

flexibility

satisfaction

Layer 1

Constrained Planning
with *HC* and *SG*

$$\begin{cases} DS^0(\chi) = 1 \\ DS^j(\chi) = 1, j = \{1,2,3\} \end{cases}$$

Layer 2

Captain

$$\begin{aligned} & \max \sum DS^j(\chi), \forall R_i \in R_{ns}, j = \{1,2,3\} \\ & \text{s. t. } \begin{cases} DS^0(\chi) = 1 \\ DS^j(\chi) = 1, \forall R_i \in R_s, j = \{1,2,3\} \end{cases} \end{aligned}$$

Layer 3

Optimal Planning with *HC*

$$\begin{aligned} & \max \sum DS^j(\chi), j = \{1,2,3\} \\ & \text{s. t. } DS^0(\chi) = 1 \end{aligned}$$