**Definition.** Given a DPI  $\langle \mathbf{F}, \mathbf{R}, \mathbf{I}, \mathsf{prov}, \mathsf{req} \rangle$ , define the map  $h : \mathbf{F} \to \mathcal{A}\mathbf{R}$  that associates to each functionality f the objective function of  $\ref{eq:total_prop}$ , which is the set of minimal resources necessary to realize f:

$$h: \mathbf{F} \to \mathcal{A}\mathbf{R},$$

$$f \mapsto \min_{\mathbf{R}} \{ \operatorname{req}(i) \mid (i \in \mathbf{I}) \land (f \leq \operatorname{prov}(i)) \}.$$

If a certain functionality f is infeasible, then  $h(f) = \emptyset$ .