Algorithm 2 Link Mapping Algorithm

1: **for** each unmapped virtual link $l \in G_i^V$ **do**
2: $bw_r = bw^V(l), k = lev^V(l), flag = 0.$
3: **if** l is splittable **then**
4: $split = 1.$
5: **else**
6: $split =$ `MAX_SPLIT_TIME`.
7: Let $m_1, m_2 \in G^S$ be the hosts of both ends of l.
8: **repeat**
9: **if** $\exists p \in P^S$ s.t. $p : m_1 \rightarrow m_2$ has the minimum $PCC(p, k)$ **then**
10: $bw^S(p) = \min_{t \in p} bw^S(t), t \in L^S.$
11: Map the remaining resources of l onto p.
12: $bw_r = bw_r - bw^S(p).$
13: **if** $bw_r \geq 0$ **then**
14: $flag = 1.$
15: **else**
16: $split =$ `MAX_SPLIT_TIME` $+ 1.$
17: **until** $flag = 1$ **or** $split >$ `MAX_SPLIT_TIME`
18: **if** $flag = 0$ **then**
19: **return** `MAP_FAILED`.
20: **return** `MAP_SUCCESS`.