CheckTyp	CheckSubTyp	Check	Description (what is tested and how exactly)	Parameter	ver	from tool	ErrorLevel	not	com	ready	function name
OpenDRIVE											
schema											
		parse file	is file readable as XML		x		Error	1	+		odr_schema_checker::load_XML
		xodr schema	the file corresponds to the scheme		x	XMLSchema	Warning	2	+		odr_schema_checker::check_Schema
		valid projection string	if projection string is compatible with PROJ4		x		Info	3			
		has CData	specification string has CData valid section -schema check?		x			?			
		is global ID unique	global ids are unique			XMLSchema		1	+		
		is Id type UInt32	is id(road, junction, signal, object, bridge, tunnel, refObj) valid unsigned int 32 value				Warning	1	+		odr_schema_checker::check_Schema_ID_Type
		Is Id type Int8	is lane id valid int 8 value				Warning	1	+		odr_schema_checker::check_Schema_Lane_ID_Type
		no negative values	for length/width/radius -> schema check?								
semantic											
	Roads										
		road linkage Pre/Suc	road have valid Predecessor/Successor ids				Error	1	+		odr_semantic_checker::check_Semantic_Road_Linkage
		road backward linkage	road A has Predecessor/Successor of road B with Successor/Predecessor back to road A			Trian3DBuilder	Error	2	+		odr_semantic_checker::check_Semantic_Road_Linkage_Backward
		polynoms valid s and sorted	laneOffset, Crossfall, Shape (s could be equal), Elevation, Superelevation					2			
		Shape valid	t valid, sorted, polynom ok					2			
	LaneSection										
		valid s, sorted	start s must be smaller than road length and sorted, first section starts at 0				Warning	1	+		odr_semantic_checker::check_LaneSection_Valid_S
		minimum length	laneSection should have a minimum length (1m?) ist vermutlich schnell mal kleiner (3DM Daten)				Info	1	+		odr_semantic_checker::check_LaneSection_min_length
	Lanes										
		lane linkage	lane have valid Predecessor/Successor lane ids (to adjacent street lanes or lane sections)				Warning	2	+		odr_semantic_checker::check_Semantic_Lanes_ID_Linkage
		lane id order	lane ids (from positive left to negative right) are in descending order without gaps				Warning	1	+		odr_semantic_checker::check_Semantic_Lanes_Order
		ValidateSuccessorPredecessorCount	??? Lanes können mehrere pred/succ haben					?			
		Lane Type "none"	is allowed, but no information value -> info output				Info	1	+		odr_semantic_checker::check_Semantic_Lane_Type
		lane width > 0	width must always be greater than 0 or at the start/end point of a lanesection >= 0				Warning	2	+		odr_semantic_checker::check_Semantic_Lane_Valid_Width
		lane width connection	Width of the lanes at begin/end must match the widths of the connected lanes (other road or other lanesection)					3			
		Lane propertiy s valid, sorted	Width, Height, Border, Speed, Marking					2	+		odr_semantic_checker::check_Semantic_Lane_Valid_sOffset
		Lane valid width	is driving lane a valid width (3.5m)				Info				
	Junction										
		connection roads	connection roads need pred/succ, connection entry needs to reference to connection road, linkage must fit				Error	2	+		odr_semantic_checker::check_Semantic_Junction_Connections
		driving lanes continue in junction	each driving lane (towads the junction) of the incoming roads must have a connection in the junction				Warning	2	+		odr_semantic_checker::check_Semantic_driving_lanes_continue_in_junction
		lane linkage	valid lane ids for from and to			Trian3DBuilder	Error	2	+		odr_semantic_checker::check_Semantic_Junction_Lane_Linkage
		lane linkage order	are the linked lanes ordered correctly			Trian3DBuilder	Warning	1	+		odr_semantic_checker::check_Semantic_Junction_Lane_LinkageOrder
		no overlapping junctions	First rule in ODR Standard regarding junctions "No junctions of any type shall overlap each other."				Error				
	Signals	*signal, signalReference*									
		valid postion	is signal s in range of road length and t,zOffset in given Range			Trian3DBuilder	Warning	2	+		odr_semantic_checker::check_Semantic_Signal_Position
		value and unit	beside the subtype also unit and value should be set ?? (e.g. speed limit 50 sign - type274, subtype50 -> also 50 as value und km/h as unit) need country specific lists					3			
		name for dynamic signs	not empty				Warning	1			
		size	valid height, width (>0 and < maxValue)				Warning	1	+		odr_semantic_checker::check_Semantic_Signal_Size
	Objects	*object, objectReferences, bridges, tunnels*									
		valid position	is object s in range of road length and t,zOffset in given Range, is bridge/tunnel length in range of road length	epsilon?		Trian3DBuilder	Warning	2	+		odr_semantic_checker::check_Semantic_Object_Position
		size	only radius or (length and width), values >0 and <maxValue					1	+		odr_semantic_checker::check_Semantic_Object_Size
		closed attibute for line/area	closed -> last point not first point					1			
		valid repeat obj	s, length					1			
	Signals/Objects	*signal, signalReference, object, objectReference*									
		lane linkage	validFrom, validTo - there are lanes in the corresponding lanesection			Trian3DBuilder	Warning	2	+		odr_semantic_checker::check_Semantic_Lane_validity
	Markings										
		valid s	see lane properties					-			
geometry											
	RoadGeometry										
		road minimum length	road should have a minimum length (1m?)	min length			Info	1	+		odr_geometry_checker::check_Geometry_Road_min_Length
		geometry length	the length of a geometry element (s + length = s of next or roadLength if last element) check the min length of a geometry element				Warning	1	+		odr_geometry_checker::check_Geometry_geometry_Length
		consistency of heading	check heading difference between lanes exceedes threshold			Trian3DBuilder		1			
		match roads	end of road1 has to match connected end of road2 (position, heading, pitch) - Position muss nicht matchen bei verschiedenen Sideoffsets			Trian3DBuilder		2*3			
		match road profile	match start/end values of lanes/polynoms(LaneOffset, Crossfall, Shape, Elevation, Superelevation) of connected roads					2*3			

			big coordinaten						
		Clothoid							
			element order, curvatures	element order (spiral between lin/arc), spiral start/end curvatures				1	
		ParamPoly3							
			attribute aU = 0, aV = 0, bV = 0	the parameters @aU, @aV and @bV shall be zero, @bU shall be > 0	epsilon bU		Warning	2 +	odr_geometry_checker::check_Geometry_ParamPoly3
			if Attribut bV = 0 then cU = 0	?? make sense?					
			if bV and cV = 0 then dU = 0	?? make sense?					
		Polynom							
			height Polynom jumps	see match road profile		Trian3DBuilder			
			width Polynom jumps	see match road profile		Trian3DBuilder			
platform test									
		Spider	loadable						
			use correct road type	checks whether the road type matches the speed of the lane (was mit Baustelle, Autobahnabfahrt?)				2 +	
		VTD	loadable					-	
		Carmaker	loadable						
			line elements	for clothoids there should be no following line elements					
		ESMini	loadable						
			continuity						
		CARLA	loadable					-	
		OpenPASS	loadable					?	
Linkage									
		CRG	available	Checks if OpenDRIVE is available					