



$$\begin{aligned}
 \mathbf{e}'_k &= \phi_1^e(\mathbf{e}_k) & \mathbf{e}''_k &= \phi_2^e(\mathbf{e}'_k, \mathbf{v}'_{r_k}, \mathbf{v}'_{s_k}) & \mathbf{v}''_i &= \phi_2^v(\bar{\mathbf{e}}''_i, \mathbf{v}'_i) & \mathbf{e}'''_k &= \phi_3^e(\mathbf{e}''_k) \\
 \mathbf{v}'_i &= \phi_1^v(\mathbf{v}_i) & \bar{\mathbf{e}}''_i &= \rho^{e \rightarrow v}(E'_i)
 \end{aligned}$$