Integration By Parts identities

One can show that under the coordinate change

$$l_i \mapsto M_{ik} q_k = A_{i,k} l_k + B_{i,k} e_k, (\det A > 0)$$

the d dimensional regulated integral

$$\int d^d l_1 \cdots d^d l_L \frac{1}{D_1^{n_1} \cdots D_N^{n_N}}$$

is invariant. Therefore as its generator form, we have

$$\int d^d l_1 \cdots d^d l_L \frac{\partial}{\partial q_i} \cdot \frac{q_j}{D_1^{n_1} \cdots D_N^{n_N}} = 0,$$

where

$$\begin{aligned} q_i &\in \{l_1, \cdots, l_L\} \\ q_j &\in \{l_1, \cdots, l_L, e_1, \cdots, e_E\} \end{aligned}$$

This set of identities generated by $\frac{\partial}{\partial q_i} \cdot q_j$ is called Integration by Parts identities.