

## KNOWLEDGE-SHARING NETWORKS AND ORGANISATIONAL PERFORMANCE

### INVITATION TO PARTICIPATE IN A MAJOR BENCHMARKING AND RESEARCH STUDY

#### Networks, Communities and Organisational Performance

Networks and communities of practice (CoPs) have increasingly become referred to as the 'killer app' of knowledge management and one of the few genuinely value added activities. This is the second phase a major cross-sectoral study of the performance impact of such networks.

In a preliminary study (Phase I), the Knowledge and Innovation Network at Warwick Business School collaborated with some of the world's leading organisations to benchmark the impact their networks and communities of practice had on organisational performance.

Organisations who took part in Phase 1 include ...



Organisations from the following sectors will participate in Phase 2

- Financial Services
- Health Technologies
- Energy
- Aerospace & Defence
- Engineering & Construction
- Consulting & Technology
- International Development

#### Guide to High Performing Networks and CoPs

Phase 1 revealed some key factors that appear to be strong predictors of high performing communities and networks.

Phase 2 will focus on validating these key factors and through interviews and focus groups identify good practices related to each factor.

A full guide to high performing networks and communities of practice will be produced for all participating organisations

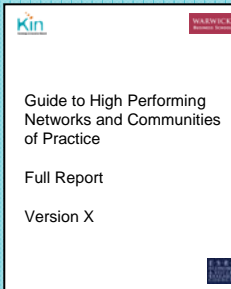
#### Phase 2 High level timelines are:

- Jul 08:** first set of interviews with participating organisations
- Sep 08:** launch and promotion activities with interested organisations, including launch of online survey
- Sep – Oct 08:** second interviews/focus groups with organisations
- Sep 08 – Nov 08:** online surveys available to participating organisations
- Dec 08 - Jan 09:** data analysis and collation of findings and recommendations for high performing communities
- Feb 09:** Engagement Workshops

Calendar						
July 2008						
M	T	W	T	F	S	S
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

February 2009						
M	T	W	T	F	S	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	



#### Why participate?

Participating organisations will receive the following:

- Guide to High Performing Networks and CoPs
- Participation in Engagement and Knowledge Sharing Workshops on key findings
- Access to other like minded professionals
- Benchmarking Reports tailored by Organisation and Networks/CoPs (optional)

#### Project Team

The study contains a team of experienced researchers and world leading experts with published articles on Networks and Communities of Practice

Prof Harry Scarbrough <i>Principal Researcher</i>	Dr Juliane Schwarz <i>Researcher</i>	Dr Richard McDermott <i>Subject Matter Expert</i>	Andrew Parker <i>Statistical Expert</i>	Erica Hurley <i>Organisation Liaison</i>	Douglas Archibald <i>Organisation Liaison</i>

#### Contact Us

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## How can you 'benchmark' networks and communities?

Networks and communities of practice are 'benchmarked' using a short online survey for network and community members. The survey involves simple responding to statements including those below:

5. At a **personal** level, to what extent has participation in *[the community]*:

	To a great extent	To a significant extent	To some extent	To a small extent	To no extent	Don't Know
Saved you time looking for information and knowledge required to do your job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helped you solve everyday business problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helped you create innovative solutions to problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved the quality of the decisions you make.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helped you meet work objectives or performance targets.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developed new and better ways of working.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced your existing skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helped you learn new things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identified opportunities for collaboration and knowledge sharing with colleagues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased your commitment to learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased your commitment to sharing knowledge with colleagues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Allowed you to apply knowledge arising from the CoP in your work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helped you capture relevant knowledge in a reusable way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Made you reflect on your own practice and performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved your job satisfaction.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased your commitment to the community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased your commitment to the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased your personal network within your organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased your visibility and promotion prospects across the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. To what extent has the community helped your **team, department or business unit** to:

	To a great extent	To a significant extent	To some extent	To a small extent	To no extent	Don't Know
Achieve business goals it could not achieve without the community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce the time to develop new products, services or customer value	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce time to solve problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce costs of daily operations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce duplication in work programmes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve quality of work products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Introduce new work methods and approaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve communication between project teams and/or across geographic locations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase consistency between sites and/or project teams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase programme effectiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support the transfer of knowledge across departments/BU's	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support the transfer of knowledge into the organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Individual Performance

To what extent has your participation in the [CoP]:

- Saved you time looking for information and knowledge required to do your job.
- Helped you solve everyday problems.
- Improved the quality of decisions you make.
- Helped you meet work objectives or performance targets.
- Enhanced your existing skills.
- Helped you learn new things.

### Organisational Performance

To what extent has the [CoP] helped your team, department or Business Unit to:

- Reduce the time to develop new products, services or customer value.
- Reduce time to solve problems.
- Reduce costs of daily operations.
- Reduce duplication in work programmes.
- Improve communication between project teams and/or across locations.

Benefits for participating in the survey, including what is involved for participants, are highlighted below. The Figure below and over page shows an example of the 'Benchmark League Table', anonymously showing how your organisation's networks and communities are performing against each other, other organisations and sectors.

What are the benefits?

Benchmarking  
Internal  
External

Engage senior management to value of networks and communities

Learn from top performers on key factors to improve performance

What is involved?

Online Survey  
10 min member survey  
30 min leader survey

Telephone Interviews  
Optional face to face interviews

Opportunity for Knowledge Transfer secondments

Obtain full report and attendance at seminars. Detailed benchmarking report by network and organisation available on request

**Some feedback from organisations who took part in Phase 1 ...**

*"Would love the opportunity to be involved in your future work – the last study helped immensely in lending us credibility"*

*KM Manager, Consulting Firm*

*"It helped us to assess the relative health of our communities and provide ideas for improvement."*

*KM Manager, Global NGO*

*"Very helpful in proving value in communities of practice and our efforts"*

*Network Leader, Global Professional Services Firm*

*"The ability to extract and measure value from communities is of strong interest to us"*

*CKO, EngineeringCo*

**Examples of the value that high performing communities demonstrated in Phase 1 ...**

**Win New Work**

*"The knowledge and expertise within the community has helped the company to secure both new work and repeat work e.g. it played its part in securing 5 year work programmes with Client X and Client Y"*

**Keep Existing Customers Happy**

*"Comments from various areas of the business have indicated much improved levels of customer satisfaction around delivery of specific projects, largely attributable to standard internal processes and increased skills."*

**Save Time and Money**

*"The CoP was used as a platform to gather info on Co X operating experiences ... shaving \$13-15million from topside costs"*  
*"Provides a successful query resolution service with 80% of questioners assisted within a working day with 4 minutes as the fastest response to date."*

**Attract and Retain Talent**

*"Feedback confirmed [CoP] involvement has been the reason for staff retention for some of the staff in the community."*  
*"Young consultants get more quickly up to speed and become more motivated."*

Benchmark Scores  
 Range: 3.75 - 5.00  
 Range: 3.00 - 3.75  
 Range: 2.25 - 3.00  
 Range: 1.00 - 2.25



CoP	Individual Level																		Organisation (Team/Department/BU) Level										Aggregate Benchmarks					OVERALL SCORE				
	Performance						Learning & Knowledge Sharing						Motivation & Commitment						Performance					Learning & Knowledge Sharing														
	Saved time	Everyday problems	Innovative problems	Decision Quality	Objectives/Targets	Ways of working	Existing skills	Learn new things	Collaborations & KS	Commit to learn	Commit to share	Apply K in work	Re-useable K	Reflect on practice	Job satisfaction	Commit to CoP	Commit to Org	Personal Network	Visibility & promotion	Business Goals	Reduce time (Products/Services)	Reduce time (Solve probs)	Reduce Costs (Daily Ops)	Reduce Duplication (Progs)	Improve Quality	New Work Methods	Programme effectiveness	Comm. n - X project/loc/h	Consistency - x project/loc	K transfer - x dept/bu	K transfer - into org/h	Personal - Performance	Personal - Learn & K-Sharing		Personal - Motiv'n/Commit	Team/Dept/BU - Perf	Team/Dept/BU - Learn & K-Sharing	
CoP 1	4.40	4.20	4.20	4.00	4.00	4.20	4.00	4.20	3.60	4.20	3.60	4.00	4.00	4.00	4.75	4.00	4.00	4.33	4.75	4.25	5.00	5.00	4.50	4.75	4.50	4.75	4.75	5.00	3.75	4.25	4.17	4.00	4.22	4.69	4.44	4.30		
CoP 2	4.00	2.67	4.00	3.33	3.33	3.00	3.33	4.00	4.67	3.67	5.00	4.00	3.67	3.67	4.33	5.00	4.50	5.00	3.00	2.67	3.67	3.67	3.00	3.67	3.67	4.00	4.00	4.33	3.67	4.33	4.67	3.39	4.00	4.77	3.54	4.25	3.92	
CoP 3	3.60	3.40	3.60	3.60	3.60	4.20	3.40	4.00	4.60	4.00	4.40	4.40	4.40	4.00	3.60	4.20	4.20	4.60	3.60	3.40	3.75	3.40	3.20	4.00	3.60	3.60	3.80	3.80	4.25	4.20	4.00	3.67	4.18	4.04	3.62	4.06	3.90	
CoP 4	4.29	3.93	3.43	4.23	3.79	3.50	3.86	4.21	4.21	3.57	4.14	4.21	3.86	3.64	3.14	3.79	3.14	4.15	2.77	3.50	3.14	3.93	3.36	3.43	3.64	3.93	3.71	3.86	3.93	4.36	4.29	3.86	3.96	3.40	3.58	4.11	3.77	
CoP 5	3.50	3.50	4.00	4.00	4.00	4.00	4.50	4.00	4.00	4.00	4.50	3.50	4.00	4.00	4.00	4.50	3.50	4.60	3.00	4.00	3.00	3.00	3.00	4.00	3.00	4.00	2.50	3.50	3.50	3.00	3.83	4.06	3.90	3.50	3.13	3.73		
CoP 6	3.50	3.25	3.00	3.75	3.50	4.00	4.00	3.75	4.25	3.75	4.00	3.75	4.25	4.25	3.00	4.00	3.75	4.25	3.25	3.00	3.75	2.50	3.75	4.00	4.25	3.25	4.00	4.00	4.25	3.25	3.50	4.00	3.65	3.44	3.88	3.69		
CoP 7								3.75	4.75	3.50	4.50	3.50	3.50	4.00	3.50	4.00	2.75	4.75	3.00	3.50	3.75	3.50	3.25	3.00	3.25	3.50	3.25	3.75	3.00	4.75	4.25	3.63	3.94	3.80	3.25	3.94	3.68	
CoP 8								4.17	4.50	3.83	4.42	3.67	3.92	3.67	3.17	3.83	3.83	4.58	3.30	3.45	3.00	3.27	2.67	2.63	3.27	3.83	3.18	4.25	3.92	4.36	4.25	3.17	3.99	3.74	3.16	4.20	3.60	
CoP 9								3.75	4.25	3.75	4.25	3.75	3.75	3.50	3.25	3.75	3.25	4.25	3.25	3.00	2.50	2.00	3.50	3.75	3.75	3.50	4.00	4.25	3.75	4.00	3.75	3.63	3.84	3.55	3.19	3.94	3.60	
CoP 10								3.80	4.00	4.20	4.40	3.60	3.40	3.80	3.80	4.00	3.60	4.40	3.80							3.50	3.80	3.60	4.40	3.80	3.23	3.83	3.92	3.04	3.90	3.53		
CoP 11								3.86	4.07	3.93	3.71	3.50	3.64	3.93	3.66	3.66	3.71	3.66	3.14							3.07	3.31	2.67	3.14	3.14	3.48	3.80	3.69	2.99	3.07	3.42		
CoP 12								3.83	3.50	3.42	3.63	3.71	3.75	3.27	3.43	3.33	3.46	3.67	3.13							3.17	3.26	2.91	3.74	3.68	3.51	3.58	3.40	3.19	3.40	3.41		
CoP 13	3.56	3.38	3.10	3.53	3.10	3.26	3.72	3.92	3.42	3.36	3.34	3.61	3.51	3.35	3.10	3.30	3.03	3.28	2.68							3.04	3.38	3.02	3.39	3.72	3.32	3.53	3.08	3.18	3.38	3.31		
CoP 14	3.76	3.29	3.25	3.19	3.06	3.13	3.47	3.71	3.59	3.38	3.59	3.35	3.35	3.19	2.94	3.35	3.00	3.24	2.44							2.86	3.62	3.07	3.69	3.67	3.28	3.45	2.99	3.15	3.51	3.28		
CoP 15	3.44	2.94	3.19	3.44	3.24	3.53	3.25	3.31	3.53	2.88	3.25	3.31	3.38	3.19	2.80	2.88	2.76	3.13	2.47							3.13	3.38	3.75	3.69	3.63	3.29	3.26	2.81	3.19	3.19	3.61	3.22	
CoP 16	3.43	3.26	3.00	3.28	2.97	3.00	3.69	3.94	3.57	3.23	3.52	3.50	3.35	3.25	3.16	3.22	2.95	3.26	2.73	2.96	2.78	3.43	2.93	2.94	2.98	3.04	3.30	3.25	2.96	3.44	3.45	3.16	3.51	3.06	3.00	3.28	3.21	
CoP 17	3.64	3.09	3.18	3.00	3.00	2.67	3.32	3.67	3.91	3.05	3.82	3.24	3.36	3.48	3.00	3.55	2.91	3.86	2.95	2.95	3.18	3.18	2.50	2.91	3.00	2.82	2.91	3.36	2.91	3.43	3.41	3.10	3.48	3.25	2.93	3.28	3.20	
CoP 18	3.46	2.82	3.04	3.30	2.96	2.98	3.24	3.67	3.43	3.35	3.65	3.30	3.13	3.18	3.07	3.41	3.48	3.85	3.11	2.66	2.79	3.10	2.35	2.64	2.80	2.68	2.70	3.50	2.76	3.49	3.40	3.09	3.37	3.38	2.72	3.28	3.14	
CoP 19	3.47	3.08	3.03	3.28	2.77	3.02	3.64	3.70	3.32	2.89	3.18	3.46	3.13	3.00	3.00	3.04	2.90	3.37	2.62	2.90	3.25	3.35	2.64	2.97	3.21	2.97	3.06	2.97	3.40	3.27	3.11	3.29	2.98	3.06	3.18	3.13		
CoP 20	3.27	3.00	2.84	3.04	2.76	3.00	3.15	3.52	3.35	3.15	3.50	3.19	3.37	3.26	2.81	3.11	2.89	3.19	2.96	2.96	3.05	3.36	2.75	3.00	3.17	3.38	2.79	3.32	2.80	3.36	3.68	2.98	3.31	2.99	3.06	3.29	3.13	
CoP 21	3.70	3.22	2.90	3.33	2.80	2.80	3.40	3.90	3.80	3.00	3.20	3.40	3.30	2.90	2.60	3.00	3.00	3.60	2.56	2.60	3.00	3.40	2.25	2.70	2.80	2.70	2.40	3.30	3.22	3.20	3.30	3.13	3.36	2.95	2.73	3.26	3.07	
CoP 22	3.25	2.75	3.00	2.87	2.94	2.81	3.25	3.44	3.25	3.00	3.20	2.81	3.13	3.25	2.81	3.00	3.07	3.31	3.00	3.00	3.00	3.50	2.77	3.00	3.07	2.93	2.64	3.29	3.29	3.14	3.36	2.94	3.20	3.04	2.99	3.14	3.06	
CoP 23	3.20	2.90	2.81	3.10	3.00	2.86	3.24	3.38	3.07	3.11	3.34	3.34	3.13	3.38	2.70	2.93	2.83	3.13	2.27	2.67	2.70	2.96	2.59	2.77	3.07	3.00	3.00	3.48	3.00	3.38	3.55	2.98	3.25	2.77	2.85	3.35	3.03	
CoP 24	2.50	2.67	3.20	3.17	3.00	3.00	2.83	3.17	4.17	3.17	3.67	3.33	3.00	3.33	2.33	3.20	2.17	3.67	2.33	2.83	2.60	2.80	1.80	2.83	2.50	3.17	3.20	3.17	3.33	3.83	3.67	2.92	3.33	2.74	2.72	3.50	3.02	
CoP 25	3.14	2.77	2.76	3.21	2.77	2.81	3.05	3.57	3.57	3.08	3.39	3.34	3.20	3.20	2.61	2.94	2.65	3.13	2.45	2.79	2.53	3.23	2.47	2.78	2.90	3.01	2.85	3.40	2.92	3.58	3.49	2.91	3.30	2.76	2.82	3.35	3.02	
CoP 26	3.10	2.82	2.88	2.92	2.81	2.82	3.12	3.52	3.21	3.07	3.13	2.93	2.94	2.91	2.80	2.86	2.98	3.07	2.92	2.76	2.75	3.06	2.45	2.80	3.03	3.02	2.88	3.13	2.87	3.19	3.28	2.89	3.10	2.93	2.84	3.12	2.97	
CoP 27	3.09	2.90	2.81	3.13	2.78	2.84	3.06	3.71	3.81	2.75	3.31	3.31	3.03	3.09	2.75	3.00	2.53	3.16	2.26	2.40	2.31	2.77	2.15	2.70	2.67	3.00	2.52	2.94	2.55	2.97	3.06	2.93	3.26	2.74	2.57	2.88	2.88	
CoP 28	2.75	2.25	2.75	3.00	3.00	3.50	3.25	3.25	3.50	2.75	3.00	3.25	2.75	2.75	3.00	3.00	2.75	3.75	2.00	3.00	2.50	2.50	2.25	2.25	2.50	3.25	2.50	2.50	3.00	3.00	2.88	3.06	2.90	2.59	2.94	2.86		
CoP 29	3.08	2.74	2.61	2.95	2.61	2.57	3.11	3.48	3.29	2.70	3.16	3.11	2.92	3.10	2.56	2.79	2.53	2.95	2.21	2.67	2.46	2.90	2.35	2.59	2.77	2.54	2.65	3.17	2.93	3.36	3.38	2.76	3.11	2.61	2.62	3.21	2.85	
CoP 30	3.03	2.72	2.75	2.81	2.48	2.66	2.86	3.38	3.55	2.90	3.38	3.10	3.00	3.14	2.72	3.03	2.76	3.48	2.21	2.54	2.21	2.86	2.21	2.29	2.69	2.93	2.61	2.83	2.69	3.00	2.86	2.74	3.16	2.84	2.54	2.84	2.83	
CoP 31	2.59	2.31	2.45	2.66	2.42	2.73	2.67	3.38	3.44	2.92	3.25	2.61	2.71	2.98	2.79	2.95	3.06	3.64	2.92	2.49	2.25	2.41	1.92	2.19	2.44	2.69	2.55	3.27	2.58	3.24	3.18	2.53	3.00	3.07	2.37	2.07	2.76	
CoP 32	3.00	2.50	2.50	2.75	3.25	3.00	2.25	2.75	3.00	2.25	3.00	2.50	3.25	2.25	2.25	2.75	2.25	3.25	1.50	3.00	2.67	2.33	2.00	2.75	2.00	2.25	3.00	4.00	3.75	3.25	3.25	2.83	2.66	2.40	2.50	3.56	2.73	
CoP 33	3.00	2.46	2.36	2.58	2.25	2.08	2.85	2.77	3.31	2.69	2.85	2.54	2.31	2.69	2.62	2.77	2.69	3.17	2.38	2.55	2.80	2.64	2.00	2.82	2.82	3.00	2.60	3.00	2.90	3.09	3.42	2.46	2.75	2.73	2.55	3.10	2.71	
CoP 34	3.00	2.22	2.56	2.56	2.58	3.11	3.25	3.55	3.42	2.63	3.11	3.16	2.89	2.63	2.70	2.79	2.47	3.00	2.11	2.59	2.17	2.63	2.06	2.47	2.44	2.59	2.19	3.00	2.68	2.79	2.59	2.67	3.08	2.61	2.39	2.77	2.71	
CoP 35	3.07	2.50	2.53	2.61	2.61	2.58	2.74	3.47	3.32	3.00	3.37	2.89	2.94	2.56	2.44	2.84	2.63	2.68	2.78	2.35	2.19	2.56	2.00	2.06	2.47	2.31	2.53	3.00	2.2					2.31	2.			