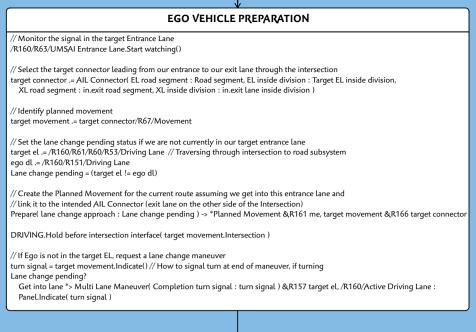
Approaching(exit road segment:Road Segment ID, exit lane inside division:Lane Division ID)



Novement ready(exit road segment:Road Segment ID, exit lane inside division:Lane Division ID) Monitor stop go // Start monitoring our motion for a stop/go decision in this EL // Get an initial assumption in the process Approach from interface EL open // Select all potential exit lanes based on our Planned Movement XLs ..= /R161/Movement/R67/R57/AIXL assumption = MOTION.Monitor EL approach(from EL: Target EL inside division, from RS: Road segment, to XLs: Xls) assumption == .go? Initially go -> : Initially stop -> me Initially go Initially stop APPROACHING ASSUMING GO APPROACHING ASSUMING STOP Assume go // Moving toward intersection assuming we will need to sto DRIVING.Assume stopping at intersection() $^\prime$ Moving toward intersection under assumption that we can pass through without stoppin DRIVING.Assume going through intersection() Commit go Unsuccessful multi lane chan Commit stop Check for lane change in progress multi lane change not Lane change pending? Proceed along -> : Lane change in progress -> me HOLDING BEHIND INTERFACE Unsuccessful multi lane change ABANDONING THIS APPROACH Proceed along There is currently a hold at the interface, so we kno Approach changed -> /R161/Planned Mov that the EV cannot proceed past that point. /But it can move up as far as it can without crossing it LANE CHANGE COMPLETING // Abort so we can deal with success or failure Unsuccessful multi lane change active mlm .= /R160/R157/MLM // If it was clearing out during our transition, no problem we just sit tight and wait for the imminent success/fail // event. Otherwise, Abort! active mlm? active mlm.Abort requested.set() Successful multi lane change Create new approach Wait for EL to open Ego holding at interface EL inside division = /R160/ADL.Current lane inside division // Now approaching from current EL target XL, target RS .= ROUTE.Reroute at intersection(EL: EL inside division, intersection: /R161/Movement.Intersection)
MOTION.Stop monitoring EL approach(lane: Target EL inside division, Road segment) **EXECUTING MOVEMENT** /R160/R63/MSAI Entrance Lane.Stop watching()
Approaching() -> *Entrance Lane.Stop watching()
Approaching() -> *Entrance Lane Approach &R160 /R160/Active Driving Lane,
SAI_EL(Inside division: EL inside division, Road segment) Follow -> /R161/Planned Movement Follow complete Turn after stop permitted Turn okay after stop // Check to see if turn okay after stop turn_after_stop .= /R161/Planned Movement/R65/R64/Turn After Stop Permitted Turn okay after stop -> : Wait for EL to open -> me Cleared intersection

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Failed approach

/ Log failed approach

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Turn in connector? PANEL.Indicate(direction : .cancel) /R160/SAI Entrance Lane/R63/MSAI Entrance Lane.Stop watchin

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Entrance Lane Approach State Machine Diagram

Leon Starr Feburary 3, 2025 tri.guidance.ego.td.7a 2.4.5

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