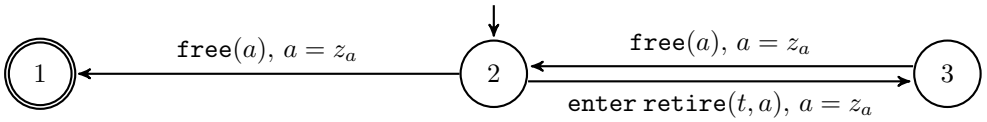
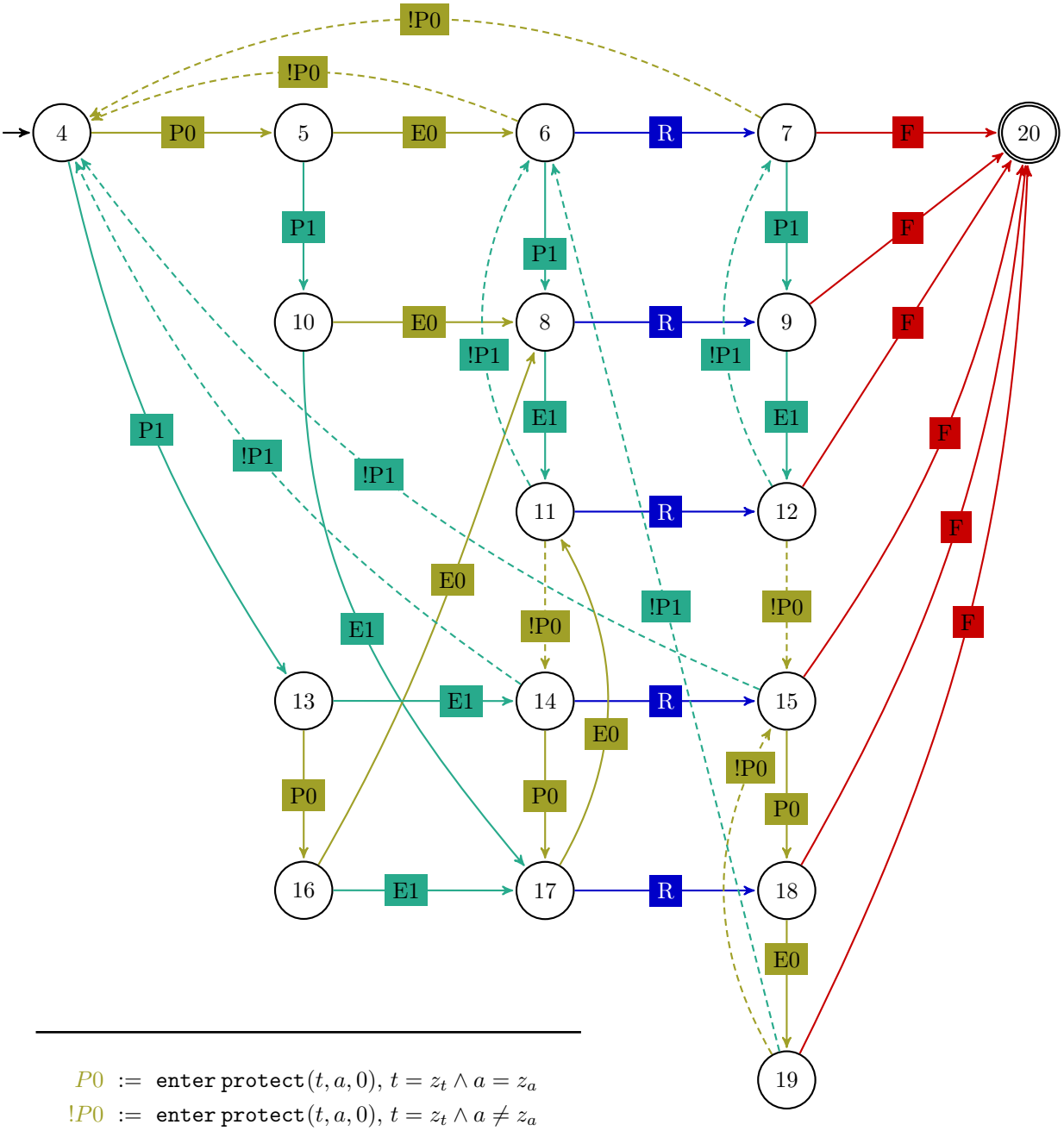
The SMR automaton specifying Hazard Pointers (HP) is defined by $\mathcal{O}_{Base} \times \mathcal{O}_{HP}$.

$\mathcal{O}_{Base}$



$\mathcal{O}_{HP}$



$P0$:= enter protect$(t, a, 0)$, $t = z_t \wedge a = z_a$

$!P0$:= enter protect$(t, a, 0)$, $t = z_t \wedge a \neq z_a$

$E0$:= exit protect(t), $t = z_t$

$P1$:= enter protect$(t, a, 1)$, $t = z_t \wedge a = z_a$

$!P1$:= enter protect$(t, a, 1)$, $t = z_t \wedge a \neq z_a$

$E1$:= exit protect(t), $t = z_t$

R := enter retire(t, a), $a = z_a$

F := free(a), $a = z_a$