

## Domination in partitioned graphs with minimum degree two

Let  $V_1, V_2$  be a partition of the vertex set in a graph  $G$ . For  $i = 1, 2$ , let  $\gamma_i$  denote the least number of vertices needed in  $G$  to dominate  $V_i$ . It is known that if  $G$  has order  $n$  and minimum degree two, then  $\gamma_1 + \gamma_2 \leq 2n/3$ . In this paper, we characterize those graphs of order  $n$  which are edge-minimal with respect to satisfying the conditions of connected, minimum degree at least two, and  $\gamma_1 + \gamma_2 = 2n/3$ .