

8 $\lambda_{max}=3.0324$ C.R.=0.0311				
C6	D1	D2	D3	W_i^o
D ₁	1	1/7	1/4	0.0786
D ₂	7	1	3	0.6586
D ₃	4	1/3	1	0.2628

9 $\lambda_{max}=3.0291$ C.R.=0.0279				
C ₈	D ₁	D ₂	D ₃	W_i^o
D ₁	1	3	9	0.6717
D ₂	1/3	1	5	0.2854
D ₃	1/9	1/5	1	0.0629

The above table 2,3 shows that the judgment matrix are in line with the consistency requirements, The C-layer and D-layer sort results as shown in Table 4,5.

Table 4 The C-layer sort results

B \ C	B ₁ (0.2195)	B ₂ (0.0873)	B ₃ (0.5908)	B ₄ (0.1025)	W_i'
C ₁	0.1095	0	0	0	0.024
C ₂	0.5816	0	0	0	0.128
C ₃	0.3090	0.0388	0.0561	0.5278	0.158
C ₄	0	0.1006	0.1046	0	0.071
C ₅	0	0.5038	0.4479	0	0.309
C ₆	0	0.1581	0.2092	0	0.137
C ₇	0	0.1986	0.1821	0	0.125
C ₈	0	0	0	0.3325	0.034
C ₉	0	0	0	0.1396	0.014

Table 5 D-layer sort results

D \ C	(Program I) D ₁	(Program II) D ₂	(Program III) D ₃
C ₁ (0.024)	0.1025	0.2158	0.6817
C ₂ (0.128)	0.1095	0.3090	0.5816
C ₃ (0.158)	0.6483	0.2297	0.1220
C ₄ (0.071)	0.0841	0.7049	0.2109

C ₅ (0.309)	0.0936	0.6267	0.2797
C ₆ (0.137)	0.0786	0.6586	0.2628
C ₇ (0.125)	0.1220	0.6483	0.2297
C ₈ (0.034)	0.6716	0.2654	0.0629
C ₉ (0.014)	0.1919	0.1744	0.6337
W_i'	0.2057	0.5072	0.2871

IV. CONCLUSION

With regard to the typical practical example of procurement project, through a large number of detailed data, establishment of the corresponding mathematical model, this paper applies AHP to draw the weights of each program so that we can select the best program. Its calculation results are in good agreement with the theoretical analysis. Thus, a reliable scientific basis and decision-making method can be provided for this project.

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