

**Definition.** Given a DP  $\langle \mathbf{F}, \mathbf{R}, \mathbf{I}, \text{prov}, \text{req} \rangle$ , define the map  $K_{\mathbf{d}} : \mathbf{R} \rightarrow_{\text{Pos}} \mathcal{L} \mathbf{F}$  that associates to each resource  $r$  the set of functionalities which can be realized with  $r$ :

$$\begin{aligned} K_{\mathbf{d}} : \mathbf{R} &\rightarrow_{\text{Pos}} \mathcal{L} \mathbf{F}, \\ r &\mapsto \{f \in \mathbf{F} : \mathbf{d}(f, r)\}. \end{aligned}$$

If a certain resource  $r$  only leads to infeasible functionalities, then  $K(r) = \emptyset$ .