

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

$$K : \mathbf{R} \rightarrow_{\text{Pos}} \langle \mathcal{L} \mathbf{F}, \subseteq \rangle,$$

$$r \mapsto \underset{\geq_{\mathbf{F}}}{\text{Max}} \{ \text{prov}(i) \mid (i \in \mathbf{I}) \wedge (r \geq \text{req}(i)) \}.$$

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