PARAMETAR d_i

$$\frac{\partial E_k}{\partial d_i} = \frac{\partial E_k}{\partial o_k} \cdot \frac{\partial o_k}{\partial \alpha_i} \cdot \frac{\partial \alpha_i}{\partial d_i}$$

$$\frac{\partial \alpha_i}{\partial d_i} = \frac{\partial \mu_{Ai} \mu_{Bi}}{\partial d_i} = \frac{\partial \mu_{Bi}}{\partial d_i} \cdot \mu_{Ai}$$

$$\frac{\partial \mu_{Bi}}{\partial d_i} = \mu_{Bi}(1-\mu_{Bi}) \cdot \frac{\partial(-d_i(x-c_i))}{\partial d_i} = \mu_{Bi}(1-\mu_{Bi}) \cdot (c_i - x)$$

$$\frac{\partial E_k}{\partial d_i} = -(y_k - o_k) \cdot \frac{\sum_{j=1}^{m} j \neq i \; \alpha_j (z_i - z_j)}{\left(\sum_{j=1}^{m} \alpha_j\right)^2} \cdot \mu_{Bi}(1-\mu_{Bi})(c_i - x) \cdot \mu_{Ai}$$

STOHASTIČKO:

$$d_i(t+1) = d_i(t) + \eta \cdot (y_k - o_k) \cdot \frac{\sum_{j=1}^{m} j \neq i \; \alpha_j (z_i - z_j)}{\left(\sum_{j=1}^{m} \alpha_j\right)^2} \cdot \mu_{Bi}(1-\mu_{Bi})(c_i - x)\mu_{Ai}$$

GRUPNO:

$$d_i(t+1) = d_i(t) + \eta \sum_{k=1}^{N} (y_k - o_k) \cdot \frac{\sum_{j=1}^{m} j \neq i \; \alpha_j (z_i - z_j)}{\left(\sum_{j=1}^{m} \alpha_j\right)^2} \cdot \mu_{Bi}(1-\mu_{Bi})(c_i - x)\mu_{Ai}$$