Remarks to MME descriptors for active safety

The following remarks are added to the existing MME descriptors which are defined as “Alphanumeric” without a remark in the ISO 13499 document:

Field descriptor	Data format	Remark and values (List with semicolon or example)
Class of test object X	Alpha-numeric	Type/class of the test object
		“VUT", "GVT", "SOV" and additional Main Locations for VRU from RED F (e.g.: PDAD, PDAF, TWCA, TWSC,…)
Nominal vel. test object X	Float	Nominal longitudinal velocity of test object to determine validities
Nom. lat. vel. test object x	Float	Nominal lateral velocity of test object to determine validities

Additional MME descriptors for active safety

The following descriptors are an enhancement to the definition in ISO MME and cover the special requirements of active safety:

Field descriptor	Data format	Remark and values (List with semicolon or example)
.VUT striking point	Alpha-numeric	percentage of the vehicles width which strikes the target without braking in test (striking point) in % or ft
		0; 25; 50; 75; -2ft; 0ft; +2ft
.Test function side X	Alpha-numeric	test function side gives an information of the location of the target (VUT, main line, blind spot, …) according to values in fine location 1
		RI (right); LE (left); FR (front); RE (rear)
.Lat. vel. test object x	Float	lateral velocity of test object in m/s
.Overlap VUT to TV	Alpha-numeric	Overlap of VUT and target vehicle in Percent
		-50; -75; 100; 75; 50; 10
.Lane marking function line	Alpha-numeric	Documentation of lane marking on function side
		Any (comment: continuous line marking of not specified lane marking or several lane markings); Bot Dots; Dashed; Solid; none (comment: no line marking); Undefined (comment: line marking available ins sections: interrupted marking or different marking in sections)
.Lane marking secondary line	Alpha-numeric	Documentation of lane marking on secondary side
		Any (comment: continuous line marking of not specified lane marking or several lane markings); Bot Dots; Dashed; Solid; none (comment: no line marking); Undefined (comment: line marking available ins sections: interrupted marking or different marking in sections)
.VUT distance eye to end	Float	Distance from the end of the vehicle to the center of the driver's eye ellipse (e.g. 95% Percentile for CNCAP 2021) in [m]
.Environment day light	Alpha-numeric	day light
		day; night; streetlight
.Road surface temperature	Float	road surface temperature (in Kelvin)
.Sky conditions	Alpha-numeric	Sky / Cloudiness
		cloudless; slightly cloudy; cloudy; not visible (in German: wolkenlos; leicht bewoelkt; bewoelkt; nicht erkennbar)
.Precipitation type	Alpha-numeric	description of precipitation
		none; rain; snow; hail (in German: kein; Regen; Schnee; Hagel)
.Precipitation intensity	Alpha-numeric	intensity of precipitation type (in German: Niederschalgsintenität)
		not relevant; low; medium; strong (in German: nicht relevant; niedrig; mittel; stark)
.Weather obstruction	Alpha-numeric	description of obstruction by weather
		fog; smog; spray; none (in German: Nebel; Smog; Gischt; keine)
.Weight of obstruction	Alpha-numeric	intensity of weather obstruction
		not relevant; low; medium; strong (in German: nicht relevant; niedrig; mittel; stark)
.Wind speed	Float	wind speed in m/s
.Road conditions		properties of road conditions od street or proving ground

	Alpha-numeric	dry; wet; wet; snowy; icy; NOVALUE (in German: trocken; nass; feucht; schneebedeckt; vereist; NOVALUE)
.VUT Shape Front	Tuples	the count starts on front left side; If the number of tuples is odd, the middle one must lie on the centerline of the vehicle
		(x1;y1) (x2;y2) (x3;y3) (x4;y4) (x5;y5) (x6;y6) (x7;y7)
.VUT Shape Rear	Tuples	the count starts on rear left side; If the number of tuples is odd, the middle one must lie on the centerline of the vehicle
		(x1;y1) (x2;y2) (x3;y3) (x4;y4) (x5;y5) (x6;y6) (x7;y7)
.Dimension of test object X	Tuples	width and length as tuple in [m]
		(width; length)
.Position of the sun	Tuples	Proposal for data type: string Data format: (α; β) with α° as angle to VUT main direction β° as angle to proving ground
		(α; β)
.Glare angle	Float	Glare angle in degrees