



Collaborative shaping of Research Agendas in WoodWisdom-net

Workshop for researchers and industrial leaders

New value-added products and production

Tuesday February 14, 2006 Helsinki

Results from Task 4

Contents

Sub-area 1.1	3
Sub-area 1.2	6
Sub-area 1.3	9
Sub-area 1.4	12
Sub-area 1.5	15
Sub-area 1.N	18
Sub-area 2.1	21
Sub-area 2.2	24
Sub-area 2.3	27
Sub-area 2.4	30
Sub-area 2.5	33
Sub-area 2.N	36
Sub-area 4.1	39
Sub-area 4.2	42
Sub-area 4.3	45

Sub-area 1.1

Table 1 Sub-area 1.1 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
1.1.1	4.47	2.20	1	7	15	4.14	1.70	1	7	14	10
1.1.2	3.50	1.93	1	7	8	4.13	1.96	1	7	8	16
1.1.3	3.71	1.89	1	7	7	4.14	1.21	3	6	7	13
1.1.4	3.67	1.41	2	7	9	4.11	0.93	3	5	9	5
1.1.5	2.33	1.53	1	4	3	2.33	0.58	2	3	3	15
1.1.6	3.00	1.67	1	5	6	3.33	1.86	1	6	6	9
1.1.7	3.67	1.15	3	5	3	4.50	2.12	3	6	2	5
1.1.8	3.40	1.82	1	6	5	4.25	2.75	1	7	4	10
1.1.9	2.86	1.07	1	4	7	4.00	2.10	1	7	6	14
1.1.10	5.56	1.51	3	7	9	4.56	1.59	3	7	9	7
1.1.11	4.80	0.84	4	6	5	5.20	1.30	4	7	5	8

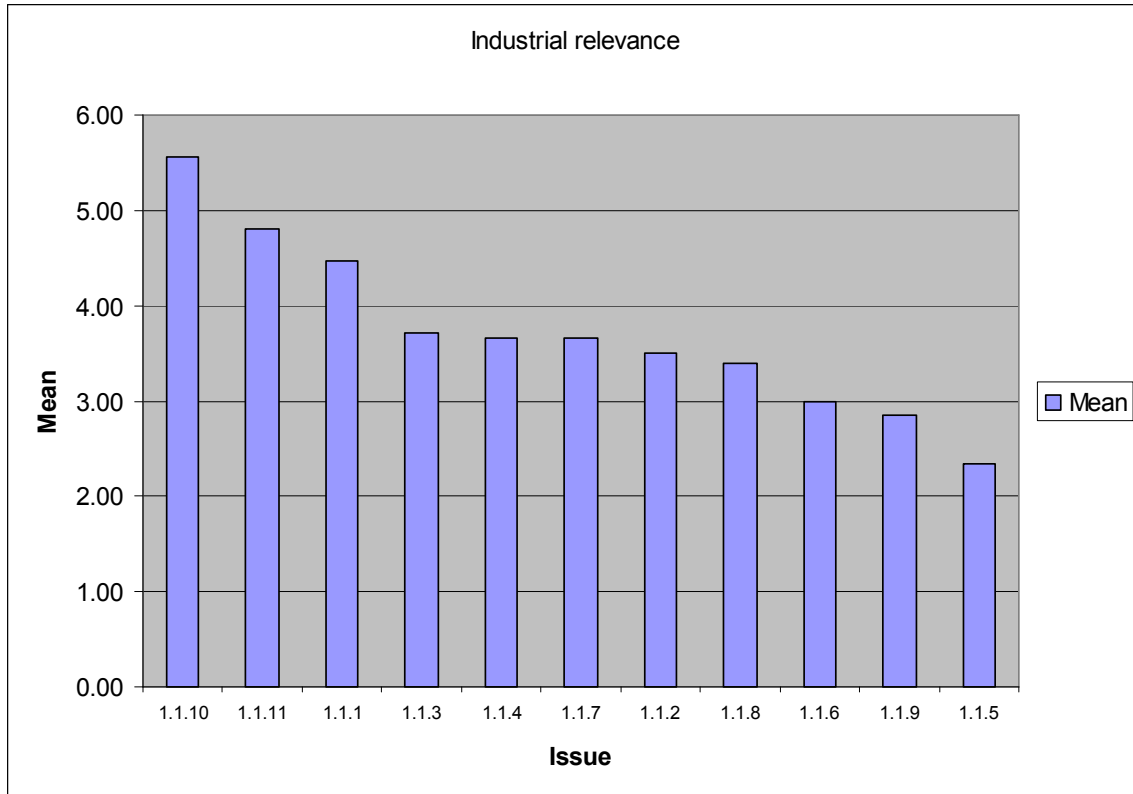


Figure 1 Sub-area 1.1 Industrial relevance

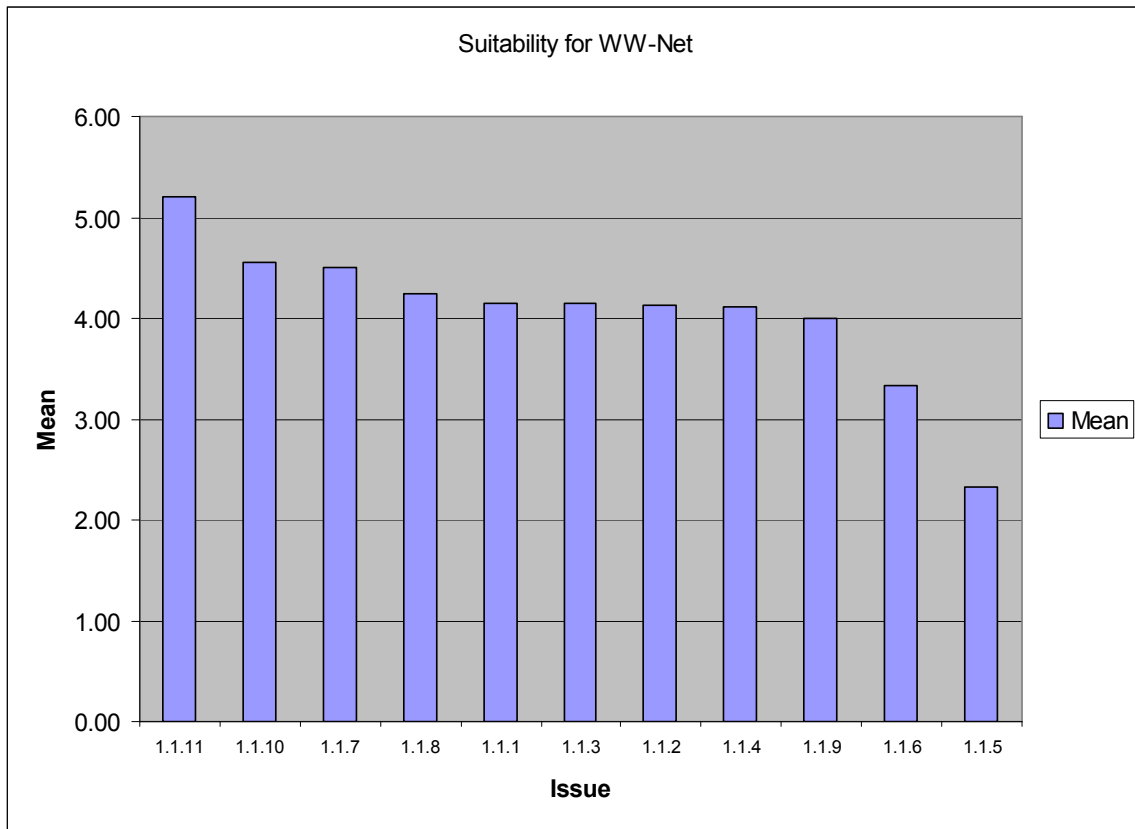


Figure 2 Sub-area 1.1 Suitability for WW-Net

Sub-area 1.2

Table 2 Sub-area 1.2 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
1.2.1	3.00	0.71	2	4	5	4.20	1.48	2	6	5	15
1.2.2	5.80	1.30	4	7	5	5.75	0.96	5	7	4	10
1.2.3	4.17	1.72	1	6	6	3.67	1.75	1	6	6	9
1.2.4	3.40	1.52	2	5	5	4.20	0.84	3	5	5	13
1.2.5	4.40	1.34	3	6	5	4.75	1.50	3	6	4	11
1.2.6	3.00	1.00	2	4	3	5.00	2.00	3	7	3	18
1.2.7	6.00	1.41	5	7	2	5.50	0.71	5	6	2	15
1.2.8	5.25	1.26	4	7	4	5.67	1.15	5	7	3	5
1.2.9	3.50	0.71	3	4	2	5.50	0.71	5	6	2	10
1.2.10	3.75	2.06	2	6	4	4.00	1.73	3	6	3	11
1.2.11	4.33	2.08	2	6	3	4.00	2.65	1	6	3	18
1.2.12	5	0	5	5	1	5	0	5	5	1	10
1.2.13	4	0	4	4	2	5	0	5	5	2	15

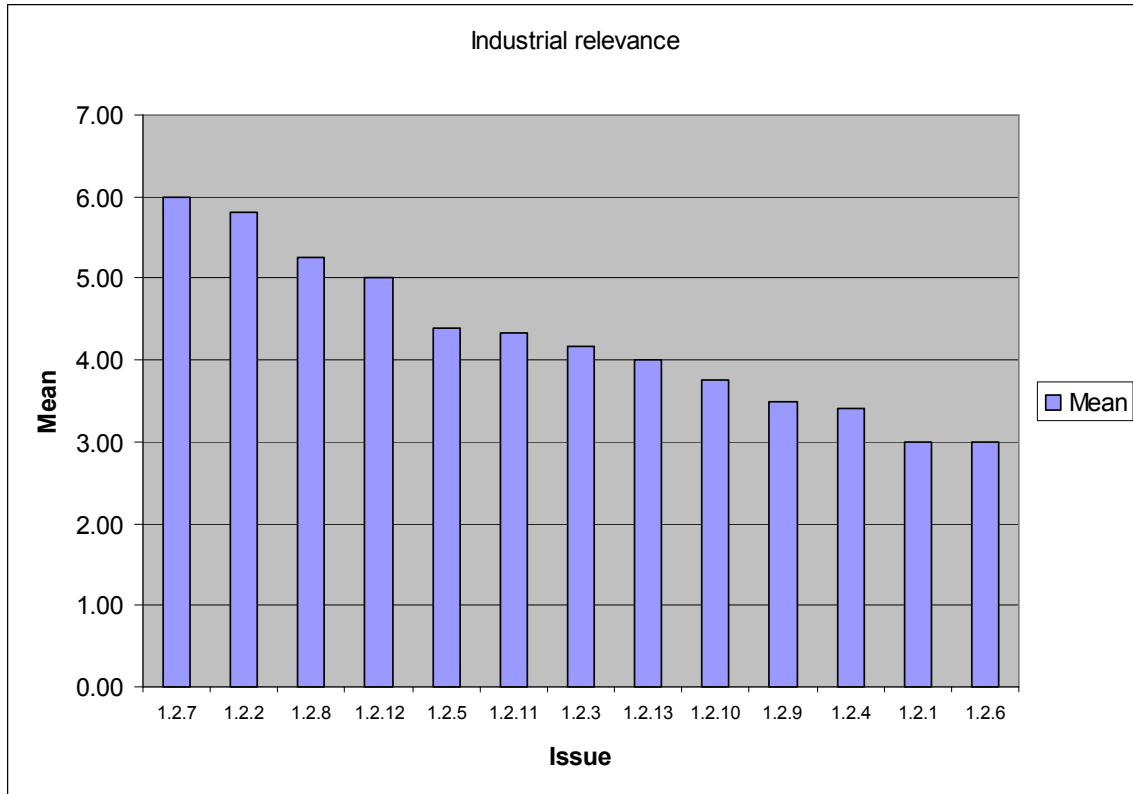


Figure 3 Sub-area 1.2 Industrial relevance

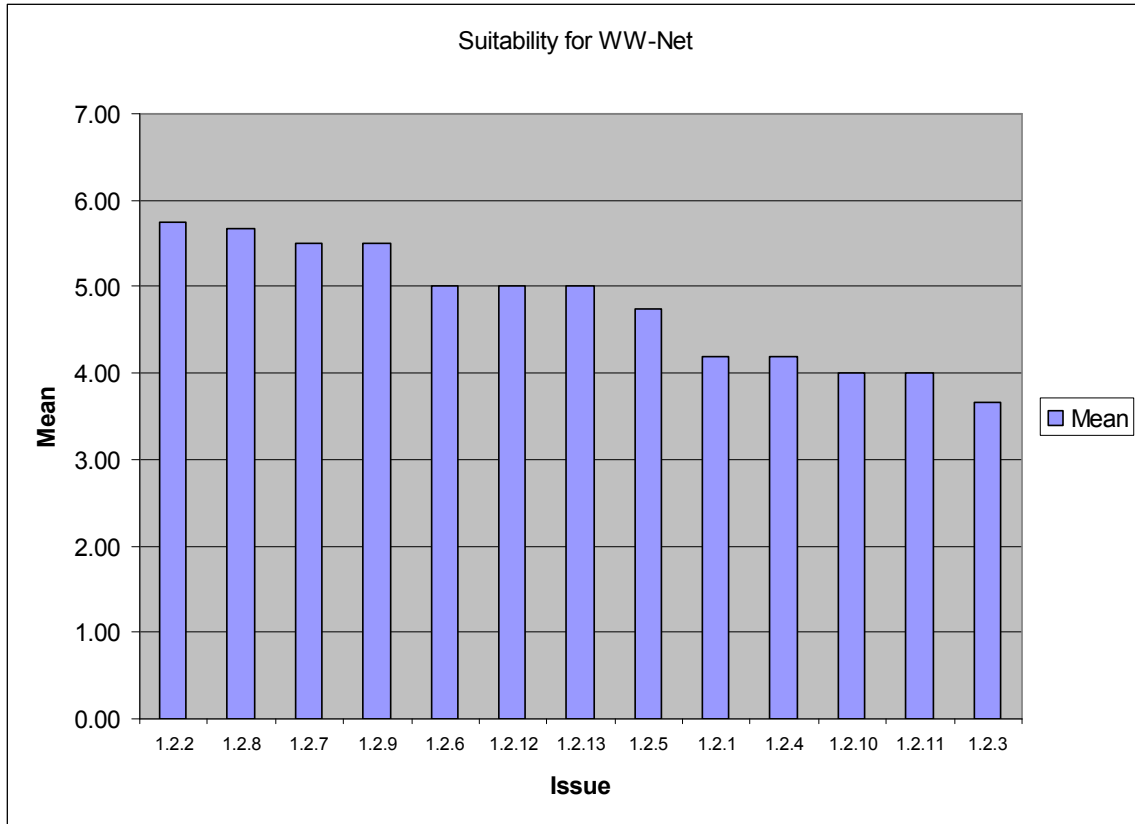


Figure 4 Sub-area 1.2 Suitability for WW-Net

Sub-area 1.3

Table 3 Sub-area 1.3 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
1.3.1	2.50	0.71	2	3	2	3.50	2.12	2	5	2	8
1.3.2	4.00	1.41	3	5	2	4.50	2.12	3	6	2	10
1.3.3	3.50	2.12	2	5	2	4.00	1.41	3	5	2	8
1.3.4	6.00	1.41	5	7	2	6.00	0.00	6	6	2	8
1.3.5	5.00	0.00	5	5	2	4.00	1.41	3	5	2	5
1.3.6	6.50	0.71	6	7	2	6.00	0.00	6	6	2	5
1.3.7	5.00	1.41	4	6	2	6.50	0.71	6	7	2	13
1.3.8	4.67	2.31	2	6	3	4.33	1.53	3	6	3	7
1.3.9	4.00	1.73	3	6	3	4.67	1.15	4	6	3	5
1.3.10	4.00	1.73	3	6	3	3.67	1.15	3	5	3	5
1.3.11	5.33	2.08	3	7	3	5.33	2.08	3	7	3	13
1.3.12	4.00	0.00	4	4	1	5.00	0.00	5	5	1	10
1.3.13	4.00	1.00	3	5	3	4.67	1.53	3	6	3	5
1.3.14	2.00	0.00	2	2	1	2.00	0.00	2	2	1	15
1.3.15	-	-	0	0	0	-	-	0	0	0	-
1.3.16	-	-	0	0	0	-	-	0	0	0	-
1.3.17	3.50	0.71	3	4	2	4.00	0.00	4	4	2	5
1.3.18	4.67	1.53	3	6	3	5.33	1.53	4	7	3	8
1.3.19	-	-	0	0	0	-	-	0	0	0	-
1.3.20	4.00	0.00	4	4	2	4.00	0.00	4	4	2	8
1.3.21	5.00	0.00	5	5	1	6.00	0.00	6	6	1	10
1.3.22	5.00	0.00	5	5	1	5.00	0.00	5	5	1	10
1.3.23	-	-	0	0	0	-	-	0	0	0	-
1.3.24	3.00	0.00	3	3	1	6.00	0.00	6	6	1	15
1.3.25	5.00	0.00	5	5	1	5.00	0.00	5	5	1	10
1.3.26	6.00	0.00	6	6	1	6.00	0.00	6	6	1	10
1.3.27	4.00	0.00	4	4	1	6.00	0.00	6	6	1	15
1.3.28	4.00	0.00	4	4	1	4.00	0.00	4	4	1	10
1.3.29	5.67	1.15	5	7	3	6.00	1.00	5	7	3	8
1.3.30	-	-	0	0	0	-	-	0	0	0	-
1.3.31	3.67	2.52	1	6	3	5.50	2.12	4	7	2	8
1.3.32	5.50	2.12	4	7	2	6.00	1.41	5	7	2	13
1.3.33	6.00	1.41	5	7	2	7.00	0.00	7	7	2	8
1.3.34	4.67	3.21	1	7	3	5.00	3.46	1	7	3	15
1.3.35	4.67	1.53	3	6	3	5.00	2.00	3	7	3	15
1.3.36	6.00	0.00	6	6	1	6.00	0.00	6	6	1	20
1.3.37	6.00	1.41	5	7	2	6.50	0.71	6	7	2	10

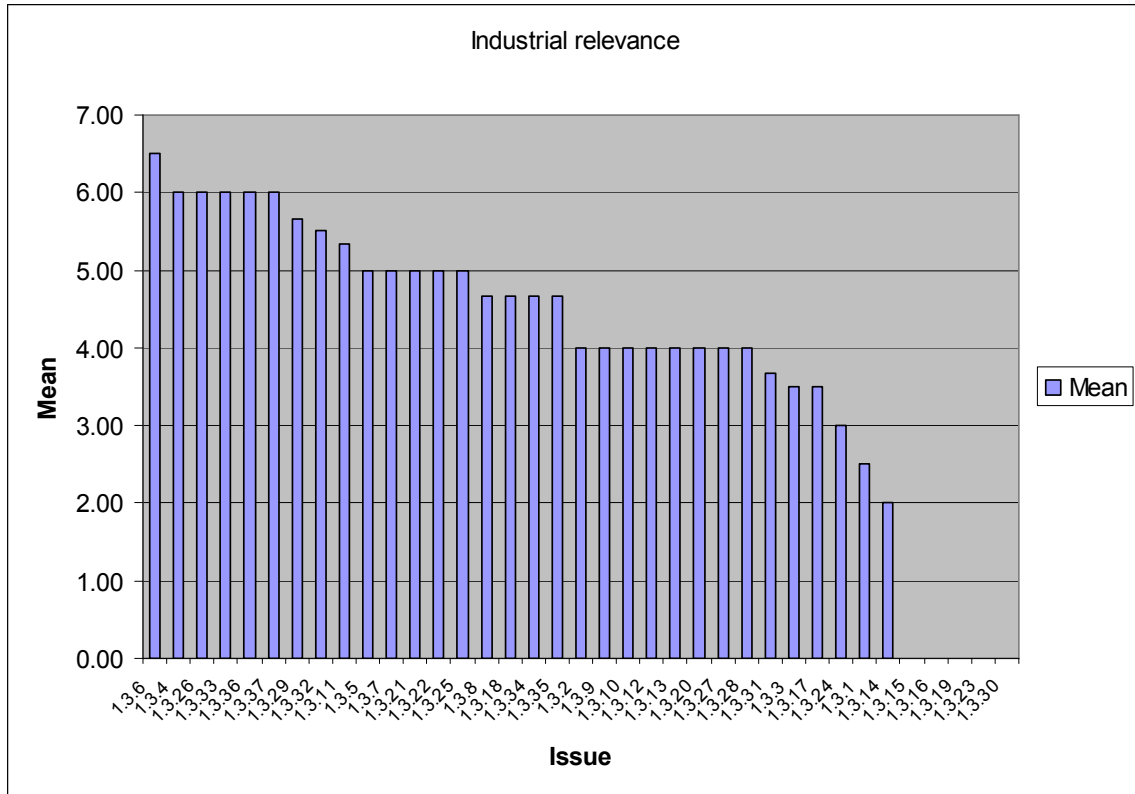


Figure 5 Sub-area 1.3 Industrial relevance

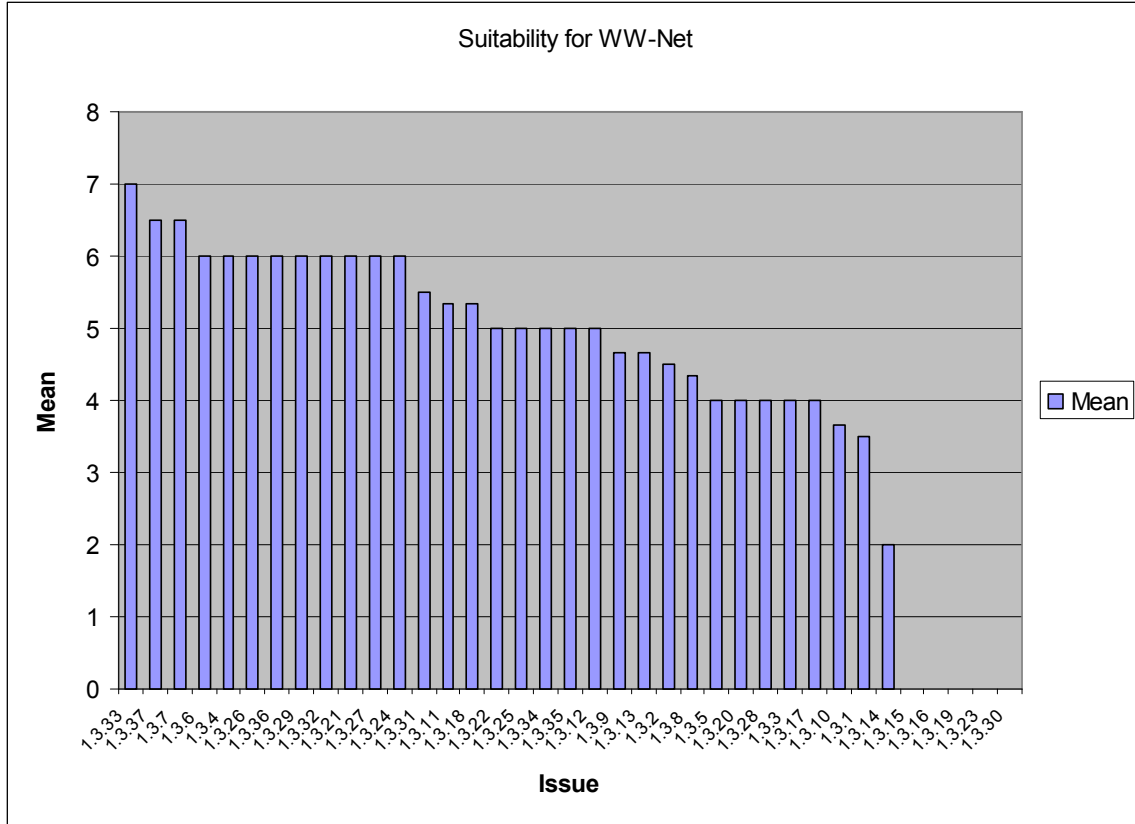


Figure 6 Sub-area 1.3 Suitability for WW-Net

Sub-area 1.4

Table 4 Sub-area 1.4 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
1.4.1	5.13	1.55	3	7	8	5.14	1.21	3	7	7	7
1.4.2	4.00	1.41	3	5	2	4.00	1.41	3	5	2	5
1.4.3	3.50	0.71	3	4	2	7.00	0.00	7	7	1	13
1.4.4	5.00	1.41	4	7	4	4.50	1.73	3	7	4	5
1.4.5	3.00	0.00	3	3	1	-	-	0	0	0	10
1.4.6	5.00	0.00	5	5	1	5.00	0.00	5	5	1	5
1.4.7	-	-	0	0	0	-	-	0	0	0	-
1.4.8	5.00	1.63	3	7	4	6.00	1.41	5	7	2	10

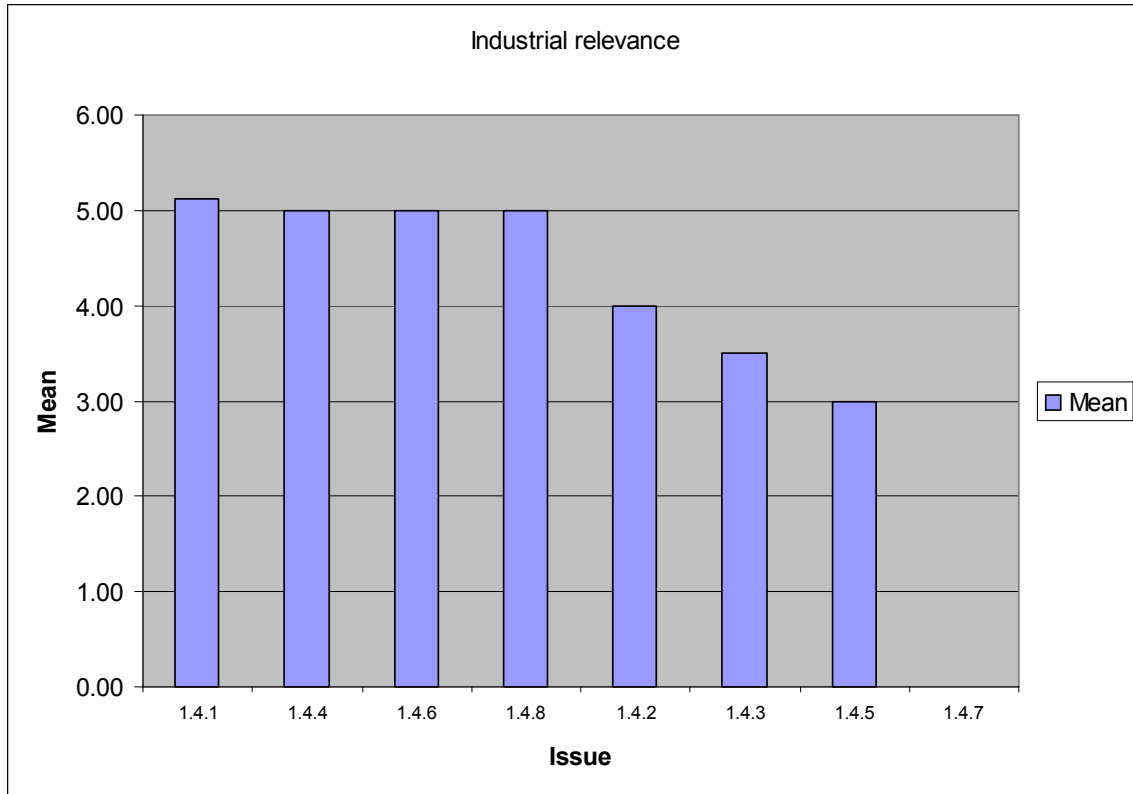


Figure 7 Sub-area 1.4 Industrial relevance

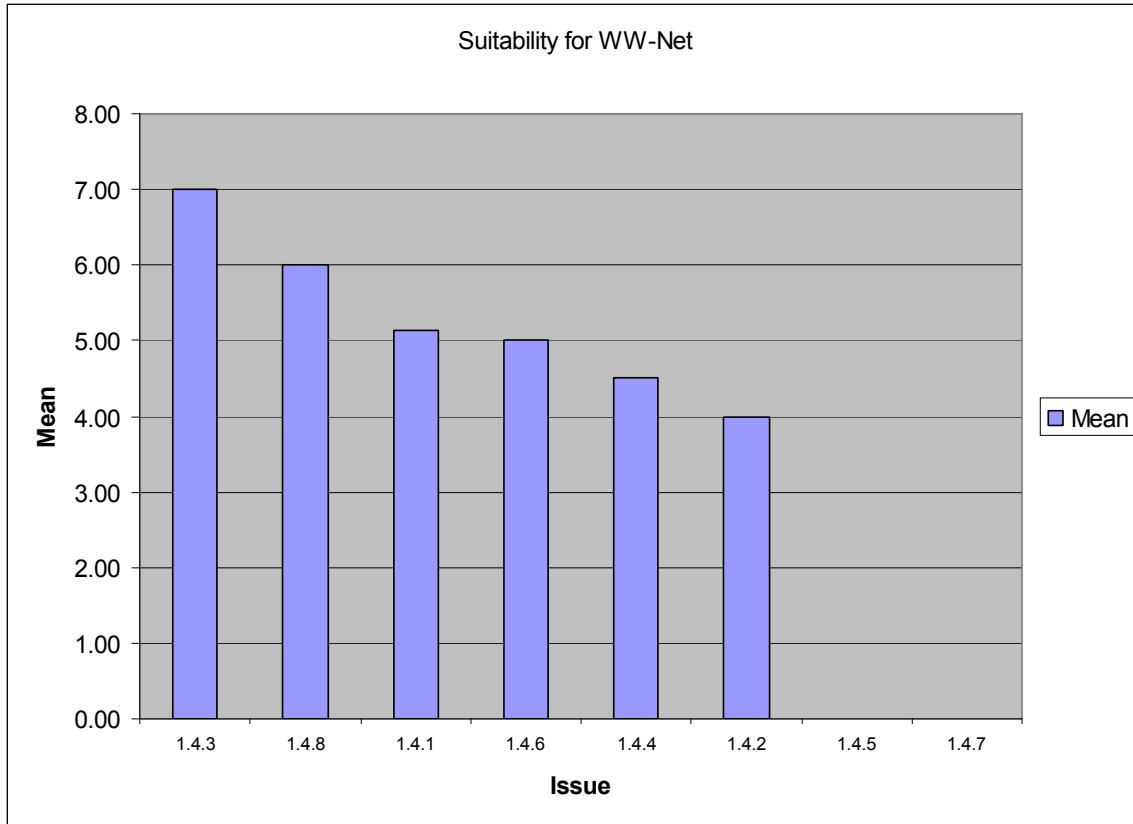


Figure 8 Sub-area 1.4 Suitability for WW-Net

Sub-area 1.5

Table 5 Sub-area 1.5 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
1.5.1	4.00	1.41	3	5	2	5.50	2.12	4	7	2	15
1.5.2	4.50	0.71	4	5	2	3.00	0.00	3	3	1	5
1.5.3	5.00	2.83	3	7	2	5.00	0.00	5	5	2	5
1.5.4	2.50	2.12	1	4	2	-	-	0	0	0	-
1.5.5	1.50	0.71	1	2	2	-	-	0	0	0	10
1.5.6	3.67	1.15	3	5	3	5.33	0.58	5	6	3	8
1.5.7	1.00	0.00	1	1	1	-	-	0	0	0	-
1.5.8	3.33	1.53	2	5	3	4.00	1.73	3	6	3	7
1.5.9	5.00	0.00	5	5	1	5.00	0.00	5	5	1	5
1.5.10	5.00	0.00	5	5	1	2.00	0.00	2	2	1	5
1.5.11	2.00	1.41	1	3	2	3.00	0.00	3	3	1	10
1.5.12	-	-	0	0	0	-	-	0	0	0	-
1.5.13	-	-	0	0	0	-	-	0	0	0	-
1.5.14	-	-	0	0	0	-	-	0	0	0	-
1.5.15	-	-	0	0	0	-	-	0	0	0	-
1.5.16	5.00	0.00	5	5	3	5.00	1.73	3	6	3	12
1.5.17	3.50	3.54	1	6	2	3.00	0.00	3	3	1	5
1.5.18	2.50	2.12	1	4	2	6.00	0.00	6	6	1	5

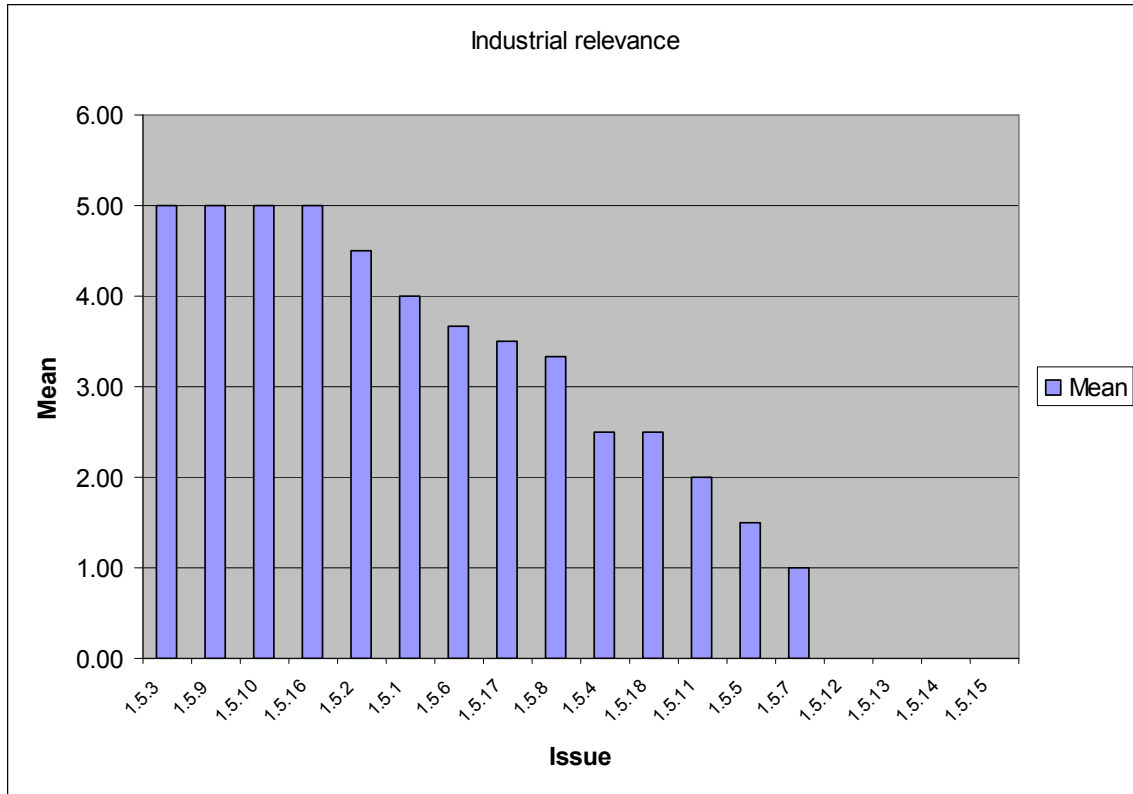


Figure 9 Sub-area 1.5 Industrial relevance

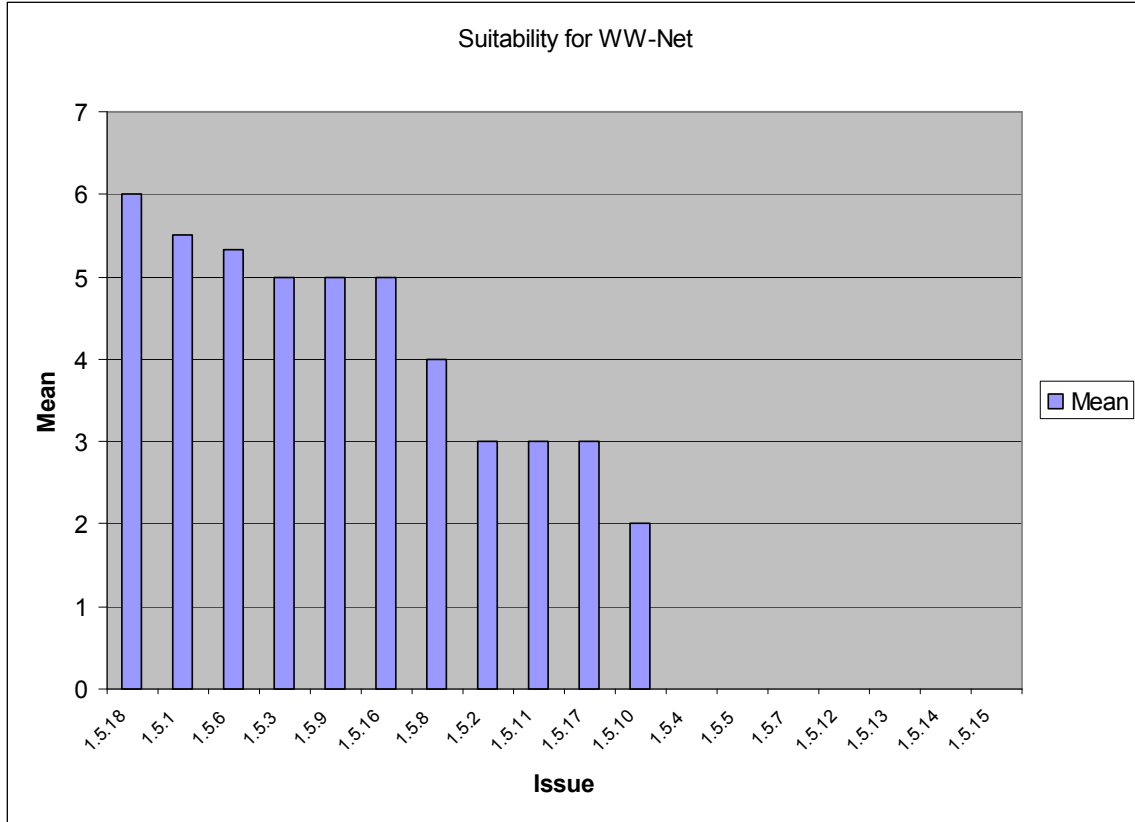


Figure 10 Sub-area 1.5 Suitability for WW-Net

Sub-area 1.N

Table 6 Sub-area 1.N Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
1.N.1	1.33	0.58	1	2	3	2.00	1.41	1	3	2	20
1.N.2	5.00	1.63	3	7	4	5.00	1.63	3	7	4	8
1.N.3	5.00	2.83	3	7	2	7.00	0.00	7	7	1	5
1.N.4	4.00	1.41	3	5	2	5.00	2.83	3	7	2	10
1.N.5	5.00	2.00	3	7	3	6.00	1.41	5	7	2	5
1.N.6	5.33	1.53	4	7	3	6.00	1.41	5	7	2	5
1.N.7	2.50	2.12	1	4	2	2.00	0.00	2	2	1	5

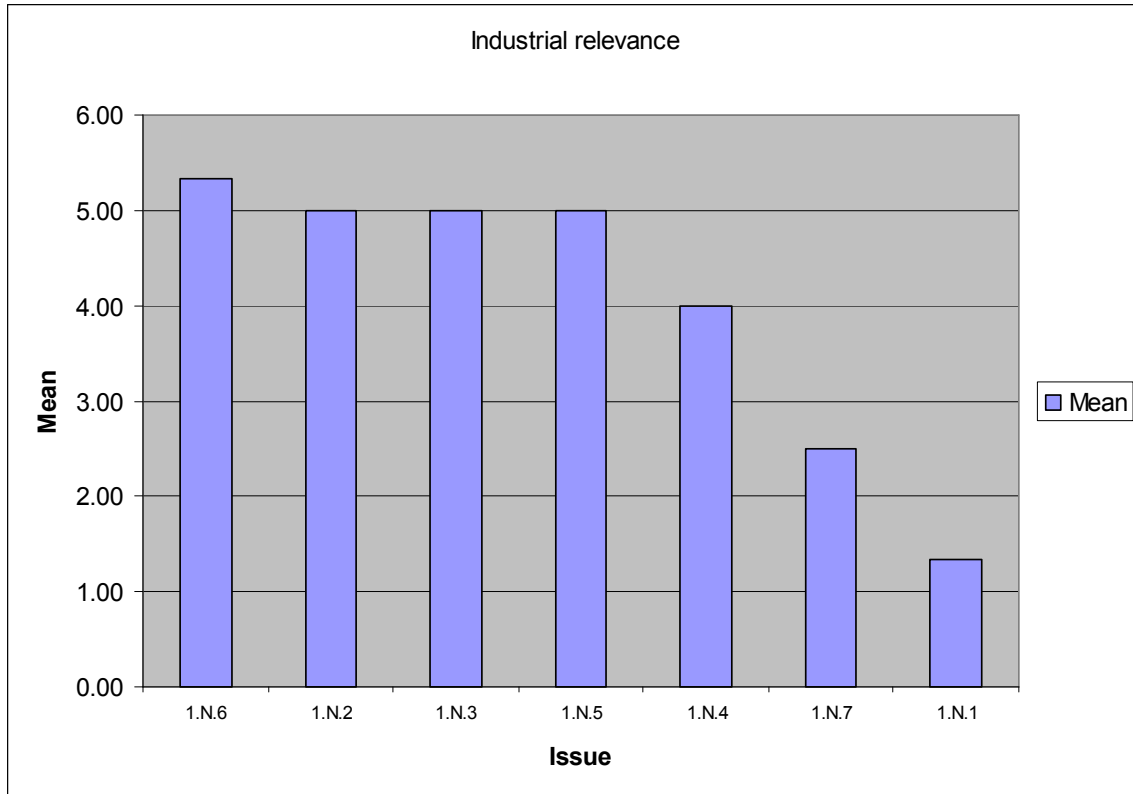


Figure 11 Sub-area 1.N Industrial relevance

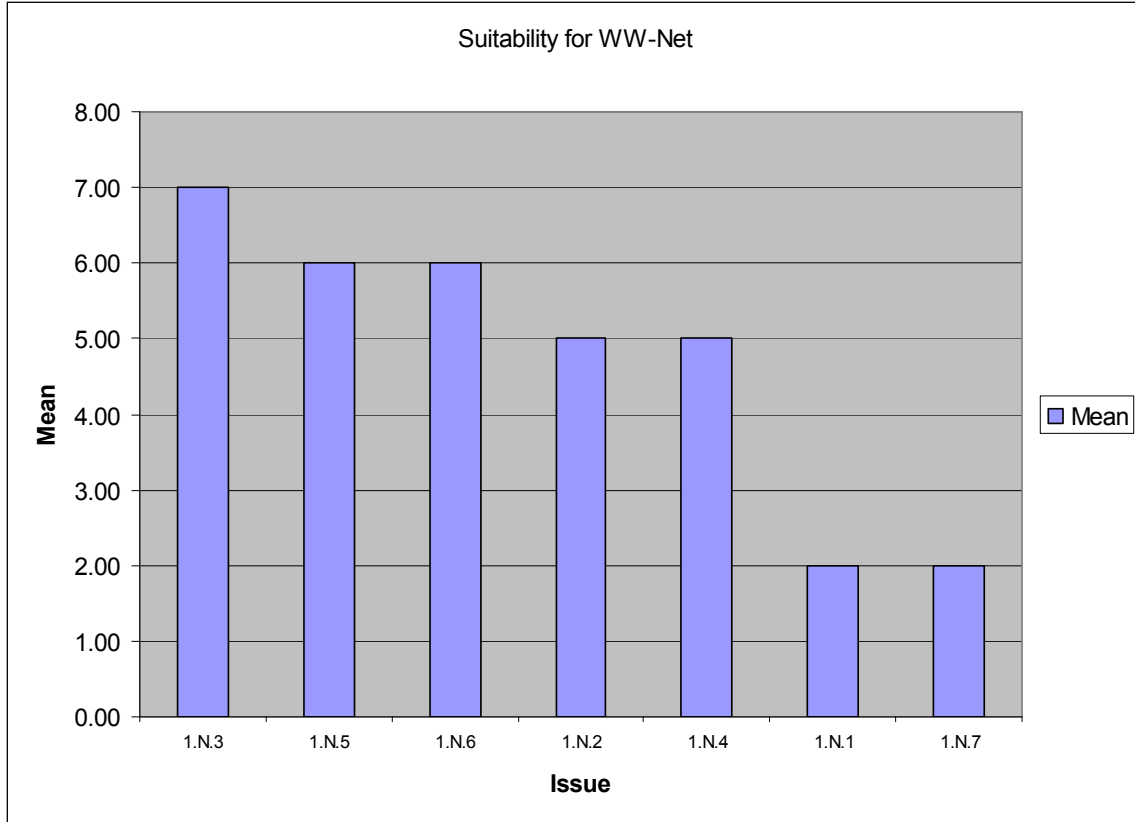


Figure 12 Sub-area 1.N Suitability for WW-Net

Sub-area 2.1

Table 7 Sub-area 2.1 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
2.1.1	4.86	1.07	3	6	7	5.29	1.80	3	7	7	9
2.1.2	-	-	0	0	0	-	-	0	0	0	-
2.1.3	4.00	1.41	3	5	2	3.00	0.00	3	3	1	-
2.1.4	3.67	1.15	3	5	3	4.33	3.06	1	7	3	13
2.1.5	4.50	2.12	3	6	2	6.50	0.71	6	7	2	13
2.1.6	3.00	0.00	3	3	2	3.00	2.00	1	5	3	20
2.1.7	5.00	0.00	5	5	1	7.00	0.00	7	7	1	10
2.1.8	4.00	0.00	4	4	1	3.00	2.83	1	5	2	10
2.1.9	4.00	1.15	3	5	4	5.75	1.50	4	7	4	11
2.1.10	3.00	2.00	1	5	3	2.67	0.58	2	3	3	10
2.1.11	4.00	2.65	1	6	3	5.00	3.46	1	7	3	8
2.1.12	5.00	2.00	3	7	3	5.67	1.15	5	7	3	8
2.1.13	3.00	0.00	3	3	2	5.00	0.00	5	5	1	8
2.1.14	4.33	1.15	3	5	3	4.67	1.53	3	6	3	8
2.1.15	4.00	0.00	4	4	1	5.00	0.00	5	5	1	10
2.1.16	4.00	0.00	4	4	1	6.00	0.00	6	6	1	-
2.1.17	-	-	0	0	0	-	-	0	0	0	-
2.1.18	5.00	0.00	5	5	1	5.00	0.00	5	5	1	-
2.1.19	-	-	0	0	0	-	-	0	0	0	-
2.1.20	-	-	0	0	0	-	-	0	0	0	-
2.1.21	3.00	0.00	3	3	2	3.00	0.00	3	3	2	10
2.1.22	-	-	0	0	0	-	-	0	0	0	-
2.1.23	4.00	1.41	3	5	2	4.50	0.71	4	5	2	8
2.1.24	3.00	0.00	3	3	1	4.00	0.00	4	4	1	10
2.1.25	3.00	0.00	3	3	1	6.00	0.00	6	6	1	10
2.1.26	4.50	0.71	4	5	2	6.00	1.41	5	7	2	8
2.1.27	2.00	0.00	2	2	1	-	-	0	0	0	-
2.1.28	3.50	0.71	3	4	2	6.00	1.41	5	7	2	13
2.1.29	2.00	0.00	2	2	1	6.00	0.00	6	6	1	15

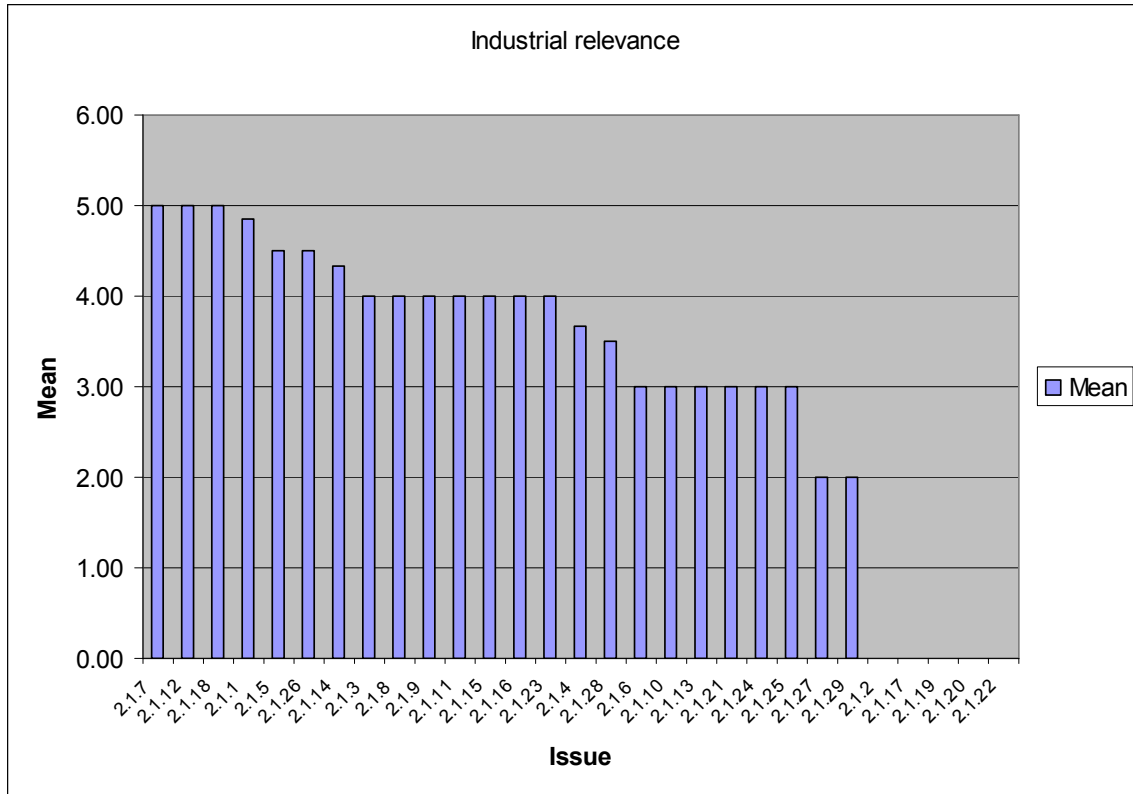


Figure 13 Sub-area 2.1 Industrial relevance

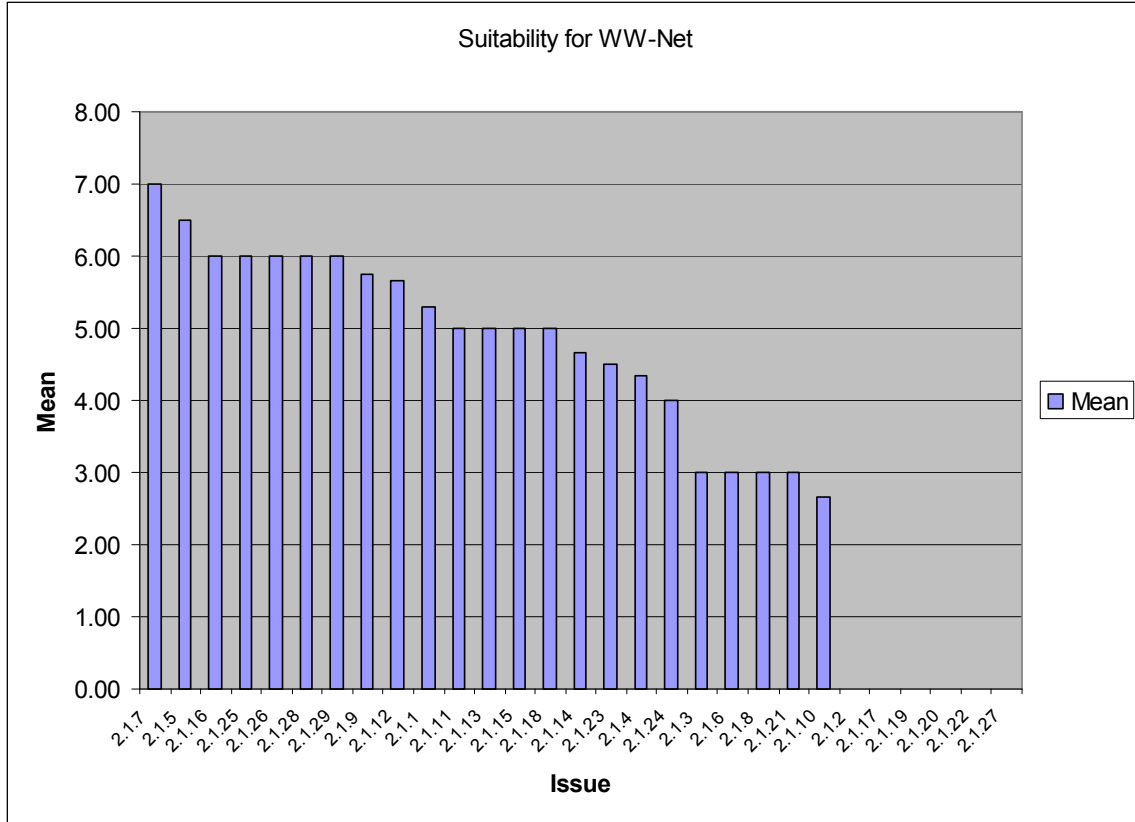


Figure 14 Sub-area 2.1 Suitability for WW-Net

Sub-area 2.2

Table 8 Sub-area 2.2 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
2.2.1	4.50	0.71	4	5	2	6.00	1.41	5	7	2	15
2.2.2	2.00	0.00	2	2	1	-	-	0	0	0	-
2.2.3	3.00	1.41	2	4	2	5.00	0.00	5	5	1	-
2.2.4	3.00	0.00	3	3	1	5.00	0.00	5	5	1	15
2.2.5	3.50	0.71	3	4	2	6.00	1.41	5	7	2	10
2.2.6	3.00	0.00	3	3	1	-	-	0	0	0	-
2.2.7	5.00	0.00	5	5	1	7.00	0.00	7	7	1	-
2.2.8	-	-	0	0	0	-	-	0	0	0	-
2.2.9	-	-	0	0	0	-	-	0	0	0	-

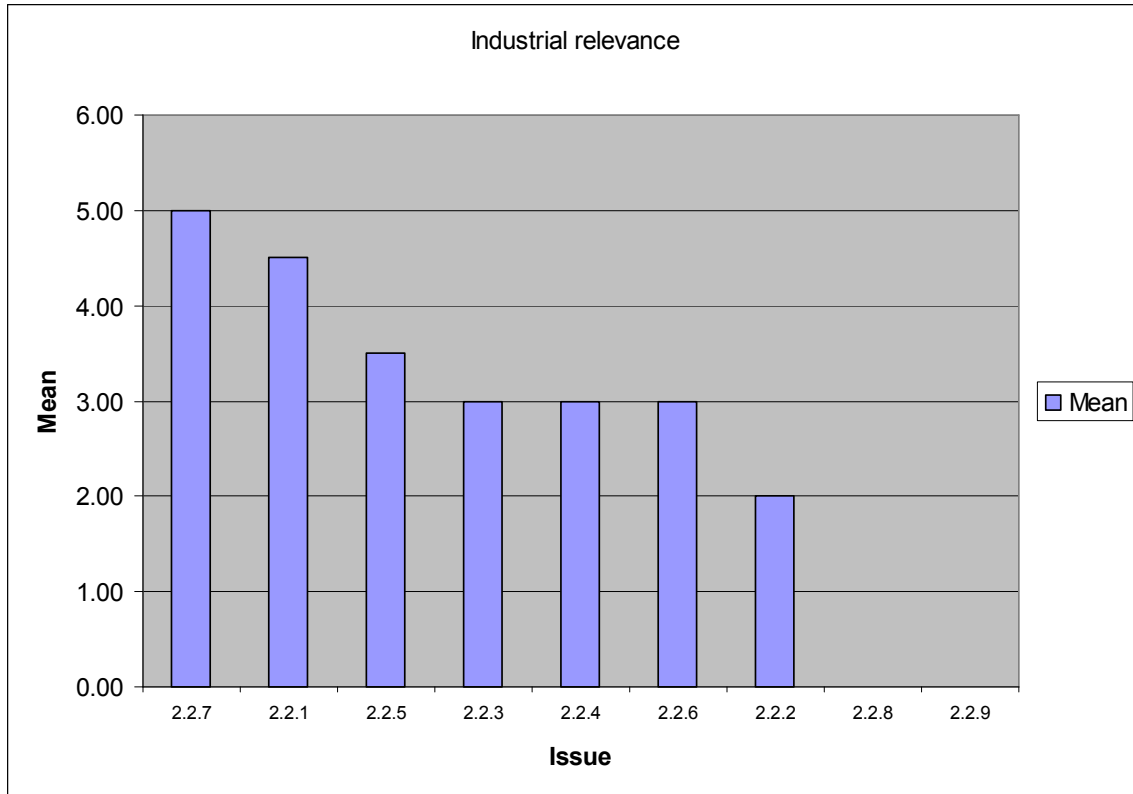


Figure 15 Sub-area 2.2 Industrial relevance

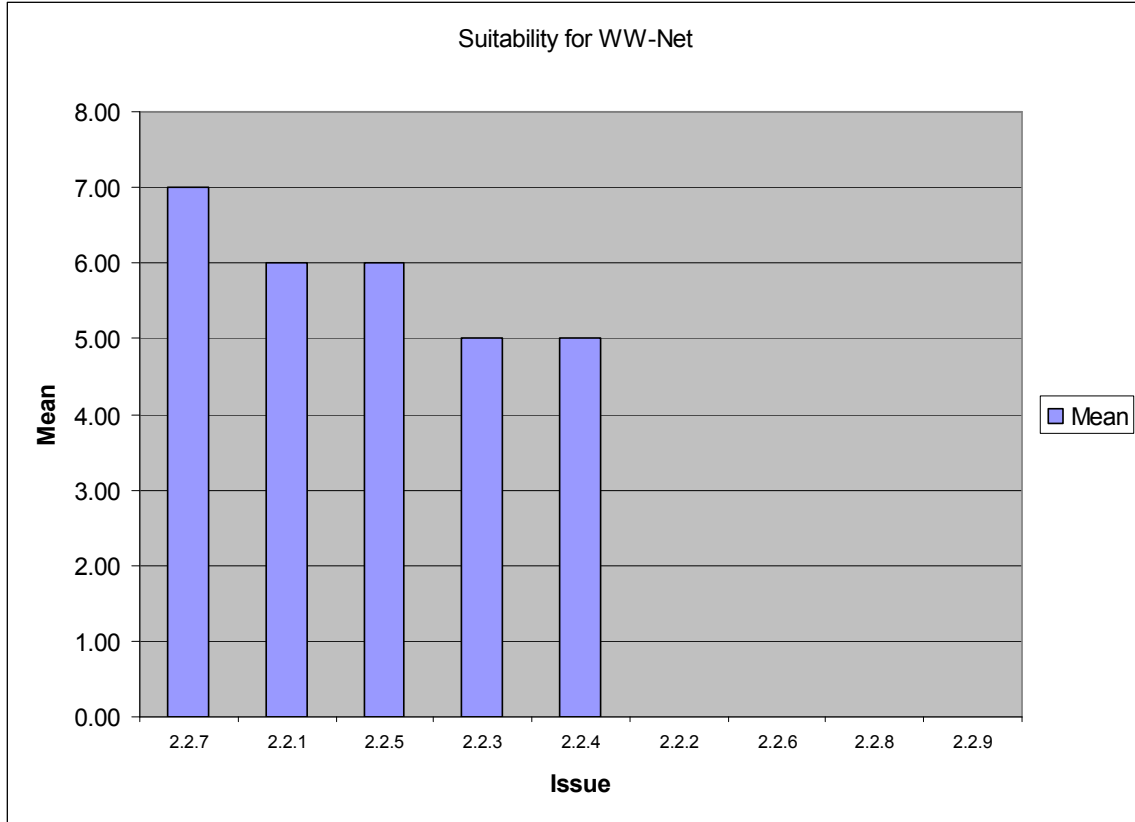


Figure 16 Sub-area 2.2 Suitability for WW-Net

Sub-area 2.3

Table 9 Sub-area 2.3 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
2.3.1	5.00	2.83	3	7	2	5.00	0.00	5	5	1	10
2.3.2	5.00	0.00	5	5	2	4.00	1.41	3	5	2	5

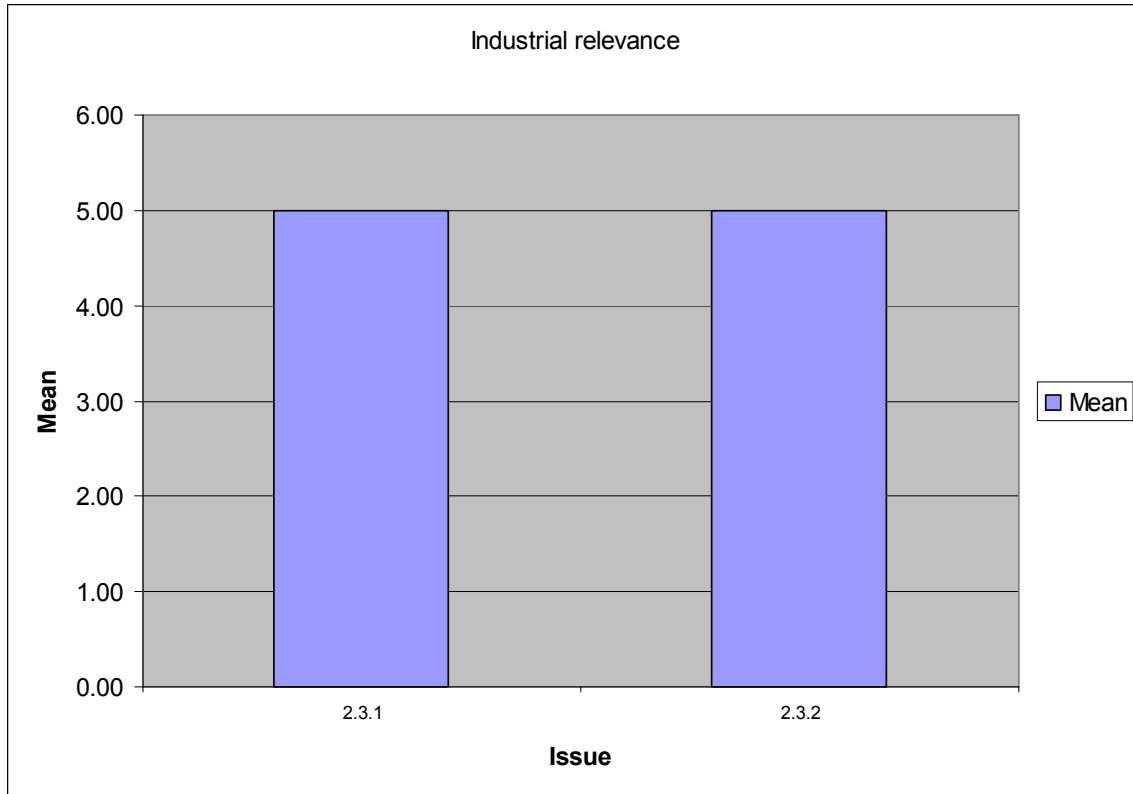


Figure 17 Sub-area 2.3 Industrial relevance

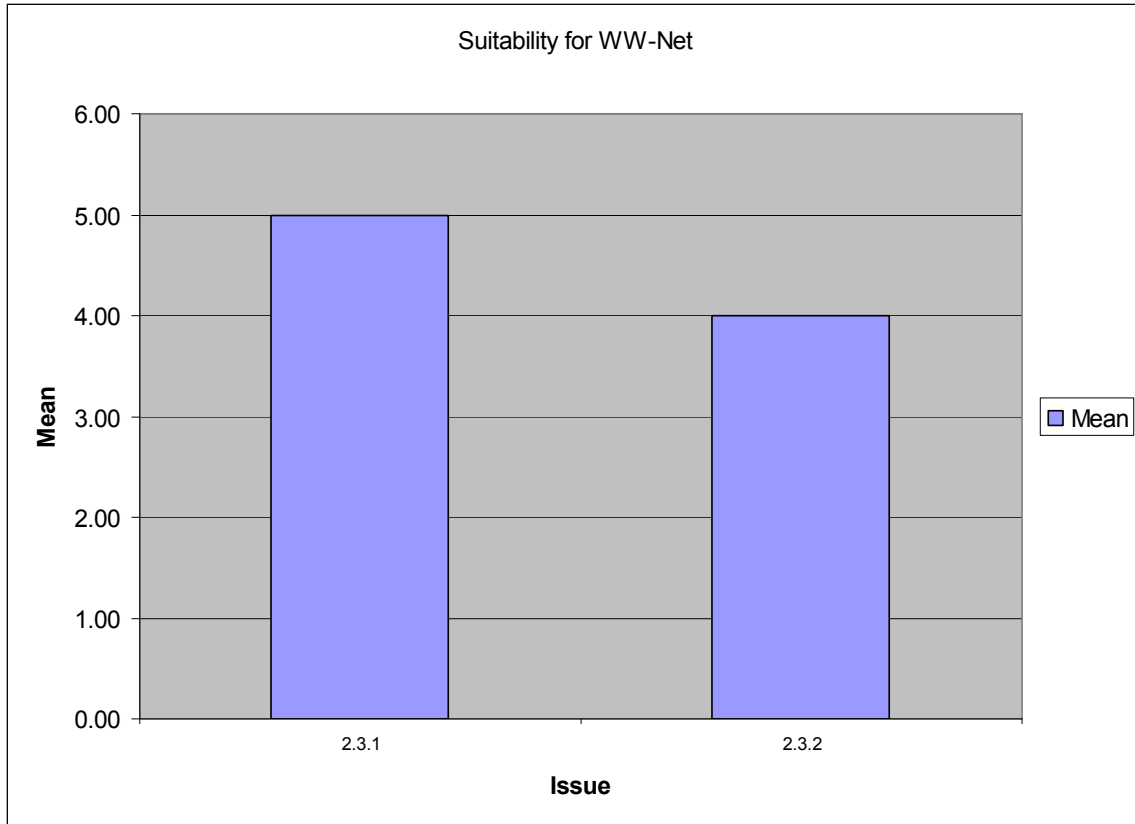


Figure 18 Sub-area 2.3 Suitability for WW-Net

Sub-area 2.4

Table 10 Sub-area 2.4 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
2.4.1	4.00	1.83	2	6	4	5.00	1.00	4	6	3	8
2.4.2	2.00	0.00	2	2	1	3.00	0.00	3	3	1	5
2.4.3	5.00	0.00	5	5	1	7.00	0.00	7	7	1	10
2.4.4	5.00	0.00	5	5	1	5.00	0.00	5	5	1	5
2.4.5	7.00	0.00	7	7	1	7.00	0.00	7	7	1	5

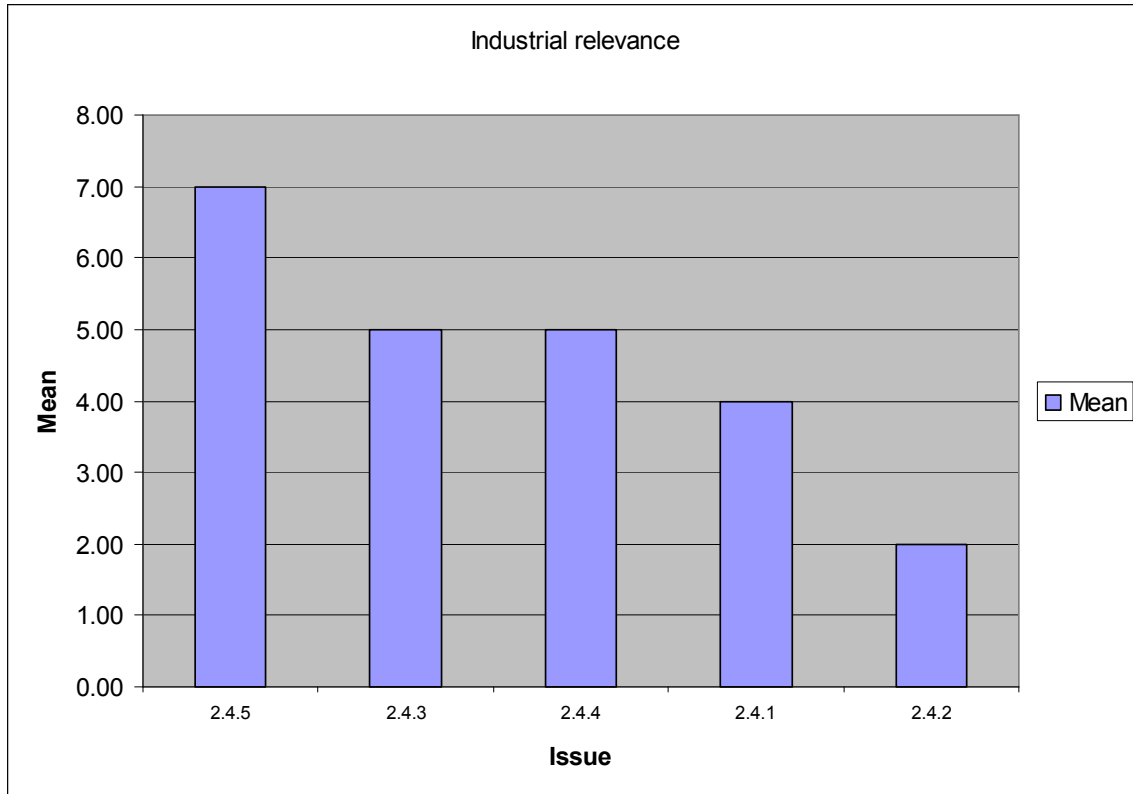


Figure 19 Sub-area 2.4 Industrial relevance

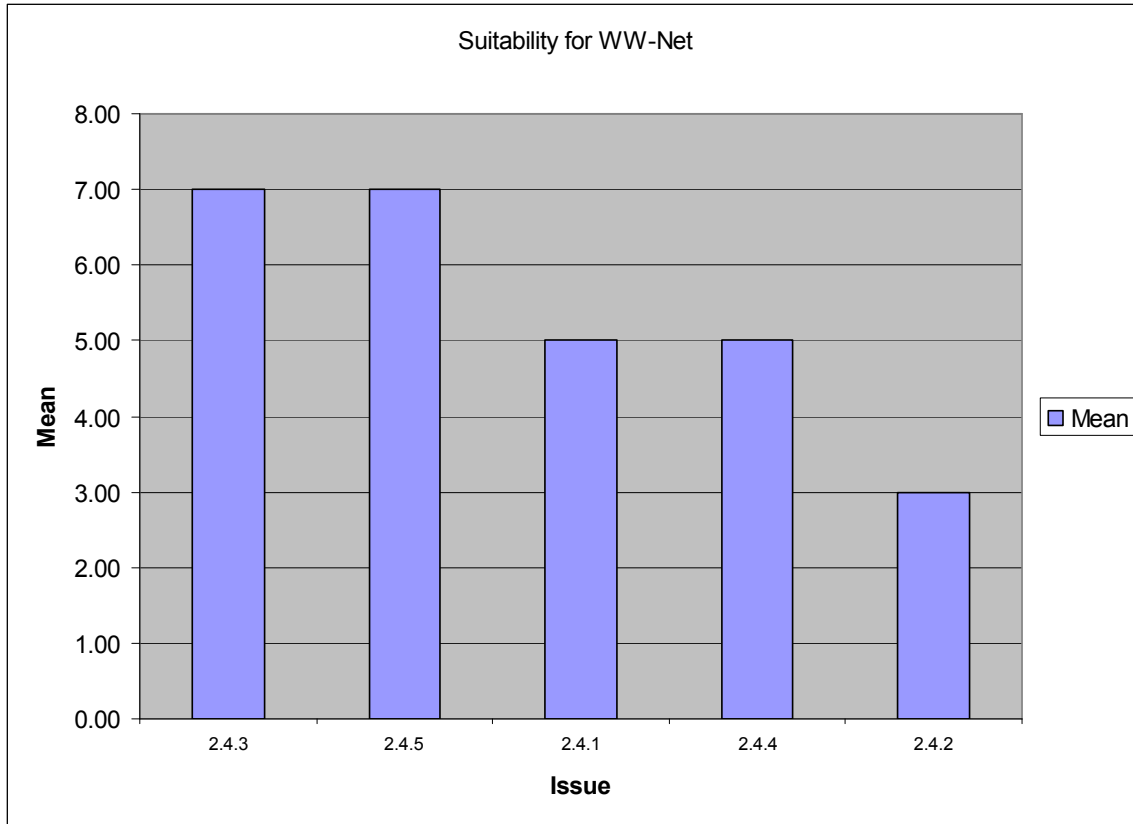


Figure 20 Sub-area 2.4 Suitability for WW-Net

Sub-area 2.5

Table 11 Sub-area 2.5 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
2.5.1	3.00	2.83	1	5	2	5.00	0.00	5	5	1	10
2.5.2	3.00	0.00	3	3	1	3.00	0.00	3	3	1	5
2.5.3	-	-	0	0	0	-	-	0	0	0	-
2.5.4	3.00	0.00	3	3	1	3.00	0.00	3	3	1	5
2.5.5	4.00	0.00	4	4	1	-	-	0	0	0	5
2.5.6	2.00	0.00	2	2	1	-	-	0	0	0	5
2.5.7	3.00	0.00	3	3	1	-	-	0	0	0	5

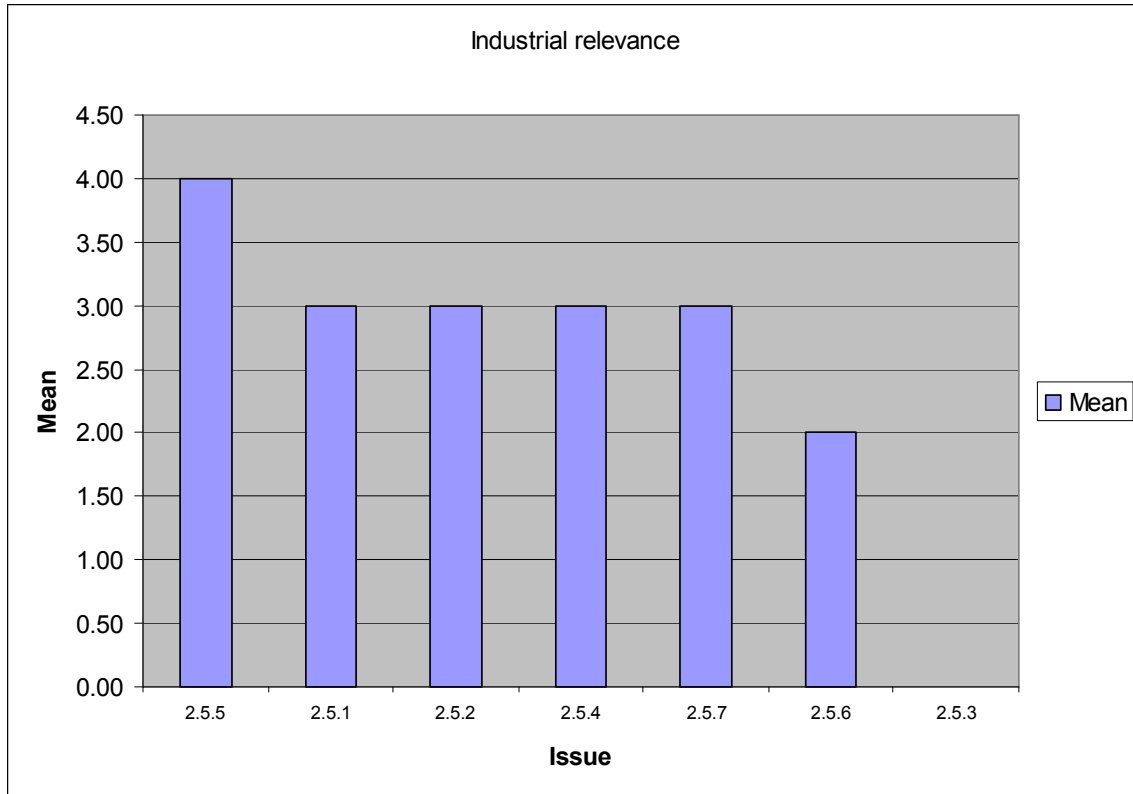


Figure 21 Sub-area 2.5 Industrial relevance

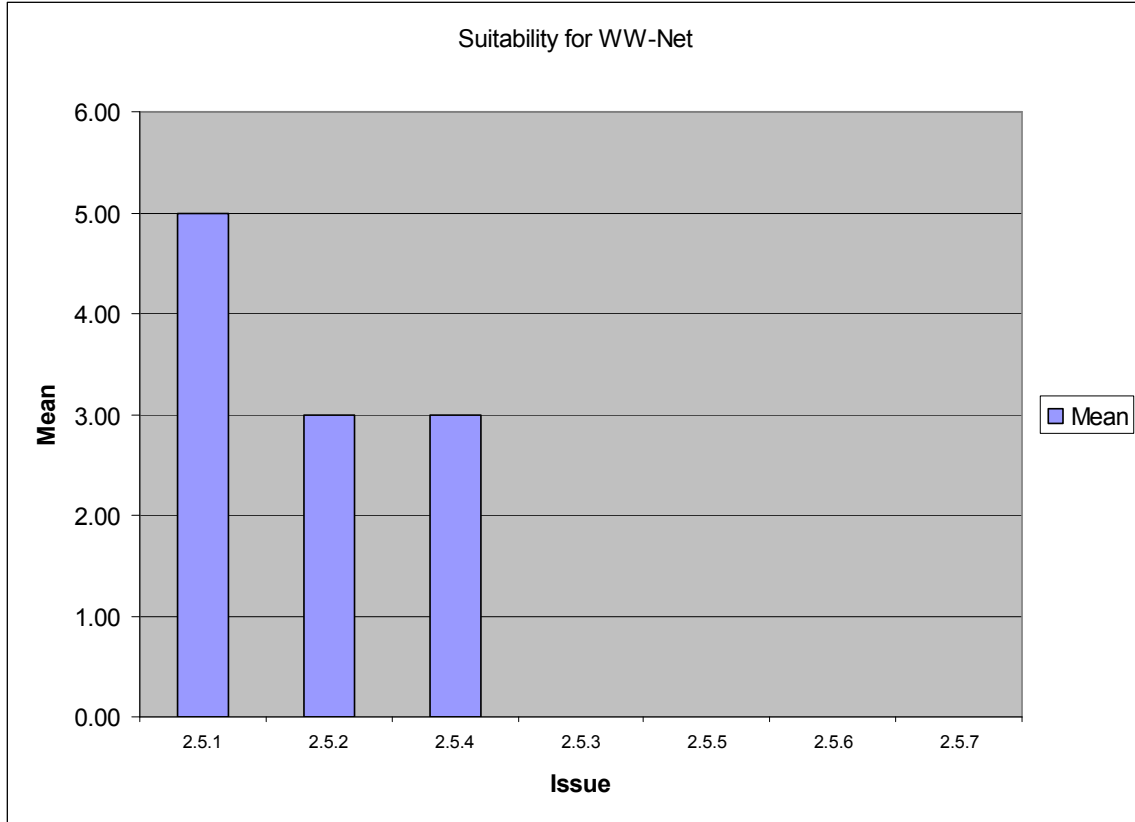


Figure 22 Sub-area 2.5 Suitability for WW-Net

Sub-area 2.N

Table 12 Sub-area 2.N Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
2.N.1	5.00	0.00	5	5	1	5.00	0.00	5	5	1	10
2.N.2	-	-	0	0	0	-	-	0	0	0	-
2.N.3	3.00	0.00	3	3	1	-	-	0	0	0	5
2.N.4	3.00	0.00	3	3	1	-	-	0	0	0	5
2.N.5	3.00	0.00	3	3	1	7.00	0.00	7	7	1	10

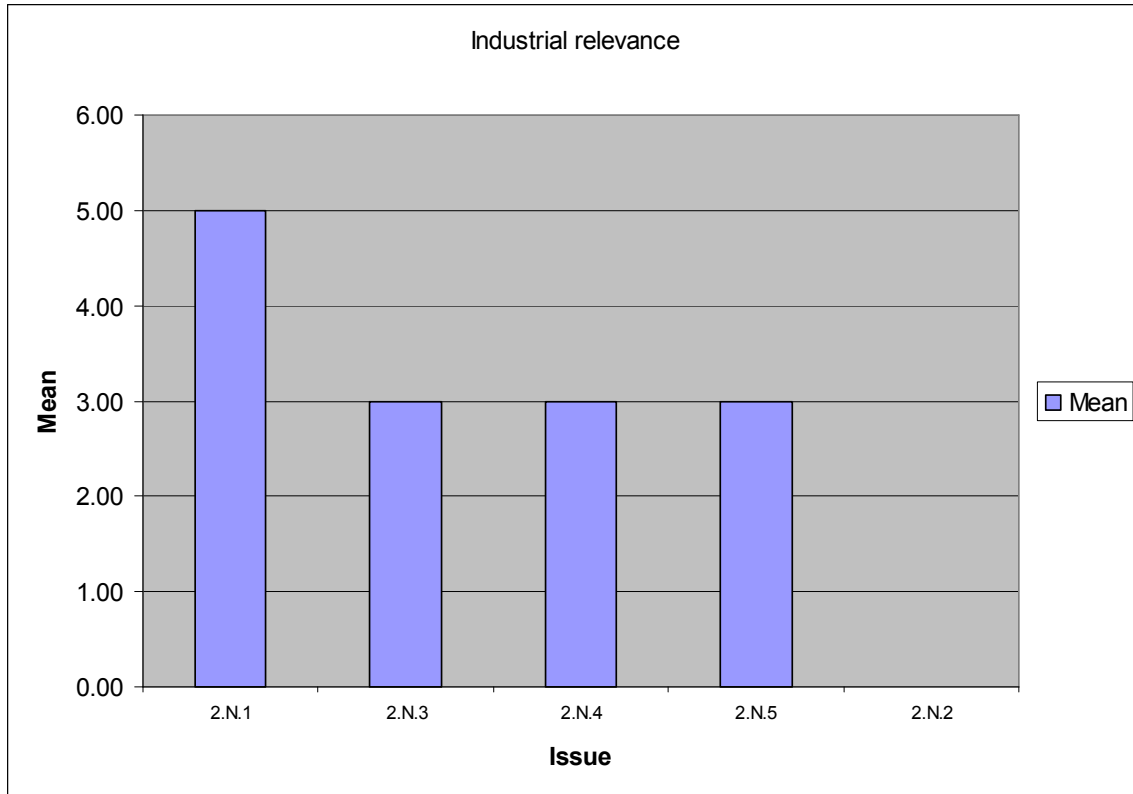


Figure 23 Sub-area 2.N Industrial relevance

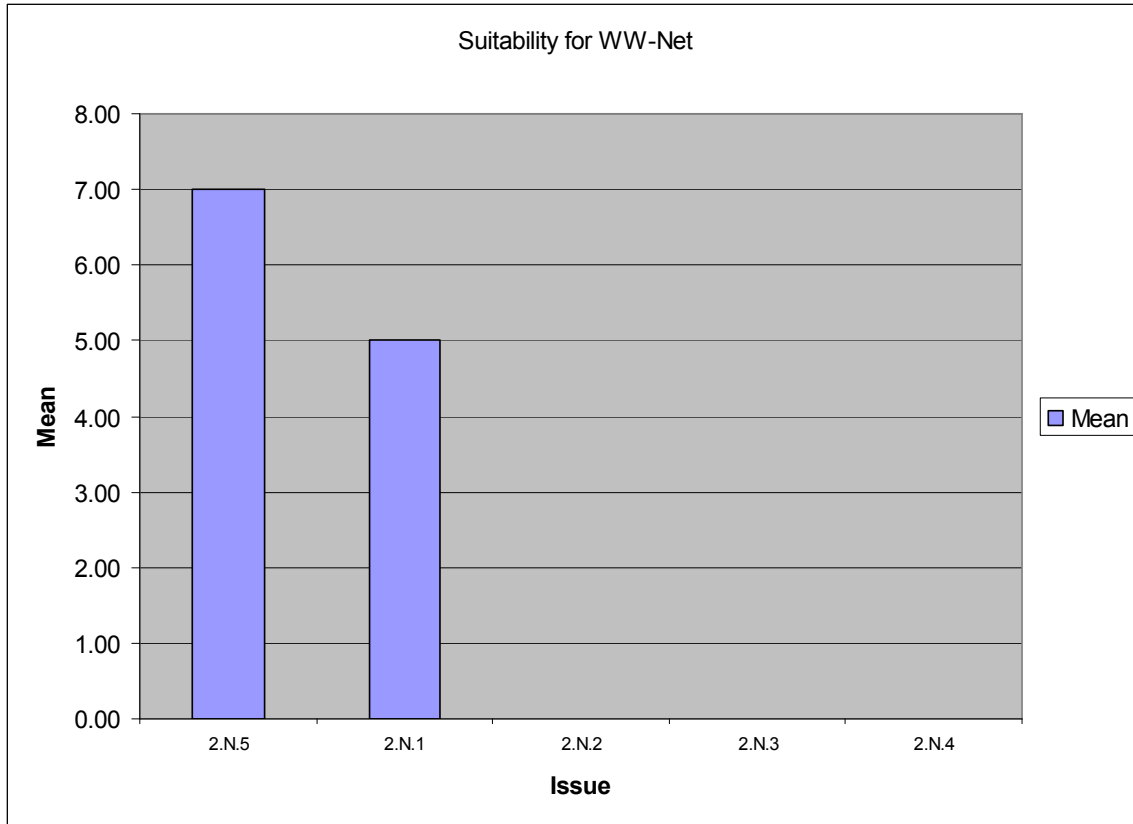


Figure 24 Sub-area 2.N Suitability for WW-Net

Sub-area 4.1

Table 13 Sub-area 4.1 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
4.1.1	4.50	3.54	2	7	2	4.50	0.71	4	5	2	5
4.1.2	6.00	0.00	6	6	1	7.00	0.00	7	7	1	5
4.1.3	4.00	0.00	4	4	1	3.00	0.00	3	3	1	5
4.1.4	4.33	1.15	3	5	3	5.00	0.00	5	5	2	7
4.1.5	4.00	1.73	2	5	3	3.67	1.15	3	5	3	5
4.1.6	3.00	0.00	3	3	1	7.00	0.00	7	7	1	5
4.1.7	3.00	0.00	3	3	1	7.00	0.00	7	7	1	5
4.1.8	1.00	0.00	1	1	1	-	-	0	0	0	-
4.1.9	2.00	0.00	2	2	1	-	-	0	0	0	-
4.1.10	3.00	3.46	1	7	3	3.00	3.46	1	7	3	13

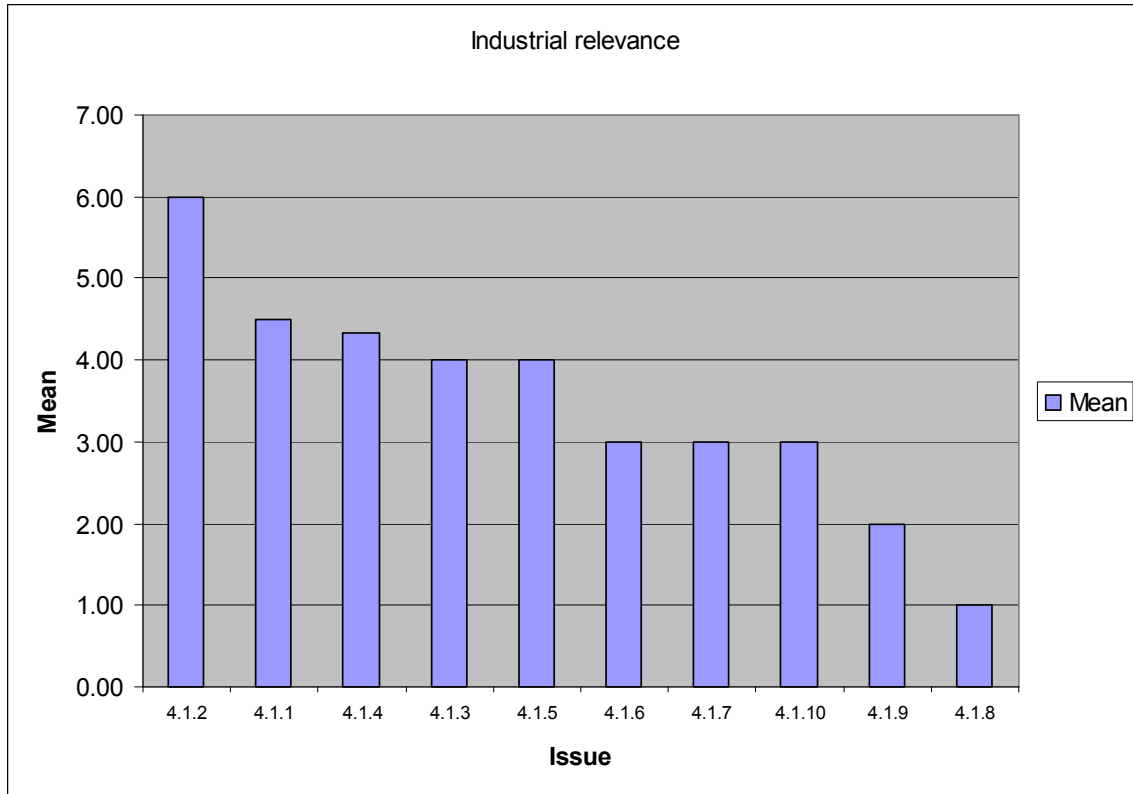


Figure 25 Sub-area 4.1 Industrial relevance

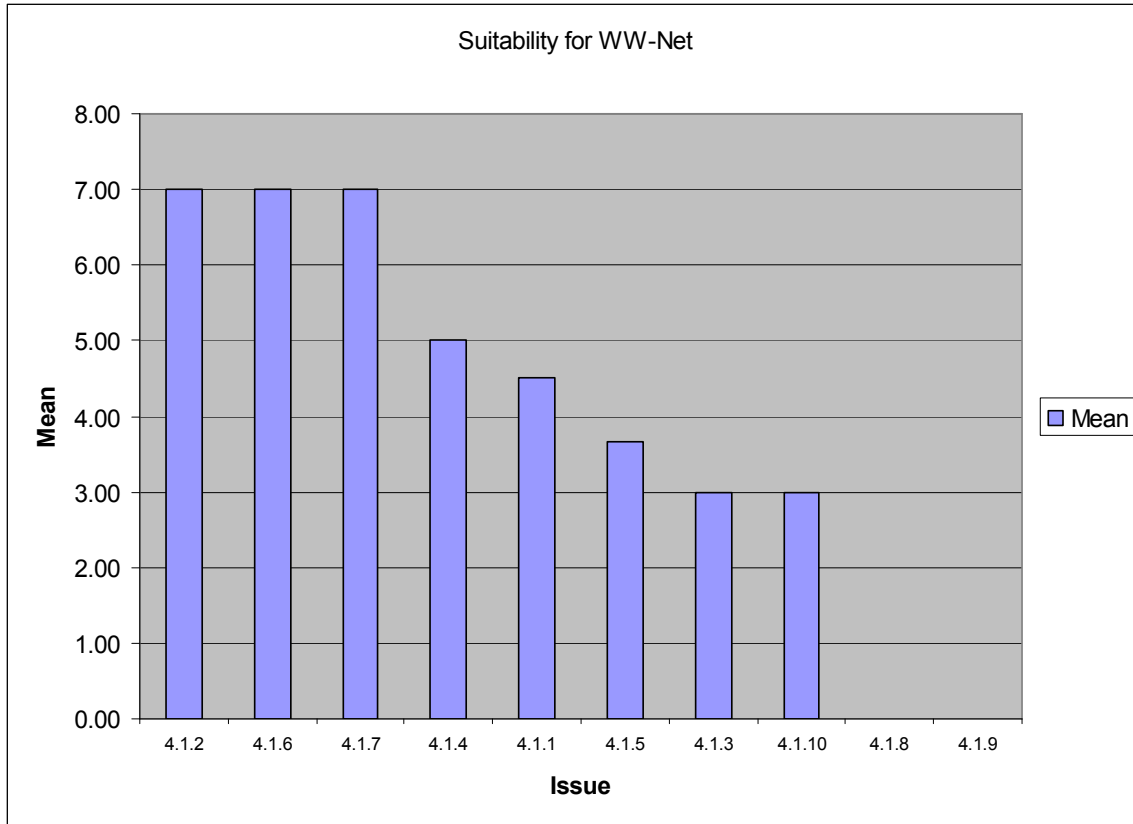


Figure 26 Sub-area 4.1 Suitability for WW-Net

Sub-area 4.2

Table 14 Sub-area 4.2 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
4.2.1	4.25	2.22	2	7	4	4.50	1.91	3	7	4	5
4.2.2	3.00	2.83	1	5	2	4.00	4.24	1	7	2	5
4.2.3	4.00	2.58	1	7	4	5.33	1.53	4	7	3	7
4.2.4	2.00	1.00	1	3	3	3.00	2.00	1	5	3	5
4.2.5	2.50	0.71	2	3	2	4.00	1.41	3	5	2	5
4.2.6	2.00	0.00	2	2	2	3.00	0.00	3	3	1	-
4.2.7	5.75	1.89	3	7	4	6.50	0.58	6	7	4	5
4.2.8	2.67	2.89	1	6	3	4.00	4.24	1	7	2	5
4.2.9	5.33	1.53	4	7	3	5.33	0.58	5	6	3	5

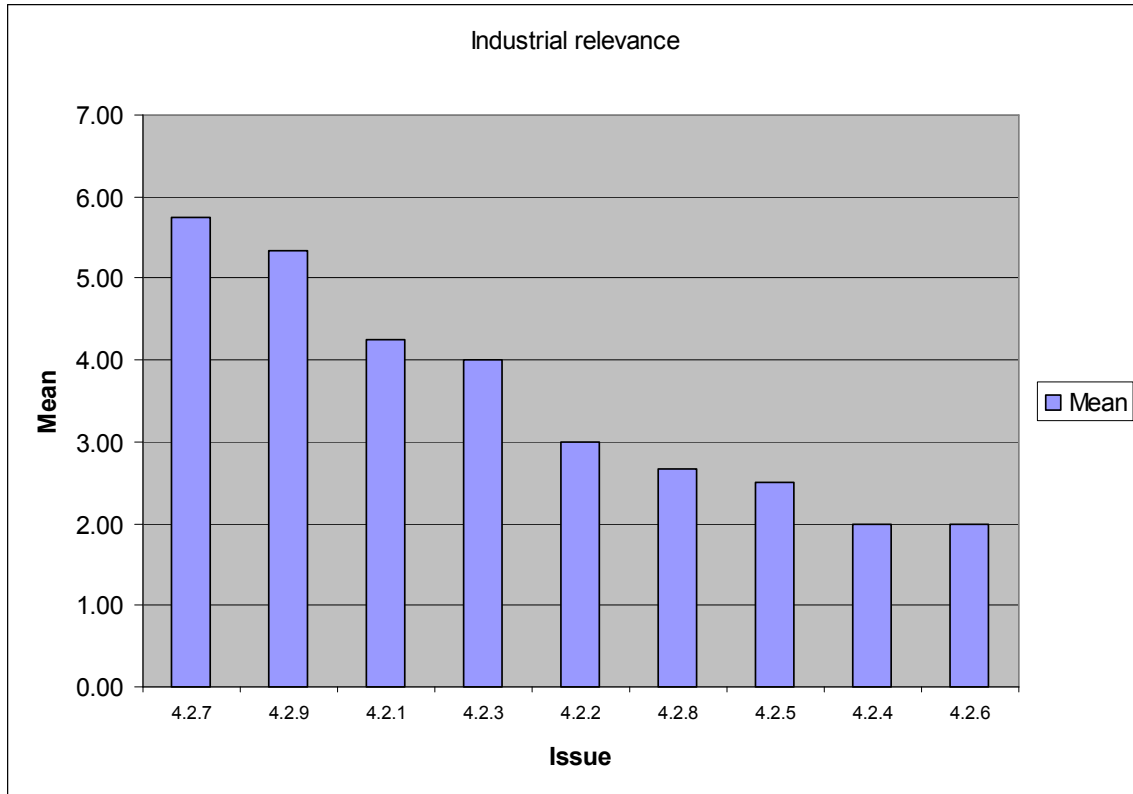


Figure 27 Sub-area 4.2 Industrial relevance

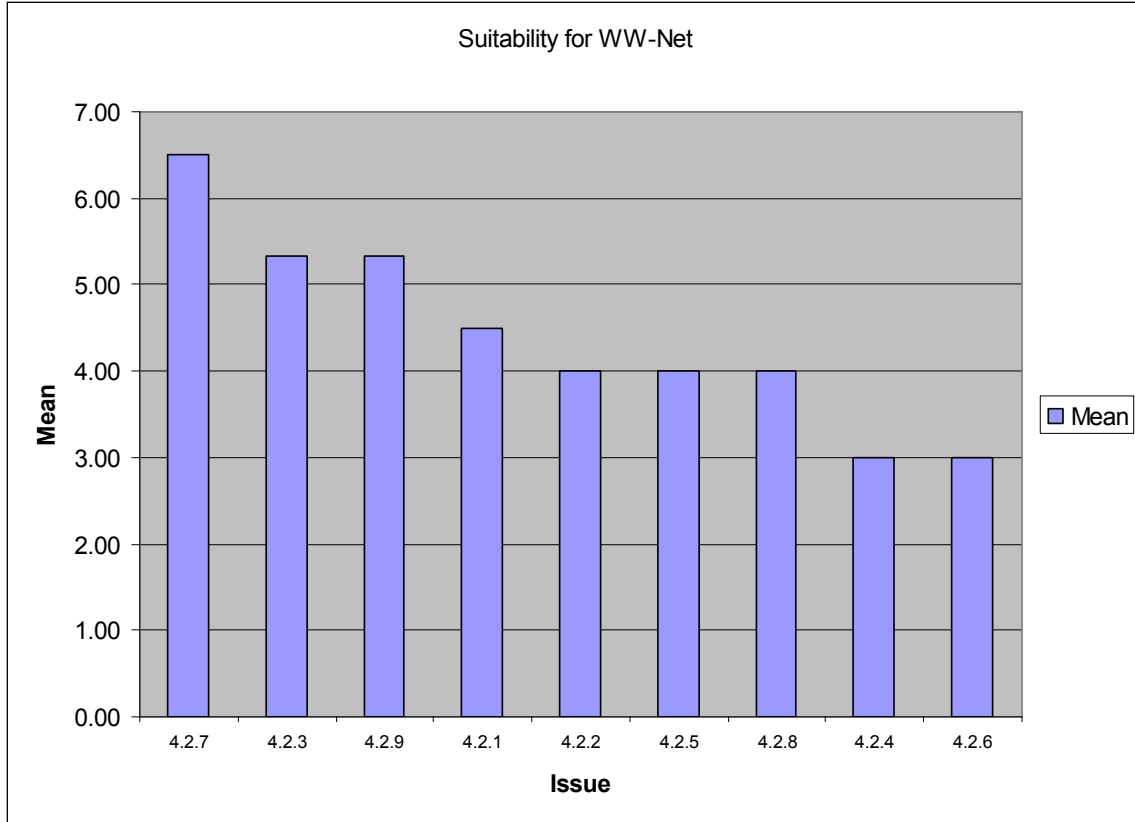


Figure 28 Sub-area 4.2 Suitability for WW-Net

Sub-area 4.3

Table 15 Sub-area 4.3 Statistics from Task 4

Issue	Industrial relevance					Suitability for ww-net					Time scale
	Mean	Std	min	max	respodents	Mean	Std	min	max	respodents	Estimated
4.3.1	4.67	0.58	4	5	3	5.00	0.00	5	5	2	5
4.3.2	6.00	1.41	5	7	2	3.00	1.41	2	4	2	5
4.3.3	2.67	0.58	2	3	3	6.50	0.71	6	7	2	13
4.3.4	3.00	0.00	3	3	1	7.00	0.00	7	7	1	5
4.3.5	3.00	0.00	3	3	2	5.00	0.00	5	5	1	10
4.3.6	3.50	0.71	3	4	2	4.00	0.00	4	4	2	13
4.3.7	-	-	0	0	0	-	-	0	0	0	-

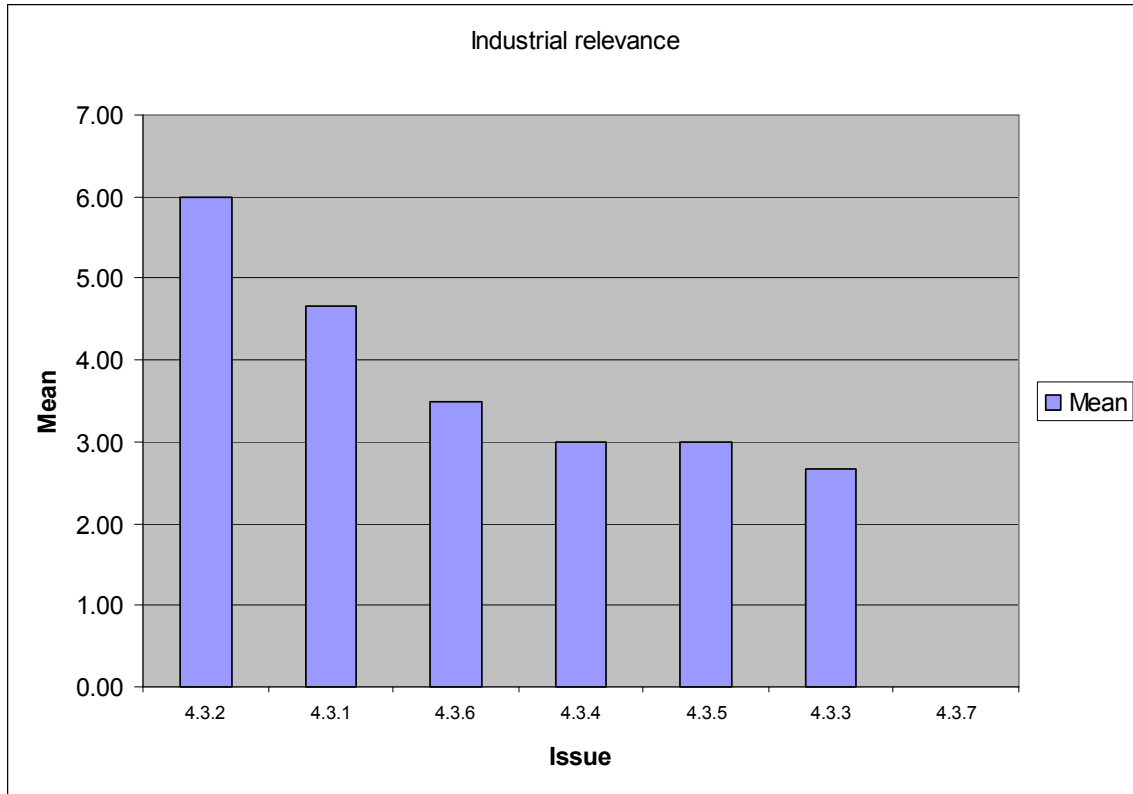


Figure 29 Sub-area 4.3 Industrial relevance

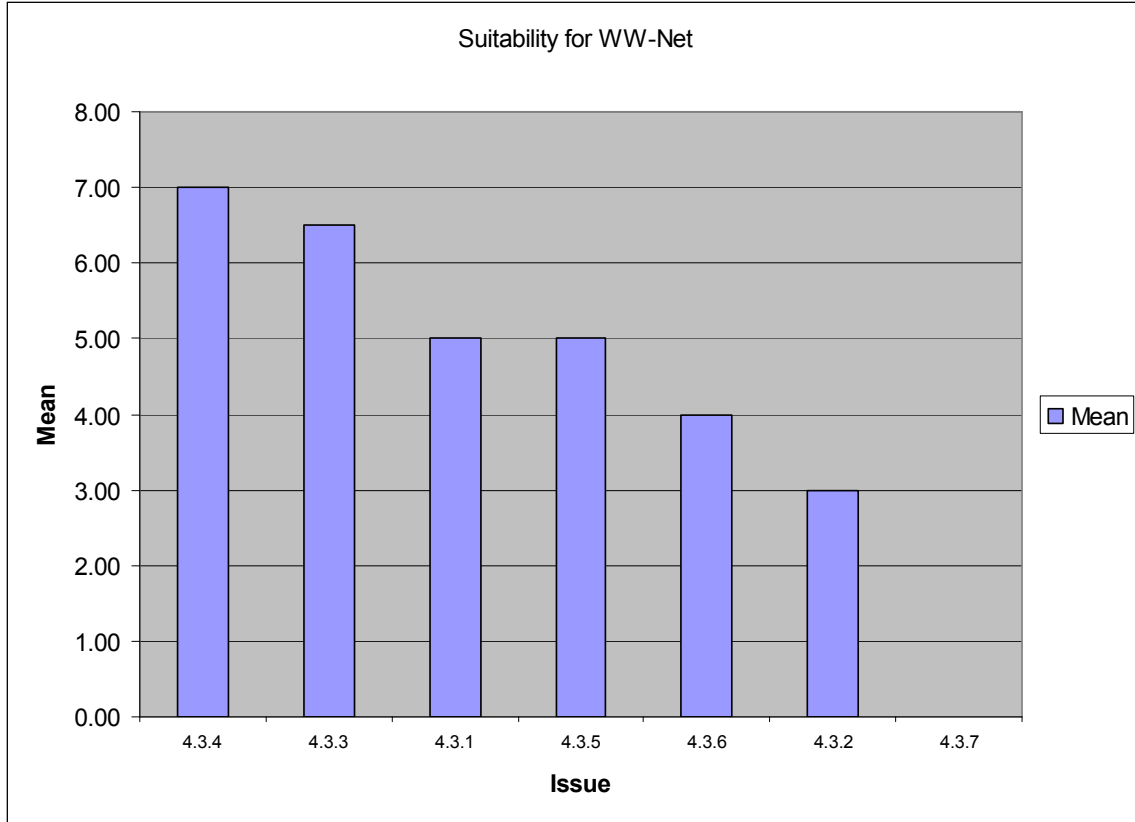


Figure 30 Sub-area 4.3 Suitability for WW-Net