

$$\mathcal{D}_{8-9} : \frac{\rho[\rho_0] \vdash_{\Delta[\Delta^0]} \langle d_1, \sigma \rangle \rightarrow^*_d \langle \rho_1, \sigma' \rangle}{\rho \vdash_{\Delta} \langle \rho_0 \text{ in } d_1, \sigma \rangle \rightarrow_d \langle \rho_1, \sigma' \rangle}$$