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1 MACHINE
2   Generic
3 SEES
4   GenericCtx
5 VARIABLES  $t, x_p, x_s$ 
6 INVARIANTS
7   inv1:  $t \in RRealPlus$ 
8   inv2:  $x_p \in RRealPlus \rightarrow S$ 
9   inv3:  $x_s \in STATES$ 
10 EVENTS
11 INITIALISATION
12 THEN
13   act1:  $t := Rzero$ 
14   act2:  $x_p \in RRealPlus \rightarrow S$ 
15   act3:  $x_s \in STATES$ 
16 END
17
18 Progress
19 THEN
20   act1:  $t :| t' \in RRealPlus \wedge (t \mapsto t' \in lt)$ 
21 END
22
23 Behave
24 ANY  $e$ 
25 WHERE
26   grd1:  $e \in DE(S)$ 
27   grd2:  $Solvable(Closed2Infinity(t), e)$ 
28 THEN
29   act1:  $x_p :| x_{p'} \in RRealPlus \rightarrow S \wedge AppendSolutionBAP(e, RRealPlus, Closed2Open(Rzero, t), Closed2Infinity(t), x_p, x_{p'})$ 
30 END
31
32 Actuate
33 ANY  $e, s$ 
34 WHERE
35   grd1:  $e \in DE(S)$ 
36   grd2:  $Solvable(Closed2Infinity(t), e)$ 
37   grd3:  $s \subseteq STATES$ 
38   grd4:  $x_s \in s$ 
39 THEN
40   act1:  $x_p :| x_{p'} \in RRealPlus \rightarrow S \wedge AppendSolutionBAP(e, RRealPlus, Closed2Open(Rzero, t), Closed2Infinity(t), x_p, x_{p'})$ 
41 END
42
43 Transition
44 ANY  $s$ 
45 WHERE
46   grd1:  $s \in \mathbb{P}1(STATES)$ 
47 THEN
48   act1:  $x_s \in s$ 
49 END
50
51 Sense
52 ANY  $s, p$ 
53 WHERE
54   grd1:  $s \in \mathbb{P}1(STATES)$ 
55   grd2:  $p \in \mathbb{P}(STATES \times RReal \times S)$ 
56   grd3:  $(x_s \mapsto t \mapsto x_p(t)) \in p$ 
57 THEN
58   act1:  $x_s \in s$ 
59 END
60
61 END

```