 1992/2003)

Special intervention

A group of control levels with high priority.

A type of a control setting (e.g. defined in the OCIT standard).

Signal group

A signal group covers all traffic signals of an intersection indicating the same signaling at any time. This logical aggregation of traffic signals simplifies the handling and operation.

Signal plan	Scheme, which defines the sequence of the red-/ green times of a single signal group of a controller (graphical representation of the signal program data).
	A signal plan is either signal group or stage – oriented.
Signal program	Signal times of a TSS defined for a certain traffic situation with regard to duration, allocation und sequence.
Signal timing plan	Signal plan representation. Graphic representation of the signal timing plan.
Sitraffic sLX	The name of the traffic actuation system on the Sitraffic sX.
Sitraffic sX	The name of the new controller type.
Sitraffic sX image	The virtualized Sitraffic sX OMC.
Sitraffic sX GUI	Sitraffic sX Service Gui
Sitraffic sX Service Gui	The GUI of the Sitraffic sX controller. You can use it for configuring, monitoring and operating the controller.
Sitraffic sX web GUI	Sitraffic sX Service Gui
Stage	(RiLSA, 1992/2003)
Stage – oriented signal plan	A signal program that is defined as a sequence of allowed stages and their stage transitions.
Stage sequence	See "phase sequence" at (RiLSA, 1992/2003)
Stage transitions	(RiLSA, 1992/2003)
Sub intersection	Main intersection
STP	Signal Timing Plan

T

TA	**Traffic Actuation**
Target stage	The stage after a transition stage.
TCC	**Traffic Control Center**
Traffic actuation	
Traffic control center	Central operation, data supply, supervision and automatic control of a LSA system.
Traffic signaling system	Combination of traffic signal heads and required operating equipments for the control of the traffic flow.
Triggering - detector	A detector that is used in a traffic actuation to activate some kind of status change of the controller (e.g. button for pedestrians to switch signaling to green).
TSS	Traffic Signaling System
TX	Time index: (RiLSA, 1992/2003)

U

V

W

Web GUI	Sitraffic sX Service Gui

X, Y, Z

Further information
is provided by:

Siemens AG
Infrastructure and Cities Sector
Mobility and Logistics Division
Road and City Mobility

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The information in this manual
contains descriptions and features
which can change due to the
development of products. The desired
features are only binding if they were
agreed upon conclusion of the
contract.

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