

## Environmental conditions ontology.

<b>ONTOLOGY (ENVIRONMENTAL CONDITIONS)</b>									
<b>Information need</b>	<b>Information element</b>	<b>Conditions/ Attribute</b>	<b>Value metrics</b>	<b>Value (blank)</b>	<b>Value threshold</b>	<b>From whom</b>	<b>To whom</b>	<b>Profile</b>	<b>Timing</b>
<b>4. Environmental conditions</b>	4.1 Traffic flow/density	4.1.1 Very Low	<b>Yes/No (boolean)</b>		NA	TMC	DG vehicle	“Critical info”	Real time; upon incident occurrence
					NA	DG vehicle	Other vehicles	“Warning”	Real time; upon incident occurrence
					NA	DG vehicle	Business chain	“Logistics”	Upon request
		4.1.2 Low	<b>Yes/No (boolean)</b>		NA	TMC	DG vehicle	“Critical info”	Real time; upon incident occurrence
						DG vehicle	Other vehicles	“Warning”	Real time; upon incident occurrence
						DG vehicle	Business chain	“Logistics”	Upon request
		4.1.3 Medium	<b>Yes/No (boolean)</b>		NA	TMC	DG vehicle	“Critical info”	Real time; upon incident occurrence
						DG vehicle	Other vehicles	“Warning”	Real time; upon incident occurrence

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Information need	Information element	Conditions/Attribute	Value metrics	Value (blank)	Value threshold	From whom	To whom	Profile	Timing
						DG vehicle	Business chain	“Logistics”	Upon request
		4.1.4 High	Yes/No (boolean)		NA	TMC	DG vehicle	“Critical info”	Real time; upon incident occurrence
						DG vehicle	Other vehicles	“Warning”	Real time; upon incident occurrence
						DG vehicle	Business chain	“Logistics”	Upon request
		4.1.5 Very high	Yes/No (boolean)		NA	TMC	DG vehicle	“Critical info”	Real time; upon incident occurrence
						DG vehicle	Other vehicles	“Warning”	Real time; upon incident occurrence
						DG vehicle	Business chain	“Logistics”	Upon request
		4.1.6 Latitude position	WGS84 Geodecimal		NA	TMC	DG vehicle	“Critical info”	Real time; upon incident occurrence
						DG vehicle	Other vehicles	“Warning”	Real time; upon incident occurrence
						DG vehicle	Business	“Logistics”	Upon request

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Information need	Information element	Conditions/ Attribute	Value metrics	Value (blank)	Value threshold	From whom	To whom	Profile	Timing
							<b>chain</b>		
		4.1.7 Longitudinal position	WGS84 Geodecimal		NA	TMC	DG vehicle	“Critical info”	Real time; upon incident occurrence
						DG vehicle	Other vehicles	“Warning”	Real time; upon incident occurrence
						DG vehicle	Business chain	“Logistics”	Upon request
		4.1.8 Direction	From node to node		NA	TMC	DG vehicle	“Critical info”	Real time; upon incident occurrence
						DG vehicle	Other vehicles	“Warning”	Real time; upon incident occurrence
						DG vehicle	Business chain	“Logistics”	Upon request
		4.1.9 Description	Text		NA	TMC	DG vehicle	“Critical info”	Real time; upon incident occurrence
						DG vehicle	Other vehicles	“Warning”	Real time; upon incident occurrence
						DG vehicle	Business chain	“Logistics”	Upon request

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Information need	Information element	Conditions/ Attribute	Value metrics	Value (blank)	Value threshold	From whom	To whom	Profile	Timing
	4.2. Weather conditions	4.2.1 Ice	Yes/No (boolean)		NA	TMC	DG vehicle	“Critical info”	Real time; upon incident occurrence
						DG vehicle	Other vehicles	“Warning”	Real time; upon incident occurrence
						DG vehicle	Business chain	“Logistics”	Upon request
		4.2.2 Snow	Yes/No (boolean)		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known
						DG vehicle	Other vehicles	“Warning”	Real time; immediately when known
						DG vehicle	Business chain	“Logistics”	Upon request
		4.2.3 Rain	Yes/No (boolean)		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known
						DG vehicle	Other vehicles	“Warning”	Real time; immediately when known
						DG vehicle	Business chain	“Logistics”	Upon request
		4.2.4 Fog	Yes/No (boolean)		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known
						DG vehicle	Other vehicles	“Warning”	Real time; immediately

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Information need	Information element	Conditions/ Attribute	Value metrics	Value (blank)	Value threshold	From whom	To whom	Profile	Timing					
		4.2.5 Sunshine	Yes/No (boolean)		NA				when known					
						DG vehicle	Business chain	“Logistics”	Upon request					
						TMC	DG vehicle	“Critical info”	Real time; immediately when known					
						DG vehicle	Other vehicles	“Warning”	Real time; immediately when known					
		DG vehicle	Business chain	“Logistics”	Upon request									
		4.2.6 Latitude position	WGS84 Geodecimal			NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known				
							DG vehicle	Other vehicles	“Warning”	Real time; immediately when known				
							DG vehicle	Business chain	“Logistics”	Upon request				
							4.2.7 Longitudinal position	WGS84 Geodecimal		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known
											DG vehicle	Other vehicles	“Warning”	Real time; immediately when known
DG vehicle	Business chain										“Logistics”	Upon request		
4.2.8 Direction	From node to node		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known							
				DG vehicle	Other	“Warning”	Real time;							

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Information need	Information element	Conditions/Attribute	Value metrics	Value (blank)	Value threshold	From whom	To whom	Profile	Timing	
							vehicles		immediately when known	
						DG vehicle	Business chain	“Logistics”	Upon request	
		4.2.9 Description	Text		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known	
						DG vehicle	Other vehicles	“Warning”	Real time; immediately when known	
						DG vehicle	Business chain	“Logistics”	Upon request	
	4.3 Road works/major accidents/road events	4.3.1 Road works/major accidents/road events position latitude	WGS84 Geodecimal		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known	
						DG vehicle	Other vehicles	“Warning”	Real time; immediately when known	
						DG vehicle	Business chain	“Logistics”	Upon request	
		4.3.2 Road works/major accidents/road events position longitude	WGS84 Geodecimal		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known	
						DG vehicle	Other vehicles	“Warning”	Real time; immediately when known	
						DG vehicle	Business chain	“Logistics”	Upon request	
		4.3.3 Road works/major accidents/road		Time H: Min:Sec		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known

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Information need	Information element	Conditions/Attribute	Value metrics	Value (blank)	Value threshold	From whom	To whom	Profile	Timing
		events time				DG vehicle	Other vehicles	“Warning”	Real time; immediately when known
						DG vehicle	Business chain	“Logistics”	Upon request
		4.3.4 Road works/major accidents/road events date	DD.MM.YY YY		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known
						DG vehicle	Other vehicles	“Warning”	Real time; immediately when known
						DG vehicle	Business chain	“Logistics”	Upon request
		4.3.5 Road works direction (i.e. on which lane it is)	Text		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known
						DG vehicle	Other vehicles	“Warning”	Real time; immediately when known
						DG vehicle	Business chain	“Logistics”	Upon request
		4.3.6 Road works name	Text		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known
						DG vehicle	Other vehicles	“Warning”	Real time; immediately when known
						DG vehicle	Business chain	“Logistics”	Upon request
		4.3.7 Road works ID	Text		NA	TMC	DG vehicle	“Critical info”	Real time; immediately

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									when known
						DG vehicle	Other vehicles	“Warning”	Real time; immediately when known
						DG vehicle	Business chain	“Logistics”	Upon request
		4.3.8 Road works description	Text		NA	TMC	DG vehicle	“Critical info”	Real time; immediately when known
						DG vehicle	Other vehicles	“Warning”	Real time; immediately when known
						DG vehicle	Business chain	“Logistics”	Upon request