

$\{d = d_0; v = v_0; ed = ed_0; ev = ev_0;\}$

Speed\_Control

du:

$d_{dot} = -v + v_l;$

$v_{dot} = 2*v_l - v - ev;$

$ed_{dot} = v_l - ev + 10*(d + nrad - ed);$

$ev_{dot} = 2*v_l + v - 3*ev$

$+ 0.5*(2*theta*ngps + 2*(1 - theta)*nenc);$

$d_{out} = d;$

$v_{out} = v;$

$ed_{out} = ed;$

$ev_{out} = ev;$

$[ed < 10 + 2*ev]$

Spacing\_Control

du:

$d_{dot} = -v + v_l;$

$v_{dot} = 2*v_l - v - ev - 0.25*(10 + 2*ev - ed);$

$ed_{dot} = v_l - ev + 10*(d + nrad - ed);$

$ev_{dot} = 2*v_l + v - 3*ev$

$+ 0.5*(2*theta*ngps + 2*(1 - theta)*nenc) - 0.25*(10 + 2*ev - ed);$

$d_{out} = d;$

$v_{out} = v;$

$ed_{out} = ed;$

$ev_{out} = ev;$

$[ed \geq 10 + 2*ev]$