Algorithm 2 pt2ptDistance(Source indoor position p_s, destination indoor position p_t)

1: $v_s \leftarrow$ getHostPartition(p_s)
2: $v_t \leftarrow$ getHostPartition(p_t)
3: $dist \leftarrow \infty$
4: **for** each door $d_s \in P2D_{\sqsubset}(v_s)$ **do**
5: $\quad dist_1 \leftarrow dist_V(p_s, d_s)$
6: $\quad$ **for** each door $d_t \in P2D_{\sqsupset}(v_t)$ **do**
7: $\quad\quad dist_2 \leftarrow dist_V(p_t, d_t)$
8: $\quad\quad$ **if** $dist >$ $dist_1 +$ d2dDistance$(d_s, d_t) + dist_2$ **then**
9: $\quad\quad\quad dist \leftarrow dist_1 +$ d2dDistance$(d_s, d_t) + dist_2$
10: **return** $dist$