## Input format RCPSP/max- $\pi$

n	ρ	0	0					
0	1	$s_0$	$j_1^0$	• • •	$j_{s_0}^0$	$[\delta_{0,j_1^0}]$		$[\delta_{0,j^0_{s_0}}]$
1	1	$s_1$	$j_1^1$		$j_{s_1}^1$	$[\delta_{1,j_1^1}]$		$[\delta_{1,j^1_{s_1}}]$
$\mid n \mid$	1	$s_n$	$j_1^n$	• • •	$j_{s_n}^n$	$[\delta_{n,j_1^n}]$	• • •	$[\delta_{n,j^n_{s_n}}]$
n+1	1	$s_{n+1}$						
0	1	$p_0$	$r_{01}$	• • •	$r_{0 ho}$			
1	1	$p_1$	$r_{11}$	• • •	$r_{1\rho}$			
•••								
$\mid n \mid$	1	$p_n$	$r_{n1}$	• • •	$r_{n\rho}$			
n+1	1	$p_{n+1}$	$r_{n+1,1}$		$r_{n+1,\rho}$			
$R_1$	• • •	$R_{ ho}$						
1	$I_1$	$[\mu_1^1,\sigma_1^1]$	• • •	$[\mu^{1}_{I_{1}},\sigma^{1}_{I_{1}}]$				
2	$I_2$	$[\mu_1^2,\sigma_1^2]$	• • •	$ \begin{bmatrix} \mu_{I_1}^1, \sigma_{I_1}^1 \\ [\mu_{I_2}^2, \sigma_{I_2}^2 ] \end{bmatrix} $				
•••								
$\rho$	$I_{ ho}$	$[\mu_1^ ho,\sigma_1^ ho]$	• • •	$[\mu_{I_ ho}^ ho,\sigma_{I_ ho}^ ho]$				

## Symbols

Symbol	Denotes
$\overline{n}$	Number of real activities
$\rho$	Number of partially renewable resources
$s_i$	Number of direct successors of node $i$ in project network
$j_s^i \ \delta_{i,j_s^i}$	s-th successor of node $i$ in project network
$\delta_{i,j_s^i}$	Weight of arc $(i, j_s^i)$
$p_i$	Duration of activity $i$
$r_{ik}$	Demand of resource $k$ by activity $i$ per period
$R_k$	Capacity of resource $k$
$\Pi_k$	Set of periods resource k is available $(\Pi_k = \bigcup_{l=1}^{I_k} [\mu_l^k + 1, \sigma_l^k] \cap \mathbb{Z})$
$I_k$	Number of components in $\Pi_k$
$egin{aligned} \mu_l^k \ \sigma_l^k \end{aligned}$	Start time of the first period in the $l$ -th component of $\Pi_k$
$\sigma_l^k$	End time of the last period in the $l$ -th component of $\Pi_k$