Seat Capability Details - VSS Alignment

Link to VSS Files

https://github.com/COVESA/vehicle_signal_specification/blob/master/spec/Cabin/Cabin.vspec

https://github.com/COVESA/vehicle_signal_specification/blob/master/spec/Cabin/SingleSeat.vspec

https://github.com/COVESA/vehicle_signal_specification/blob/master/spec/include/ItemHeatingCooling.vspec

Seat Data Capabilities

Data Capability Name	Data Type	VSS Alignment			Android VHAL Alignment		
		Data Element Names	Element Data Type	VSS Values	Possible Interface	Data Elements	Element Data Type
Provide Seat Position per seat	Structure or Array of Structure	Seat ID (or position)	Row Id (uint8)	Row[1,2]			
			Position (enum)	["DriverSide","Middle","PassengerSide"]			
		position (x-axis)	uint16	Seat position on vehicle x-axis. Position is relative to the frontmost position supported by the seat. 0 = Frontmost position supported			
		Height (z-axis)	uint16	Seat position on vehicle z-axis. Position is relative within available movable range of the seating. 0 = Lowermost position supported.			
		Tilt	float	unit: degrees Tilting of seat (seating and backrest) relative to vehicle x-axis. 0 = seat bottom is flat, seat bottom and vehicle x-axis are parallel. Positive degrees = seat tilted backwards, seat x-axis tilted upward, seat z-axis is tilted backward. comment: In VSS it is assumed that tilting a seat affects both seating (seat bottom) and backrest, i.e. the angle between seating and backrest will not be affected when changing Tilt.			
		Backrest. Recline	float	unit: degrees Backrest recline compared to seat z-axis (seat vertical axis). 0 degrees = Upright/Vertical backrest. Negative degrees for forward recline. Positive degrees for backward recline. comment: Seat z-axis depends on seat tilt. This means that movement of backrest due to seat tilting will not affect Backrest.Recline as long as the angle between Seating and Backrest are constant. Absolute recline relative to vehicle z-axis can be calculated as Tilt + Backrest.Recline.			
		Backrest. Lumbar. Support	float	unit: percent min: 0 max: 100 0 = Innermost position. 100 = Outermost position.			
		Backrest. Lumbar. Height	uint8	unit: mm Height of lumbar support. Position is relative within available movable range of the lumbar support. 0 = Lowermost position supported.			
		Backrest. SideBolster. Support	float	unit: percent 0 = Minimum support (widest side bolster setting). 100 = Maximum support			
		Seating. Length	uint16	unit: mm 0 = Adjustable part of seating in rearmost position (Shortest length of seating).			
		Headrest. Height	uint8	unit: mm Position of headrest relative to movable range of the head rest. 0 = Bottom most position supported.			

		Headrest. Angle	float	unit: degrees Headrest angle, relative to backrest. 0 degrees if parallel to backrest Positive degrees = tilted forward.			
Provide Seat Heating Mode (Heat, Vent, Cool) and Level per seat	Structure or Array of Structure	HeatingCooling	int8	unit: percent -100 = Maximum cooling, 0 = Heating/cooling deactivated, 100 = Maximum heating.			
Provide Seat Occupancy Status	boolean	IsOccupied	boolean	0 = False 1 = True			
Provide Seat Belt Status	boolean	IsBelted	boolean	0 = False 1 = True			

Seat Control Capabilties

Data Capability Name	VSS Alignment			Android VHAL Alignment		
	Parameters / Arguments	Data Type	VSS Values	Possible Interface	Parameters / Arguments	Data Type
Control Seat Position per seat						
Control Seat Heating Mode (Heat, Vent, Cool) and Level per seat	(set) HeatingCooling	int8	unit: percent -100 = Maximum cooling, 0 = Heating/cooling deactivated, 100 = Maximum heating.			