RTES UTILIZATION ANALYSIS

$U_{sub} = n\left(2^{1/n} - 1\right)$ n = n° of periodic task → worst case = all tasks are periodic $n = 5$

$= 5\left(2^{1/5} - 1\right) = 0,7435$

$U_p = \sum_{i=1}^{n} \frac{C_i}{T_i}$ → computation time

↳ min interarrival time

$= \frac{104}{125} + \frac{8,3}{125} + \frac{3}{23} + \frac{0,014}{23} + \frac{0,014}{23}$

$= 0,83 + 0,0664 + 0,13 + 0,0012 = 1,0276$

TASK	C_i	T_i
INPUT REC	104 ms	125 ms
INPUT PROC	8,3 ms	125 ms
SENDOUTPUT	3 ms	23 ms
FIRE	14 µs	23 ms
FOG	14 µs	23 ms

caso peggiore

task aperiodic con T_i = al min T_i