

Hand-In Paper:

Applied Large-Scale Group Decision Making Using Systemic Consensus and Fuzzy Method of Comparative Linguistic Expressions

Appendix

Table 4. Decision-making methods compared

		Alt. DM in 7 steps [21]	DM in 5 steps [14]	DM in 6 steps [4]	DM in 3 steps [14]	DM based on innovation concept. [14]
Defining	1	Identify the decision	Decision identification	Classifying the problem	Identification	Context description
	2	Gather relevant information	-	Defining the problem		-
	3	Identify the alternatives	Options examination	Deciding what is "right"		-
Identifying	4	Weigh the evidence	Information gathering	Building into the decision the action to carry out	Building decision components	Innovation
	5	Choose among the alternatives	Decision-making	Testing the validity and effectiveness of the decision		-
Developing	6	Take action	Decision implementation		Implementation	Decision
	7	Review the decision	-			-

Table 5. Means of sliders and CLE value of all alternatives

Alternative	Support					Resistance				
	slider-value	CLE 1 s1	CLE 2 s2	CLE 3 s3	CLE 4 s4	slider-value	CLE 1 r1	CLE 2 r2	CLE 3 r3	CLE 4 r4
1 Schäracher	49.813	0.000	0.500	0.500	0.000	55.550	0.000	0.000	1.000	0.000
2 Unterdorf	40.706	0.000	1.000	0.000	0.000	46.231	0.000	0.833	0.167	0.000
3 Sursee	68.008	0.000	0.000	1.000	0.000	74.124	0.000	0.000	0.833	0.167
4 St. Erhard	28.353	0.000	1.000	0.000	0.000	31.804	0.000	1.000	0.000	0.000
5 Dörnliacher	40.961	0.000	1.000	0.000	0.000	49.378	0.000	0.583	0.417	0.000
6 Hinterdorf	24.172	0.333	0.667	0.000	0.000	29.818	0.000	1.000	0.000	0.000
7 Langsamverkehr	50.062	0.000	0.500	0.500	0.000	56.760	0.000	0.000	1.000	0.000
8 Umsiedlung	59.956	0.000	0.000	1.000	0.000	70.211	0.000	0.000	1.000	0.000
9 Keine Massnahmen	46.318	0.000	0.833	0.167	0.000	53.353	0.000	0.250	0.750	0.000
10 Zeitkombination	52.665	0.000	0.250	0.750	0.000	56.623	0.000	0.000	1.000	0.000
11 Massnahmenkombi	40.712	0.000	1.000	0.000	0.000	43.858	0.000	1.000	0.000	0.000
12 Bahnverkehr	45.109	0.000	0.917	0.083	0.000	56.021	0.000	0.000	1.000	0.000
13 Umnutzung	54.280	0.000	0.167	0.833	0.000	58.614	0.000	0.000	1.000	0.000

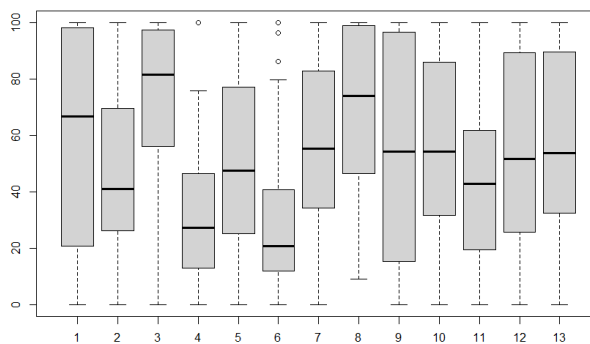


Fig. 7. Statistical values per alternative of the support slider-values

**Table 6.** Membership-degrees of output statuses per alternative (only values > 0)

Alternative	Output statuses as CLE			Rank
	pursue clearly	pursue critical	rather not pursue	
3 Sursee	0.167	0.833		1
8 Umsiedlung		1.000		2
13 Umnutzung		0.833	0.167	3
10 Zeitkombination		0.750	0.250	4
7 Langsamverkehr		0.500	0.500	5
1 Schäracher		0.500	0.500	6
9 Keine Massnahmen		0.167	0.750	7
12 Bahnverkehr		0.083	0.917	8
11 Massnahmenkombi			1.000	9
4 St. Erhard			1.000	10
2 Unterdorf			0.833	11
6 Hinterdorf			0.667	12
5 Dörnliacher			0.583	13