DISTRICT WISE DEMOGRAPHIC INDICATORS OF KARNATAKA

		Decadal Growth Rate (2001)			Birth Order 3 & above			Current users of Family Planning Methods			Girls Married below 18 years			Sex Ratio (2001)		
Sl. No.	Districts	%	Rank in India in 569 districts	Rank in Karnataka in 27 districts	%	Rank in India in 569 districts	Rank in Karnataka in 27 districts	%	Rank in India in 569 districts	Rank in Karnataka in 27 districts	%	Rank in India in 569 districts	Rank in Karnataka in 27 districts	Ratio	Rank in India in 569 districts	Rank in Karnataka in 27 districts
1	Bangalore(U)	34.80	534	26	26.10	69	8	60.10	131	17	37.00	294	16	906	408	26
2	Bangalore(R)	34.80	535	27	16.40	14	1	63.0	98	11	21.5	176	6	908	409	27
3	Chitradurga	15.05	134	18	34.40	149	18	59.9	134	19	30.5	241	10	955	213	20
4	Davanagere	14.78	130	14	34.40	147	15	59.9	133	18	30.5	240	9	951	232	21
5	Kolar	13.83	103	12	29.70	99	12	57.1	170	20	33.5	261	11	970	168	11
6	Shimoga	12.90	82	9	22.80	41	4	69.3	34	5	16.5	144	5	977	142	10
7	Tumkur	11.87	71	7	27.3	81	11	61.30	117	13	27.10	212	8	968	181	16
8	Belgaum	17.40	195	18	36.7	176	17	61.80	114	12	55.80	433	22	959	200	19
9	Bijapur	17.63	200	19	43.0	243	22	47.1	280	24	64.8	511	26	948	251	23
10	Bagalkote	18.84	235	20	43.0	242	21	47.1	279	23	64.8	510	25	977	141	9
11	Dharwad	16.65	174	17	37.4	191	20	61.2	120	16	36.5	288	14	948	253	24
12	Gadag	13.14	87	10	37.4	190	19	61.2	119	15	36.5	287	13	968	174	14
13	Haveri	13.29	94	11	37.4	188	18	61.2	118	14	36.5	286	12	942	283	25
14	U.Kannada	10.90	62	5	27.20	80	10	66.0	52	6	15.0	132	3	970	169	12
15	Bellary	22.30	311	24	48.6	323	23	50.4	251	22	44.2	358	18	969	171	13
16	Bidar	19.56	253	21	52.9	389	26	50.60	249	21	67.60	529	27	948	249	22
17	Gulbarga	21.02	283	22	53.70	408	27	39.20	359	27	47.70	376	19	964	189	18
18	Koppal	24.57	375	25	52.80	385	24	45.40	295	25	57.10	453	23	982	122	7
19	Raichur	22.08	305	23	52.8	387	25	45.40	296	26	57.10	454	24	980	131	8
20	Chikkamangalore	11.98	74	8	26.10	68	7	71.40	20	3	37.00	293	15	984	114	6
21	D.Kannada	14.51	124	13	32.00	128	14	63.70	84	10	4.50	35	2	1023	37	2
22	Udupi	6.88	24	1	32.00	127	13	63.70	83	9	4.50	34	1	1127	4	1
23	Hassan	9.66	51	4	19.10	26	3	75.1	10	1	15.2	133	4	1005	65	3
24	Kodagu	11.64	69	6	18.80	19	2	70.60	27	4	22.00	180	7	998	87	4
25	Mandya	7.14	27	2	26.10	70	9	71.70	18	2	37.00	295	17	985	111	5
26	Mysore	15.04	133	15	23.90	50	6	65.4	61	8	47.90	379	21	965	185	17
27	Chamarajanagar	9.16	47	3	23.90	49	5	65.4	60	7	47.90	378	20	968	175	15

DISTRICT WISE DEMOGRAPHIC INDICATORS OF KARNATAKA

		Safe Delivery			Complete Immunisation			Female Literacy Rate (2001)			Villages not connected with pucca road (2000-01)			Estimated Coverage of safe drinking water (2000)		
Sl. No.	Districts	%	Rank in India in 569 districts	Rank in Karnataka in 27 districts	%	Rank in India in 569 districts	Rank in Karnataka in 27 districts	%	Rank in India in 569 districts	Rank in Karnataka in 27 districts	%	Rank in India in 569 districts	Rank in Karnataka in 27 districts	%	Rank in India in 569 districts	Rank in Karnataka in 27 districts
1	Bangalore(U)	90.60	41	3	77.70	139	16	78.98	29	1	0.00	64	11	67.56	320	8
2	Bangalore(R)	79.10	92	7	83.70	96	14	78.98	30	2	0.00	65	12	71.30	288	4
3	Chitradurga	53.80	233	21	88.40	65	9	54.62	261	15	0.00	58	10	72.62	281	3
4	Davanagere	53.80	231	20	88.40	63	8	58.45	209	11	0.00	26	3	72.62	280	2
5	Kolar	59.20	202	18	90.60	48	6	52.81	289	16	23.10	208	27	74.00	275	1
6	Shimoga	83.00	70	5	92.90	30	2	67.24	111	7	4.67	134	21	54.60	437	18
7	Tumkur	63.50	183	16	88.00	66	10	57.18	226	13	21.47	201	26	66.59	335	12
8	Belgaum	68.60	150	12	64.80	226	20	52.53	296	18	0.00	42	6	52.94	452	21
9	Bijapur	50.10	253	24	53.20	315	22	46.19	380	21	0.00	20	2	60.42	402	15
10	Bagalkote	50.10	252	23	53.20	314	21	44.10	404	23	0.00	7	1	60.42	401	14
11	Dharwad	65.30	172	15	74.80	162	19	62.20	157	9	0.00	55	9	67.18	328	11
12	Gadag	65.30	170	14	74.80	161	18	52.58	295	17	0.00	45	7	67.18	327	10
13	Haveri	65.30	169	13	74.80	160	17	57.60	220	12	0.00	28	5	67.18	326	9
14	U.Kannada	86.10	54	4	89.90	57	7	68.48	91	6	18.55	191	25	24.89	543	25
15	Bellary	54.00	229	19	52.60	320	23	46.16	381	22	0.00	27	4	69.41	301	5
16	Bidar	52.50	237	22	50.30	336	24	50.01	328	20	2.86	123	20	49.84	471	23
17	Gulbarga	47.70	262	27	25.30	494	27	38.40	471	26	0.65	113	19	51.92	456	22
18	Koppal	48.00	258	25	37.20	418	25	40.76	441	25	12.32	174	23	53.91	442	19
19	Raichur	48.00	260	26	37.20	419	26	36.84	484	27	12.32	175	24	53.91	443	20
20	Chikkamangalore	78.00	97	8	83.50	97	15	64.47	135	8	4.97	136	22	57.25	424	17
21	D.Kannada	91.50	38	2	86.00	78	13	77.39	34	3	0.00	78	16	16.49	557	27
22	Udupi	91.50	37	1	86.00	77	12	74.02	49	4	0.00	70	15	16.49	556	26
23	Hassan	69.70	145	11	92.80	31	3	59.32	200	10	0.00	88	18	65.55	351	13
24	Kodagu	79.40	90	6	94.80	17	1	72.53	63	5	0.00	85	17	36.95	524	24
25	Mandya	61.90	185	17	88.00	67	11	51.62	306	19	0.00	69	14	58.65	417	16
26	Mysore	69.70	144	10	92.70	34	5	55.81	246	14	0.00	67	13	68.16	315	7
27	Chamarajanagar	69.70	143	9	92.70	33	4	43.02	419	24	0.00	53	8	68.16	314	6

DISTRICT WISE DEMOGRAPHIC INDICATORS OF KARNATAKA

		Births registered			Deaths registered			Composite Index		
Sl. No.	Districts	%	Rank in India in 589 districts	Rank in Karnataka in 27 districts	%	Rank in India in 589 districts	Rank in Karnataka in 27 districts	%	Rank in India in 589 districts	Rank in Karnataka in 27 districts
1	Bangalore(U)	86.87	145	19	91.17	42	18	75.19	73	10
2	Bangalore(R)	64.88	284	24	82.03	79	19	75.34	72	9
3	Chitradurga	93.84	82	7	95.11	23	9	73.98	84	11
4	Davanagere	50.58	316	27	32.27	371	27	65.43	173	21
5	Kolar	84.01	154	20	95.11	15	1	71.92	106	16
6	Shimoga	93.84	88	13	95.11	29	15	80.37	29	2
7	Tumkur	90.58	119	18	94.66	31	17	73.97	85	12
8	Belgaum	93.84	80	5	95.11	21	7	68.75	135	18
9	Bijapur	93.84	78	3	95.11	19	5	62.86	206	22
10	Bagalkote	54.77	307	26	34.95	358	26	54.71	299	26
11	Dharwad	93.84	81	6	95.11	22	8	73.03	96	13
12	Gadag	93.10	103	15	59.42	207	21	69.72	124	17
13	Haveri	62.93	276	25	40.17	321	25	65.66	170	19
14	U.Kannada	93.84	85	10	95.11	26	12	76.11	61	5
15	Bellary	93.84	79	4	95.11	20	6	65.54	171	20
16	Bidar	91.10	115	17	95.11	18	4	60.55	230	23
17	Gulbarga	92.70	105	16	95.11	16	2	58.31	255	25
18	Koppal	75.82	202	23	48.39	258	24	53.09	323	27
19	Raichur	93.84	77	2	95.11	17	3	58.34	253	24
20	Chikkamangalore	79.44	181	22	50.70	240	23	72.13	102	15
21	D.Kannada	93.84	86	11	95.11	27	13	78.77	41	4
22	Udupi	81.56	167	21	52.05	233	22	75.97	64	6
23	Hassan	93.84	89	14	95.11	30	16	81.55	25	1
24	Kodagu	93.84	87	12	95.11	28	14	80.06	30	3
25	Mandya	93.84	84	9	95.11	25	11	75.86	66	7
26	Mysore	93.84	83	8	95.11	24	10	75.70	68	8
27	Chamarajanagar	93.84	76	1	59.89	205	20	72.18	101	14

Source: National Population Commmission

HIN India Annex III - Project Budget

Implementing Partner: WHO
Project Title: Health InterNetwork, India Pilot

Start Date: 07/01/01
Completion Date: 12/31/02
Agency Project ID code:
IMIS Project ID:
UNFIP Project Reference No.: WHO-GLO-00-15OB

Revision: [ ] (Explain reason for revision, i.e., "new start date", "extension", etc.)

Project Budget

CCAQ codes	UNDP codes	Project Budget Lines	Object of Expenditure	I Total		II Year 1		III Year 2		IV Year 3		V Year 4	
				Work-months	US$	Work-months	US$	Work-months	US$	Work-months	US$	Work-months	US$
		1	**Salaries**										
011	11	a	International Professionals	0	0	0	0	0	0	0	0	0	-
040/060	12	b	Consultants	4	5,200	1	1,300	3	3,900	0	0	0	-
030	18	c	National Professionals	18	64,500	6	21,500	12	43,000	0	0	0	-
330	15	d	UN Volunteers	0	0	0	0	0	0	0	0	0	-
030	14	e	Administrative assistants	18	15,500	6	5,200	12	10,300	0	0	0	-
			Total	40	85,200	13	28,000	27	57,200	0	0	0	0
		2	**Travel**										
[illegible]	16		Evaluation		8,700		4,200		4,500		0		-
[illegible]2	17		Other mission travel		99,000		85,400		13,600		0		-
			Total		107,700		89,600		18,100		0		0
		3	**Contractual services**										
360	21		International				0		0		0		-
370	21		National		183,200		131,000		52,200		0		-
300	22		Total		183,200		131,000		52,200		0		0
		4	**Meetings and training**										
810	32		Fellowships		0		0		0		0		-
820	33		Seminars, workshops, meetings		61,100		28,900		32,200		0		-
			Total		61,100		28,900		32,200		0		0
		5	**Acquisitions**										
620	45	a	IT equipment		237,400		237,400		0		0		-
640	45	b	Transport equipment		2,500		2,500		0		0		-
	45	c	Other acquisitions		1,100		1,100		0		0		-
600	49		Total		241,000		241,000		0		0		0
830	79	6	**Grants**		0		0		0		0		-
			Total		0		0		0		0		0
		7	**Miscellaneous**										
350	53		Reporting costs		10,000		600		9,400		0		-
[illegible]00	53		Supplies		18,100		9,800		8,300		0		-
[illegible]0	53		Sundry		12,700		6,300		6,400		0		-
			Total		40,800		16,700		24,100		0		0
	99	8	**Total Project Cost**		719,000		535,200		183,800		0		0
		9	Support Cost @ 5%		35,950		26,760		9,190		0		0
		10	**UNF Contribution Total**		754,950		561,960		192,990		0		0
		11	**Cost Sharing**		0								
		12	**Grand Total**		754,950		561,960		192,990		0		0

Notes:

1. All line items should be rounded off to the nearest hundred dollar or nearest dollar, as applicable.
2. Each line item should have detailed supporting justification and/or information.
3. Operating Expenses include bank charges, expendable office supplies, telephone lines/fax charges, freight, etc.
4. Training includes workshops, seminars, fellowships and similar activities.
5. "UNF Contribution Total" comprises cost sharing provided through UNFIP

Use this sheet for one agency. See "Project total" sheet for more guidance

Implementing Partner: (Name of agency for this portion of grant)
Project Title: Health InterNetwork, India Pilot

Start Date: 37073
Completion Date: 37621
Revision: [ ] (Explain reason for revision, i.e., "new start date", "extension", etc.)

Agency Project ID code: (Enter specific agency project number)
IMIS Project ID: 0
UNFIP Project Reference No.: WHO-GLO-00-15OB

Project Budget

CCAQ codes	UNDP codes	Project Budget Lines	Object of Expenditure	I Total		II Year 1		III Year 2		IV Year 3		V Year 4	
				Work-months	US$	Work-months	US$	Work-months	US$	Work-months	US$	Work-months	US$
		1	**Salaries**										
011	11.01	a	International Professionals	0	0								
040/060	11.99	b	Consultants	0	0								
030	17.99	c	National Professionals	0	0								
330	14.99	d	UN Volunteers	0	0								
030	13.99	e	Administrative assistants	0	0								
			Total	0	0	0	0	0	0	0	0	0	0
		2	**Travel**										
[illegible]	15.99		Evaluation		0								
242	16.99		Other mission travel		0								
			Total	0		0		0		0		0	
		3	**Contractual services**										
360	21.01		International		0								
370	21.02		National		0								
300	21.99		Total	0		0		0		0		0	
		4	**Meetings and training**										
810	31.99		Fellowships		0								
820	32.99		Seminars, workshops, meetings		0								
			Total	0		0		0		0		0	
		5	**Acquisitions**										
620	45.01	a	IT equipment		0								
640	45.02	b	Transport equipment		0								
	45.03	c	Other acquisitions		0								
600	49		Total	0		0		0		0		0	
830	79	6	**Grants**		0								
			Total	0		0		0		0		0	
		7	**Miscellaneous**										
350	52.99		Reporting costs		0								
[illegible]	53.01		Supplies		0								
[illegible]	53.02		Sundry		0								
			Total	0		0		0		0		0	
	99	8	**Total Project Cost**	0		0		0		0		0	
		9	Support Cost @ 5%	0		0		0		0		0	
		10	**UNF Contribution Total**	0		0		0		0		0	
		11	**Cost Sharing**	0									
		12	**Grand Total**	0		0		0		0		0	

Notes:

1. All line items should be rounded off to the nearest hundred dollar or nearest dollar, as applicable.
2. Each line item should have detailed supporting justification and/or Information.
3. Operating Expenses include bank charges, expendable office supplies, telephone lines/fax charges, freight, etc...
4. Training includes workshops, seminars, fellowships and similar activities
5. "UNF Contribution Total" comprises cost sharing provided through UNFIP

Use this sheet for one agency. See "Project total" sheet for more guidance

Implementing Partner: (Name of agency for this portion of grant)
Project Title: Health InterNetwork, India Pilot

Start Date: 37073
Completion Date: 37621
Revision: (Explain reason for revision, i.e., "new start date", "extension", etc.)

Agency Project ID code: (Enter specific agency project number)
IMIS Project ID: 0
UNFIP Project Reference No.: WHO-GLO-00-15OB

Project Budget

CCAQ codes	UNDP codes	Project Budget Lines	Object of Expenditure	I Total Work-months	I Total US$	II Year 1 Work-months	II Year 1 US$	III Year 2 Work-months	III Year 2 US$	IV Year 3 Work-months	IV Year 3 US$	V Year 4 Work-months	V Year 4 US$
		1	**Salaries**										
011	11.01	a	International Professionals	0	0								
040/060	11.96	b	Consultants	0	0								
030	17.99	c	National Professionals	0	0								
330	14.99	d	UN Volunteers	0	0								
030	13.99	e	Administrative assistants	0	0								
			Total	0	0	0	0	0	0	0	0	0	0
		2	**Travel**										
230	15.99		Evaluation		0								
242	16.99		Other mission travel		0								
			Total		0		0		0		0		0
		3	**Contractual services**										
360	21.01		International		0								
370	21.02		National		0								
300	21.99		Total		0		0		0		0		0
		4	**Meetings and training**										
810	31.99		Fellowships		0								
820	32.99		Seminars, workshops, meetings		0								
			Total		0		0		0		0		0
		5	**Acquisitions**										
520	45.01	a	IT equipment		0								
540	45.02	b	Transport equipment		0								
	45.03	c	Other acquisitions		0								
600	49		Total		0		0		0		0		0
830	79	6	**Grants**		0								
			Total		0		0		0		0		0
		7	**Miscellaneous**										
350	52.99		Reporting costs		0								
500	53.01		Supplies		0								
400	53.02		Sundry		0								
			Total		0		0		0		0		0
	99	8	**Total Project Cost**		0		0		0		0		0
		9	Support Cost @ 5%		0		0		0		0		0
		10	**UNF Contribution Total**		0		0		0		0		0
		11	**Cost Sharing**		0								
		12	**Grand Total**		0		0		0		0		0

Notes:

1. All line items should be rounded off to the nearest hundred dollar or nearest dollar, as applicable.
2. Each line item should have detailed supporting justification and/or information.
3. Operating Expenses include bank charges, expendable office supplies, telephone lines/fax charges, freight, etc....
4. Training includes workshops, seminars, fellowships and similar activities.
5. "UNF Contribution Total" comprises cost sharing provided through UNFIP

Use this sheet for one agency. See "Project total" sheet for more guidance

Implementing Partner: (Name of agency for this portion of grant)
Project Title: Health InterNetwork, India Pilot

Start Date: 37073
Completion Date: 37621
Revision: [ ] (Explain reason for revision, i.e., "new start date", "extension", etc.)

Agency Project ID code: (Enter specific agency project number)
IMIS Project ID: 0
UNFIP Project Reference No.: WHO-GLO-00-15OB

Project Budget

CCAQ codes	UNDP codes	Project Budget Lines	Object of Expenditure	I Total		II Year 1		III Year 2		IV Year 3		V Year 4	
				Work-months	US$	Work-months	US$	Work-months	US$	Work-months	US$	Work-months	US$
		1	**Salaries**										
011	11.01	a	International Professionals	0	0								
040/060	11.99	b	Consultants	0	0								
030	17.99	c	National Professionals	0	0								
330	14.99	d	UN Volunteers	0	0								
030	13.99	e	Administrative assistants	0	0								
			Total	0	0	0	0	0	0	0	0	0	0
		2	**Travel**										
230	15.99		Evaluation		0								
242	16.99		Other mission travel		0								
			Total		0		0		0		0		0
		3	**Contractual services**										
360	21.01		International		0								
370	21.02		National		0								
300	21.99		Total		0		0		0		0		0
		4	**Meetings and training**										
810	31.99		Fellowships		0								
820	32.99		Seminars, workshops, meetings		0								
			Total		0		0		0		0		0
		5	**Acquisitions**										
620	45.01	a	IT equipment		0								
640	45.02	b	Transport equipment		0								
	45.03	c	Other acquisitions		0								
600	49		Total		0		0		0		0		0
830	79	6	**Grants**		0								
			Total		0		0		0		0		0
		7	**Miscellaneous**										
350	52.99		Reporting costs		0								
500	53.01		Supplies		0								
400	53.02		Sundry		0								
			Total		0		0		0		0		0
	99	8	**Total Project Cost**		0		0		0		0		0
		9	Support Cost @ 5%		0		0		0		0		0
		10	**UNF Contribution Total**		0		0		0		0		0
		11	**Cost Sharing**		0								
		12	**Grand Total**		0		0		0		0		0

Notes:

1. All line items should be rounded off to the nearest hundred dollar or nearest dollar, as applicable
2. Each line item should have detailed supporting justification and/or information.
3. Operating Expenses include bank charges, expendable office supplies, telephone lines/fax charges, freight, etc.
4. Training includes workshops, seminars, fellowships and similar activities.
5. "UNF Contribution Total" comprises cost sharing provided through UNFIP

Use this sheet for one agency. See "Project total" sheet for more guidance

Implementing Partner: (Name of agency for this portion of grant)
Project Title: Health InterNetwork, India Pilot

Start Date: 37073
Completion Date: 37621
Revision: [ ] (Explain reason for revision, i.e., "new start date", "extension", etc.)
Agency Project ID code: (Enter specific agency project number)
IMIS Project ID: 0
UNFIP Project Reference No.: WHO-GLO-00-15OB

Project Budget

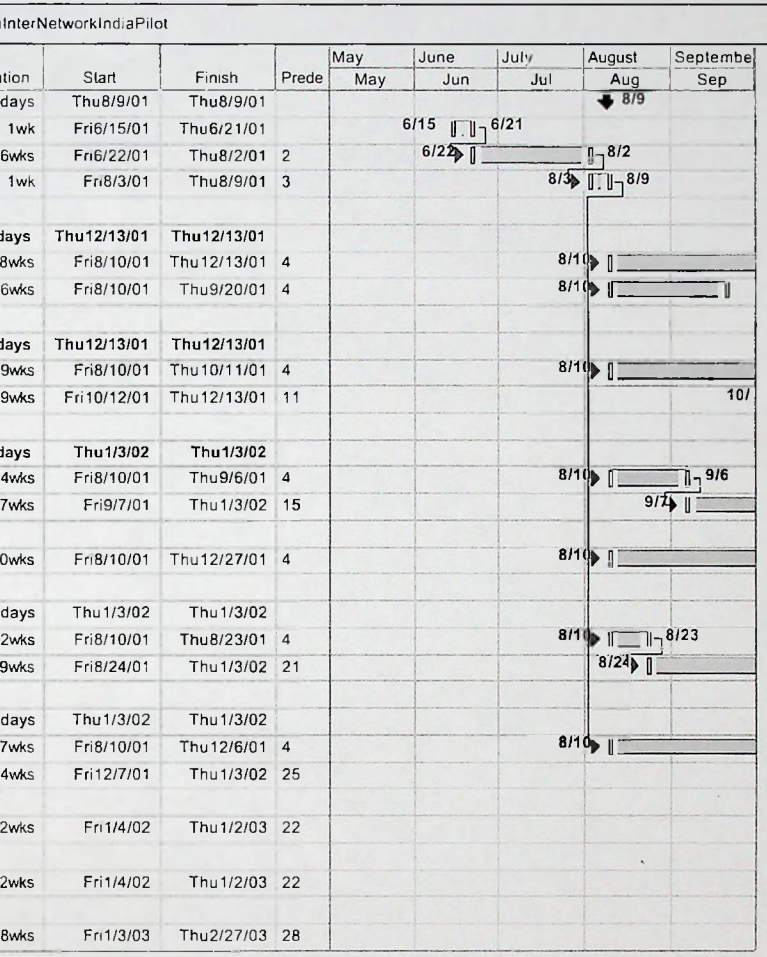
CCAQ codes	UNDP codes	Project Budget Lines	Object of Expenditure	I Total		II Year 1		III Year 2		IV Year 3		V Year 4	
				Work-months	US$	Work-months	US$	Work-months	US$	Work-months	US$	Work-months	US$
		1	**Salaries**										
011	11.01	a	International Professionals	0	0								
040/060	11.96	b	Consultants	0	0								
030	17.99	c	National Professionals	0	0								
330	14.99	d	UN Volunteers	0	0								
030	13.99	e	Administrative assistants	0	0								
			Total	0	0	0	0	0	0	0	0	0	0
		2	**Travel**										
230	15.99		Evaluation		0								
2[illegible]	16.99		Other mission travel		0								
			Total		0	0		0		0		0	
		3	**Contractual services**										
360	21.01		International		0								
370	21.02		National		0								
300	21.99		Total		0	0		0		0		0	
		4	**Meetings and training**										
810	31.99		Fellowships		0								
820	32.99		Seminars, workshops, meetings		0								
			Total		0	0		0		0		0	
		5	**Acquisitions**										
620	45.01	a	IT equipment		0								
640	45.02	b	Transport equipment		0								
	45.03	c	Other acquisitions		0								
600	45		Total		0	0		0		0		0	
830	79	6	**Grants**		0								
			Total		0	0		0		0		0	
		7	**Miscellaneous**										
350	52.99		Reporting costs		0								
500	53.01		Supplies		0								
400	53.02		Sundry		0								
			Total		0	0		0		0		0	
	99	8	**Total Project Cost**		0	0		0		0		0	
		9	Support Cost @ 5%		0	0		0		0		0	
		10	**UNF Contribution Total**		0	0		0		0		0	
		11	**Cost Sharing**		0								
		12	**Grand Total**		0	0		0		0		0	

Notes:

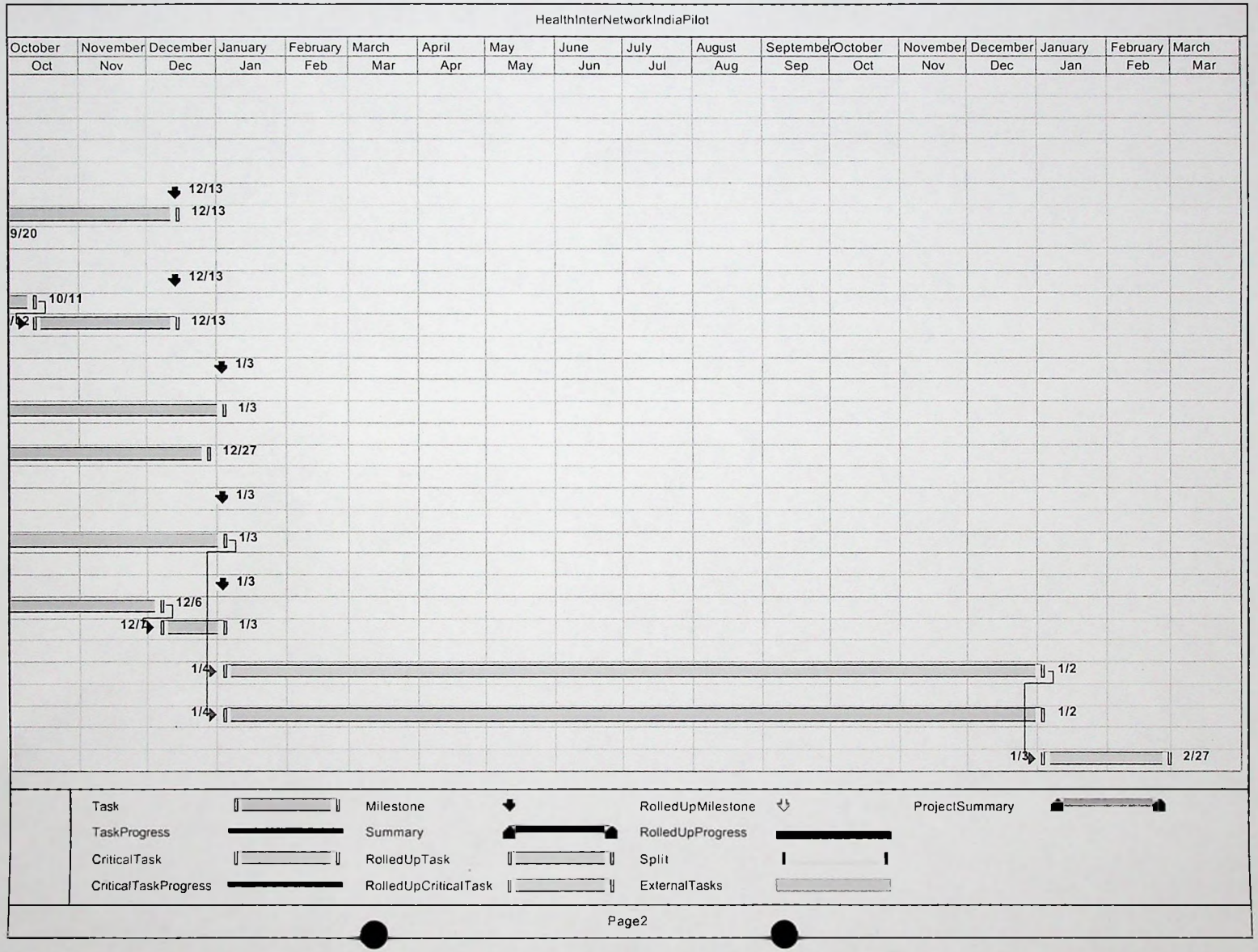
1. All line items should be rounded off to the nearest hundred dollar or nearest dollar, as applicable.
2. Each line item should have detailed supporting justification and/or information.
3. Operating Expenses include bank charges, expendable office supplies, telephone lines/fax charges, freight, etc.
4. Training includes workshops, seminars, fellowships and similar activities.
5. "UNF Contribution Total" comprises cost sharing provided through UNFIP

HealthInterNetworkIndiaPilot

ID	TaskName	Duration	Start	Finish	Prede
1	**Projectworkplan**	0days	Thu8/9/01	Thu8/9/01	
2	Define and identify main stakeholders, reference sites and access poi	1wk	Fri6/15/01	Thu6/21/01	
3	Conduct detailed needs assessments at sites and determine requirem	6wks	Fri6/22/01	Thu8/2/01	2
4	Developworkplan(includingworkshopwithkeystakeholders)	1wk	Fri8/3/01	Thu8/9/01	3
5					
6	**HealthResearchInformationSystem**	0days	Thu12/13/01	Thu12/13/01	
7	Network key research institutions related to tuberculosis and tobacco	18wks	Fri8/10/01	Thu12/13/01	4
8	Develop processes and templates for dissemination of research (inclu	6wks	Fri8/10/01	Thu9/20/01	4
9					
10	**NetworkMedicalCollegeLibraries**	0days	Thu12/13/01	Thu12/13/01	
11	Review and adapt system for developing integrated Virtual Health Lib	9wks	Fri8/10/01	Thu10/11/01	4
12	Network medical college libraries in reference states with National M	9wks	Fri10/12/01	Thu12/13/01	11
13					
14	**Electronicpublishingofkeyjournalsandotherkeyinformation.**	0days	Thu1/3/02	Thu1/3/02	
15	Establishcontentselectioncriteria,standardsandprocesses	4wks	Fri8/10/01	Thu9/6/01	4
16	e-publishing of selected journals and other key information (national	17wks	Fri9/7/01	Thu1/3/02	15
17					
18	**Userinterfacedevelopment**	20wks	Fri8/10/01	Thu12/27/01	4
19					
20	**Connectivityandinfrastructureataccesspoints**	0days	Thu1/3/02	Thu1/3/02	
21	Establishtechnicalspecifications,standardsandprocess	2wks	Fri8/10/01	Thu8/23/01	4
22	Establishconnectivity(hardware,software,internetconnectivity)	19wks	Fri8/24/01	Thu1/3/02	21
23					
24	**Training/development**	0days	Thu1/3/02	Thu1/3/02	
25	Developtrainingmodules	17wks	Fri8/10/01	Thu12/6/01	4
26	Conductinitialtrainingprogramsatsites	4wks	Fri12/7/01	Thu1/3/02	25
27					
28	**Ongoingprojectmanagementandsupport**	52wks	Fri1/4/02	Thu1/2/03	22
29					
30	**Trainingupdatesduringpilot**	52wks	Fri1/4/02	Thu1/2/03	22
31					
32	**Pilotevaluation**	8wks	Fri1/3/03	Thu2/27/03	28



Task
TaskProgress
CriticalTask
CriticalTaskProgress
Milestone
Summary
RolledUpTask
RolledUpCriticalTask
RolledUpMilestone
RolledUpProgress
Split
ExternalTasks
ProjectSummary


HealthInterNetworkIndiaPilot
October November December January February March April May June July August September October November December January February March
Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar
12/13
12/13
9/20
12/13
10/11
12/13
1/3
1/3
12/27
1/3
1/3
1/3
12/6
1/3
1/4
1/2
1/4
1/2
1/3
2/27
Task
TaskProgress
CriticalTask
CriticalTaskProgress
Milestone
Summary
RolledUpTask
RolledUpCriticalTask
RolledUpMilestone
RolledUpProgress
Split
ExternalTasks
ProjectSummary
Page2

Subject: Thank You RE: Health Internetwork Meeting at NTI Banglore
Date: Mon, 8 Oct 2001 12:44:18 +0530
From: Dwivedi R <dwivedir@npsuindia.org>
To: "'Jagota (E-mail)'" <ntiindia@blr.vsnl.net.in>,
"'Nirmala Murthy (E-mail)'" <frhsblr@bgl.vsnl.net.in>,
"'Thelma Narayan (E-mail)'" <sochara@vsnl.com>,
"'S Sadagopan (E-mail)'" <ss@iiitb.ac.in>,
"'Sudha Murthy (E-mail)'" <ntiindia@blr.vsnl.net.in>,
"'slc@indegene.com'" <slc@indegene.com>

Dear all,

Thank you very much taking out the time fir the meeting and your valuable thoughts/ suggestions/ comments

Will keep you posted with the developments, which should move quickly now.

Best Regards,

Ranjan

-----Original Message-----
From: Dwivedi R
Sent: Thursday, October 04, 2001 5:19 PM
To: Jagota (E-mail); Nirmala Murthy (E-mail); Thelma Narayan (E-mail); S Sadagopan (E-mail); Sudha Murthy (E-mail); 'slc@indegene.com'
Subject: Health Internetwork-Meeting at NTI Banglore,

Dear All,
The Agenda for the meeting at the National Tuberculosis Institute, Bangalore on Oct 5, at 2p.m. is mentioned below-
1. Initial Understanding of the scope of the pilot.
2. Preparatory next steps.
3. Listing of institutions and resource persons for different project components
4. Any other matter.
Looking forward to the meeting
Best regards,
Ranjan
Note: Some of the members would be joining later

Ranjan Dwivedi
Project Manager- Health InterNetwork India Project
World Health Organization
Rm 530 'A' Wing, Nirman Bhawan, New Delhi
India-110011

Phone: +91(11) 4366375
Mobile: +91 9810505068

For office team
This is a new initiative called Health-Inter-Network (HIN) a pilot research project initiated by WHO-SEARO
? Research file
JN 9/10/01

TO BY JN 9/x/01

HEALTH INTERNETWORK INITIATIVE
TECHNOLOGY ADVISORY WORKSHOP

Date: October 10-11, 2001

Venue: Pan American Health Organization / World Health Organization
525 Twenty-third Street, N.W.
Washington, D.C. 20037
USA

The Health InterNetwork Initiative

In September 2000 UN Secretary-General, Kofi Annan, launched the Health InterNetwork as a partnership to bridge the digital divide in health. Led by the World Health Organization, the Health InterNetwork (HIN) brings together international agencies, the private sector, foundations, non-governmental organizations and country partners under the principle of ensuring equitable access to health information. The aim of the initiative is to improve public health by improving the information environment of health personnel: health-care providers, researchers and scientists, and policy makers. The core elements of the initiative are content, connectivity, and capacity building.

The Health InterNetwork site will help users find, organize, and share information for public health. The information itself is produced and managed by different content providers around the world. Users will be able to access statistical data, scientific publications and information for health policy and practice, as far as possible in their own language. In addition, the site will make available a range of health information technology applications such as geographical information systems and epidemiological tools, as well as courses and training offered through distance learning. Particular attention will be given to the production and publishing of local and regional health-related information that is currently unavailable electronically.

1. Objectives of the Technology Advisory Workshop

The overall goal is to review technology options and provide recommendations for the development and deployment of the Health InterNetwork site.

1. Examine user scenarios, requirements, architecture, hardware and software platforms, development process and software tools and resources, knowledge/content management, connectivity implications and other technology-related issues which will impact site development and use.

2. Consider implications, risks and potential cost and time requirements for recommended options.

3. Issues for Discussion by Workshop Participants

User and content requirements - Characteristics of the data in each content area; global and local user requirements; and language implications.

Processes - Syndication of content from major content providers; publishing of local content; authentication processes for restricted information; search, retrieval, and display requirements; meta-data in building community and collaborative environments; site architecture, navigation, and user interface design; development options and associated implications, risks, and costs; updates and maintenance issues.

Hardware options – Server platform; user devices; hardware options and constraints; maintenance logistics; costs, risks, and implications.

Software options – user device operating system, internet browser, email package, office suite; proprietary and non-proprietary design tools; knowledge management tools; search engines; databases; scalability; developer's toolkits; management interfaces; proprietary and non-proprietary applications for public health, authoring, distance education, statistical packages, logistical support of health services operations, peer-to-peer interactivity, etc; security

Connectivity - Constraints at country level e.g. spectrum of options to access the functionalities limited by existing telecommunication infrastructure, service level of local ISP, and last-mile issues.

Technology resources - Identification of companies, experts, international and national organizations, key national partners, academic institutions who could contribute to HIN project.

4. Participants List - tentative

(See attachment)

5. Background information on the Health InterNetwork Initiative

(See attachment)

project. net - equap

HEALTH INTERNETWORK INITIATIVE
TECHNOLOGY ADVISORY WORKSHOP

Date: October 10-11, 2001

Venue: Pan American Health Organization / World Health Organization
525 Twenty-third Street, N.W.
Washington, D.C. 20037
USA

The Health InterNetwork Initiative

In September 2000 UN Secretary-General, Kofi Annan, launched the Health InterNetwork as a partnership to bridge the digital divide in health. Led by the World Health Organization, the Health InterNetwork (HIN) brings together international agencies, the private sector, foundations, non-governmental organizations and country partners under the principle of ensuring equitable access to health information. The aim of the initiative is to improve public health by improving the information environment of health personnel: health-care providers, researchers and scientists, and policy makers. The core elements of the initiative are content, connectivity, and capacity building.

The Health InterNetwork site will help users find, organize, and share information for public health. The information itself is produced and managed by different content providers around the world. Users will be able to access statistical data, scientific publications and information for health policy and practice, as far as possible in their own language. In addition, the site will make available a range of health information technology applications such as geographical information systems and epidemiological tools, as well as courses and training offered through distance learning. Particular attention will be given to the production and publishing of local and regional health-related information that is currently unavailable electronically.

1. Objectives of the Technology Advisory Workshop

The overall goal is to review technology options and provide recommendations for the development and deployment of the Health InterNetwork site.

1. Examine user scenarios, requirements, architecture, hardware and software platforms, development process and software tools and resources, knowledge/content management, connectivity implications and other technology-related issues which will impact site development and use.

2. Consider implications, risks and potential cost and time requirements for recommended options.

3. Outline strategy for site design, development, hosting, and testing, including phases, timeline, milestones, priorities, partners, and options.

4. Generate list of technology-related resources (products, corporations, institutions, and individuals) for planning and resource commitment and to involve in follow-up activities.

2. Proposed Content Areas

The particular strength and added value of the HIN site will be the rapid access to quality assured public health information from multiple sources, as well as support for local and locally/regionally-produced information – no site offers these features today. Earlier this year a working group identified five content areas for the Health InterNetwork.

Content areas

Statistical Data	Scientific Publications	Information Collections	Distance Education	Health IT Applications
Numerical information sets - can include raw, analyzed, validated data	*Peer-reviewed primary scientific literature, and its reviews and indexes*	*Information packages, created for specific public health audiences and purposes*	*Professional and continuing education and training packages*	*ICT tools for public health policy and practice*
Official (international organization, national government) data and statistics	Published scientific research (*may be priced*)	Policies, reports, guidelines, protocols, reference material, and authoritative health communication material	Courses and training products for health professionals at all levels	Communication, networking, and publication tools inc. communities of practice applications
Epidemiological, statistical, program data from different sources	Major databases (e.g. bibliographic, evidence compendia), text books and manuals	"Gray" literature and other publications	Programmed instruction products	Public health work applications (e.g. Geographical Information Systems, statistical packages, training and diagnostic tools, telemedicine)

3. Issues for Discussion by Workshop Participants

User and content requirements - Characteristics of the data in each content area; global and local user requirements, and language implications.

Processes - Syndication of content from major content providers; publishing of local content; authentication processes for restricted information; search, retrieval, and display requirements; meta-data in building community and collaborative environments; site architecture, navigation, and user interface design, development options and associated implications, risks, and costs; updates and maintenance issues.

Hardware options – Server platform, user devices, hardware options and constraints; maintenance logistics; costs, risks, and implications.

Software options – user device operating system, internet browser, email package, office suite; proprietary and non-proprietary design tools; knowledge management tools; search engines, databases; scalability; developer's toolkits; management interfaces; proprietary and non-proprietary applications for public health, authoring, distance education, statistical packages, logistical support of health services operations, peer-to-peer interactivity, etc; security

Connectivity - Constraints at country level e.g. spectrum of options to access the functionalities limited by existing telecommunication infrastructure, service level of local ISP, and last-mile issues

Technology resources - Identification of companies, experts, international and national organizations, key national partners, academic institutions who could contribute to HIN project.

4. Participants List - tentative

(See attachment)

5. Background information on the Health InterNetwork Initiative

(See attachment)

UNF/UNFIP Project Document

Health InterNetwork (India Pilot)

12 June 2001

World Health Organization

• Pl. start a resource file
"Health Inter-Network."
HIN – India pilot
WHO/UNF
• I am part of the sounding board
15/10/01 • Keep file in the office at the moment.

Health InterNetwork (India Pilot)
Project document

1.0 Cover Page

▪ Project title:	Health InterNetwork (India Pilot)
▪ Project number:	WHO-GLO-00-150B
▪ Project purpose:	To test scalable, sustainable approaches to bridging the digital divide in health information and the gaps between health research, policy and practice
▪ Duration:	18 months
▪ Expected start date:	1 July 2001
▪ Location:	India, 2 states: Orissa – Deogarh district; Karnataka – Bangalore rural district
▪ Lead UN agency:	World Health Organization (WHO country office, New Delhi)
▪ UN cooperating agencies	UNDP and UNICEF country offices in India
▪ Non-UN executing partners:	*National:* Ministry of Health and Family Welfare, Ministry of Information Technology, National Tuberculosis Institute, Tata Institute of Social Sciences, Bharat Electronics Ltd., private corporations (e.g. NIIT, TCS, Indegene Life Systems, 2 Streams Media), and NGOs (e.g. Sochara) *International:* Harvard Center for International Development and MIT Media Lab, Cornell University, BIREME, Collexis Corp., Project.net Inc.
▪ Total budget:	US$ 754,950
▪ UNF funding:	US$ 754,950 (incl. 5% programme support costs)
▪ Summary project description:	- Facilitate an Internet-based network of health service providers, researchers, and policy makers in the tuberculosis and tobacco control programs - Provide and test content, connectivity and training options to enable optimal use of this network - Enhance the capacity of local research institutions and medical libraries to support and scale up the Health InterNetwork

I. Background and Analysis

2.0 Problem Statement/ Challenge/ Context

The Health InterNetwork Project

In September 2000, the UN Secretary-General launched a public-private initiative to bridge the digital divide in health. Led by the World Health Organization, the *Health InterNetwork* brings together international agencies, the private sector, foundations, non-governmental organizations and country partners under the principle of ensuring *equitable access to health information*. The aim is to improve public health by facilitating the flow of health information, using the Internet. Health information – relevant, timely and appropriate – must become unrestricted and affordable worldwide, so that all communities can benefit from this global public good.

The focus of the Health InterNetwork (HIN) is on improving the information environment of health personnel: professionals, researchers and scientists, and policy makers. The core elements of the project are *content*, *connectivity* and *capacity building*.

I. Content: to deliver effective public health services

An Internet portal will provide a shortcut to high-quality, relevant and current information on public health. Users will be able to access statistical data, scientific publications and information for health policy and practice, as far as possible in their own language. In addition the portal will make available a range of information technology health applications such as geographical information systems and epidemiological tools, as well as courses and training offered through distance learning. Particular attention will be given to the production and publishing of local and regional public health information that is currently unavailable electronically.

II. Connectivity: for information and communication

Starting on a small scale with 6-8 pilot projects and rolling out over a 7-year period, the Health InterNetwork seeks to establish and equip up to 10,000 Internet-connected sites. The logistics of supplying, delivering and installing hardware and software, Internet connectivity and providing maintenance will require working with non-governmental organizations and corporate and local private sector partners.

III. Capacity building: to create an enabling information environment

Finding, evaluating, using and managing information is a significant challenge in public health settings all over the world. Health InterNetwork training will concentrate on building the skills needed to put information into action: 1) information access and use in daily work, 2) basic computer and Internet skills, and 3) hands-on training to use specialized public health tools.

HIN India pilot

India was selected as the one of the first HIN pilot countries because it has several priority public health programs as well as valuable skills and resources that would contribute to the development of the global Health InterNetwork project. Each HIN pilot focuses on a particular facet of the overall Health InterNetwork. In the HIN India pilot, the focus is on the gaps between health research, policy and practice.

Gaps between health research, policy and practice in India

These gaps exist throughout the world and have to be addressed to ensure that relevant research reaches citizens in the form of effective, up to date health care.

Dr C.P. Thakur, the Union Minister for Health and Family Welfare, has highlighted the gaps in the health research, policy and practice in India. In his 2001 status report on TB in India, he points out that, as an example, most of the significant research on the cure and control strategy for tuberculosis was carried out in India. Pioneering research from the Tuberculosis Research Center, Chennai, and the National Tuberculosis Institute, Bangalore, included:

> the effectiveness of ambulatory treatment of tuberculosis, the effectiveness of intermittent treatment regimes, the necessity of direct observation of treatment (DOT) by a trained individual who is not a family member, the usefulness and practicability of AFB microscopy as a diagnostic tool among patients reporting to health facilities and the crushing burden of disease of tuberculosis on our society.

However, while several other countries benefited from these findings, India was among the last countries to introduce this key life-saving research into its own health policy and practice.

Regarding tobacco-related morbidity, the WHO Director-General observed last year that it was in India, in 1964, that the first link between oropharyngal cancer and chewing tobacco was identified. Studies from eastern India were the first in the world to link palate cancer to the chewing of tobacco. Yet again, while other countries were able to act decisively on this research, the tobacco control program in India is still in its inception.

The implications of these gaps between health research, policy and practice must be considered in the context of the magnitude of the two public health problems discussed above - tuberculosis and tobacco use.

The burden of tuberculosis

In the 2001 report on tuberculosis, the Directorate General of Health Services in India presents the effect of the disease on the country and its people, despite there being a cure for the disease.

> Everyday in India more than 20 000 people become infected with the tubercle bacillus. more than 5 000 develop the disease, and more than 1 000 die from TB. India accounts for nearly one third of the global burden of tuberculosis and the disease is one of India's most important public health problems.
>
> Tuberculosis is a major barrier to social and economic development. The direct and indirect costs of tuberculosis to the country amount to Rs. 12 000 crore (US $3 billion) per year. Every year, more than 17 crore (US $170 million) workdays are lost to the national economy on account of tuberculosis, at a cost of Rs. 700 crore (US $200 million).
>
> Every year, 300 000 children are forced to leave school because their parents have tuberculosis, and 100 000 women lose their status as mothers and wives because of the social stigma of tuberculosis. Tuberculosis kills more women than all causes of maternal mortality combined (TB India 2001).

The Revised National Tuberculosis Program (RNTCP) has made a significant impact on the burden of disease related to tuberculosis. Currently the program covers more than one third of the country and 80% of the patients treated are being cured of the disease compared with the 25% cure rate of a decade earlier. However there is still a lot of effort needed to combat the disease and 'unless urgent action is taken more than 40 lakh (4 million) people in India will die of tuberculosis in the next decade'.

The tobacco threat

Tobacco has been established to be a risk factor in over 25 diseases, the first links to cancer having been identified in India as mentioned earlier. In her address at the International Conference on Global Tobacco Control Law in New Delhi, the WHO Director-General Dr Gro Harlem Brundtland stated:

> Today in India, tobacco kills 670,000 people every year. If unchecked and unregulated, by 2030, tobacco will kill 10 million people each year. Seventy percent of those deaths will occur in the developing world, with India and China in the lead. If nations do not act individually and together, in the next 30 years, tobacco will kill more people than the combined death toll from malaria, tuberculosis and maternal and child diseases. Every tobacco related death is preventable. That is our message. That is our challenge.

The Framework Convention was introduced as a new legal instrument negotiated by WHO, its member countries, and partners, including UNICEF and the World Bank, to deal with the problem of tobacco use in a comprehensive manner.

> The Framework Convention is expected to address issues as diverse as tobacco advertising and promotion, agricultural diversification, product regulation, smuggling, excise tax levels, treatment of tobacco dependence and smoke-free areas.
>
> The Framework Convention process will activate all those areas of governance that have a direct impact on public health. Science and economics will mesh with legislation and litigation. Health ministers will work with their counterparts in finance, trade, labour, agriculture and social affairs ministries to give public health the place it deserves.

Where are the gaps between health research, policy and practice?

There are several factors that contribute to the disjoint between research, policy and practice. For instance, one important reason why research is not effectively utilized is that it is often not perceived to be relevant to the priority health needs of the country. A comparison of medical research carried out in India (as reflected by published literature) with the country's healthcare needs (as reflected by morbidity and mortality statistics) showed that there was a considerable mismatch between the two (Subbiah Arunachalam 1998). In addition the variability in reliability and validity of health research further reduces its perceived utility.

The main objective of the Health InterNetwork project is to address the digital divide in health information. Policy makers, researchers, health practitioners, information scientists and librarians identified reasons for the current disjoint between research, policy and practice in the context of the HIN project, *access to research, dissemination of research, and the environment for communicating research using information and communication technologies.*

I. Access to health research

India accounts for 23% of the global burden of disease from tuberculosis but only for 5-6% of the world's research output in this area as seen from papers indexed in three international databases, viz. *PubMed*, *Science Citation Index* and *Biochemistry and Biophysics Citation Index* over the ten years 1990-1999'. To improve the relevance of health research the value of developing country research has to be recognized and promoted.

In addition, access to these international databases is expensive and difficult. Equitable and effective dissemination of health research information has to be ensured. Currently in India it costs US$12 to get one full text journal article from an international database. It can take up to four months for a copy of this article to be delivered by surface mail from the National Medical Library which has the single largest collection of scientific and medical journals, both national and international, in the country. Most of these journals are currently only available in hard copy.

Even when the research information is available it is often not in the form most useful for the different stakeholder groups in health. Very few people, other than researchers, read through multiple page reports or articles on research protocols and findings. The appropriate formatting of research information is therefore crucial to enhance the utilization of research for health policy and practice.

II. Dissemination of research

There are various efforts related to dissemination of health research in India. However, a huge amount of (valuable) unpublished information lies around in research and medical institutions as raw or partially analyzed data. There is also considerable

duplication of effort across public, private and academic sectors involved in health care and very little coordination between them.

Various agencies, donors, private and academic institutions all commission research related to tuberculosis and tobacco control in India. However, there is no network in the country to coordinate these efforts or to make this information available to health policy makers, practitioners or other researchers. The flow of research information, both international and national, leaves much to be desired and it can take several months and even years for data to be analyzed and disseminated, all this reducing the perceived utility of research for policy and practice.

III. The environment for the communicating health research using information and communication technologies

Information and communication technologies offer cogent solutions to some of the problems related to the access and dissemination of health research. These solutions include tools for structuring health information networks, facilitating electronic publishing, building searchable databases of local research, and enabling Internet-based exchange of health information. However, these solutions have significant resource implications and have to be situated in the larger social and political environment of the country.

Infrastructure

An e-readiness assessment was conducted in five states that were initially proposed for the Health InterNetwork India pilot. An e-readiness assessment tool developed by the Harvard Center for International Development and the MIT Media Lab (http://www.readinessguide.org) was used for this purpose. The assessment showed that even states that were considered to be at the forefront of the information technology revolution, in India and internationally, still faced many of the environment-related problems outlined in the UN Administrative Committee on Coordination (ACC) 1998 statement:

> The information technology gap and related inequities between industrialized and developing nations are widening: a new type of poverty – information poverty – looms. Most developing countries, especially the Least Developed Countries (LDCs), are not sharing in the communication revolution, since they lack:
> - affordable access to core information resources, cutting edge technology and to sophisticated telecommunication systems and infrastructure;
> - the capacity to build, operate, manage, and service the technologies involved;
> - policies that promote equitable public participation in the information society as both producers and consumers of information and knowledge; and
> - a work force trained to develop, maintain and provide the value-added products and services required by the information economy.

Inequity

In addition to addressing these basic infrastructural issues care has to be taken that the introduction of new technologies does not exacerbate existing inequities or create new ones not only on an international level, but also within the country. For example, only 22 people in 1000 have telephone access in India and less than 2 in 1000 use the Internet. Of Internet users in India more than 75% are males under the age of 30 from the higher educated strata in the country (Eddie Cheung 2001). Facilitating equitable access has to be paid particular attention when considering the use of technology in the health system where professionals higher up in the health system hierarchy, like doctors and policy makers, are predominantly male while the majority of the countries community health workers are female.

Building up the basics

In considering the far-reaching and creative solutions offered by information and communication technologies, it is therefore important not to lose track of the foundations on which these solutions must rest.

At a meeting to plan the Health InterNetwork India, Professor S. Vijaya, a researcher currently working on genetics and tuberculosis at the Indian Institute of Science, emphasized the importance of starting with the basics, and building up the foundation of health research, policy and practice system in the country:

> Research information needs to be compiled and made to reach the medical community as well as the policy makers. In another 5 to 10 years, we should be able to see it making a dent in the manner in which medical students are taught. I do believe that if we in India can ensure that every medical graduate will come out and treat every TB patient he or she sees with the standard, (current) WHO prescribed regimen of anti-TB drugs, we can dramatically reduce the incidence of both TB as well as drug resistance.
>
> I find the possibility exciting that we too, like some of the developed countries can make a dent in our TB control programme without waiting for that miracle new drug that everyone promises.

3.0 Relationship to UNF/UNFIP Programme Framework and Project Criteria

In 1998, ACC expressed profound concern at the deepening maldistribution of access, resources and opportunities in the information and communication field and committed the organizations of the United Nations to assist developing countries in redressing these alarming trends.

Through establishing new connectivity and infrastructure in developing countries the Health InterNetwork responds to the ACC commitment to address the growing inequities related to information and communication resources. In addition, the India pilot aims to support priority health programs for tuberculosis and tobacco control where the ultimate beneficiaries are the 'poorest of the poor' who invariably bear the greatest burden of these problems.

4.0 National/Government Commitment

The Government of India is firmly committed to the use of information and communication technology for health. In 1986 the Indian Medlar Centre was set up as a joint project of the Indian Council of Medical Research (ICMR) and the National Informatics Centre (http://indmed.delhi.nic.in) to facilitate access across the country to national and international bio-medical information. More recently, there have been two major initiatives planned by the national government that correspond to the Health InterNetwork objectives.

An expert committee on the Application of Information Technology in Medical Education in India in its report dated January 2001, recommended that the following projects be implemented through the Ministry of Health,

- School of Health Informatics at the Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow,
- Developing the use of IT for research, teaching and patient care at the Postgraduate Institute of Medical Education and Research, Chandigarh,
- Knowledge network on Medicinal Plants and National Centre for Training and Technology Transfer at the Regional Research Laboratory at Jammu,
- Developing a National System of Health Research Information at the ICMR.

On March 22, 2001 the Prime Minister of India launched a national scheme for linking 23 government medical college libraries. The scheme, with a budgetary provision of over US$200,000, provides basic infrastructure, connectivity, and training to one medical college library each in of 23 States. The libraries will be networked to share the resources of the individual libraries as well as of the National Medical Library located in Delhi.

The Health InterNetwork pilot will integrate with these national priority programs and will thus also provide a means of integration between the individual national programs.

Prerequisites and policy

The processes for logistic and policy procedures for implementation of the project are in place. Representatives of the Ministry of Health and Family Welfare, Indian Council of Medical Research, Ministry of Information Technology, National Institute of Communicable Diseases, and the National Informatics Centre are key members of the core team formed to facilitate planning, implementation and evaluation of the HIN pilot project. The pilot project has evolved from discussions in the core team and the direct involvement of the Ministry of Health and Family Welfare. The pilot will be coordinated through a full time project manager in the office of the WHO Representative to India with support from the HIN task force based at the WHO headquarters.

Integration and sustainability

The project responds to the needs of the government and integrates with the government plans for ICT and health. The government has earmarked complementary funding that augurs extremely well for the sustainability. For each component of the pilot project a focal point has been identified from key governmental institutions to facilitate project ownership, implementation and integration with the larger national infrastructure and capacity building efforts.

5.0 Process followed in Project Identification/Formulation

In his announcement at the 2000 Millenium Assembly, the UN Secretary General Kofi Annan described the Health InterNetwork in the following terms:

> This network will establish... 10,000 on-line sites in hospitals, clinics and public health facilities throughout the developing world. It aims to provide (tailored) access to relevant up-to-date health and medical information...
>
> The equipment and Internet access, wireless where necessary, will be provided by a consortium... in co-operation with foundation and corporate partners.
>
> Training and capacity-building... is an integral part of the project. The World Health Organization is leading the United Nations in developing this initiative with external partners.

Following this commitment from the Secretary-General, an inter UN agency meeting was held in Geneva to define the specific objectives of the project. A small HIN task force began working on the project at WHO, Geneva, with financial support from the UN Foundation of US$ 734,000. It was decided to develop the project up on the basis of 6 - 8 pilot projects conducted during the first year. India was selected as the first HIN pilot country because it has several priority public health programs as well as the skills and resources that would contribute to the development of the global Health InterNetwork.

Over the next couple of months, meetings were held in India with key stakeholders in health and information and communication technology in the country (including the government, local UN agencies, NGOs, research institutions, policy makers, health service providers, researchers, and the private sector) to discuss options for the pilot project focus and scope. In addition, through a questionnaire the information needs of over 600 policy makers, health service providers, researchers were assessed. (The results of this assessment and other project related information is available on the project development web site at www.hin.org.in).

Based on these inputs a draft project plan and logical framework were drafted and circulated to some key experts and stakeholders. The consultations on this draft were used to build up this proposal including the logical framework (Annex 1).

6.0 Related Past and Current Activities

a. Lessons learned from past approaches to resolve the problem

There have been some very successful experiences related to the use of information and communication technologies for development in India and there are four main lessons to heed.

I. Focus on need-based content

Mr Arunachalam, who coordinates an innovative, useful and used telecenter project in rural Tamil Nadu advises, "The first thing we should do is to shift our focus from the technology part of IT to the information (or content) part. (People's) information needs are different. It is only on the basis of their current needs and how they get those needs satisfied (that) one can think of meaningful technological interventions."

Dr C.A.K. Yesudian, head of the Department of Health Services at the Tata Institute of Social Sciences, also emphasizes that the key to the success of the HIN India project will be an in depth understanding of the needs of the main stakeholders involved in the project. In addition he notes that this understanding would need to inform building up the capacity of local institutions to meet these and future needs past the project phase.

II. Aim for broad access and resource sharing

Capacity building cannot be confined to central institutions. 'When resources are limited and the population to be served is very large, then considering community-based access (to affordable and appropriate technology) and resource sharing is the only choice. That is precisely what Sam Pitroda did, when Prime Minister Rajiv Gandhi called for his help in improving telecom services in India. Thanks to Pitroda's plan, today virtually every town in India has a public telephone booth within a short distance from where one can make local, national and international calls' (Subbiah Arunachalam 1999).

III. Use local solutions

Dr Ashok Jhunjhunwala of the Indian Institute of Technology, Madras, noticed that if telephone coverage had to move from 1 per cent of Indian homes to 15 to 25 per cent, the transition would cost an astronomical sum, way beyond the means of a developing country. The only solution was to get rid of the expensive copper wires, which need to be hooked to every home wanting a phone connection. The problem identified, Dr Jhunjhunwala went ahead to make the breakthrough 'wireless local loop' technology, that also enables Internet access. And at less than half the price of similar methods developed elsewhere (Shobha Warrier 1997).

Researchers at the Indian Institute of Science and Bharat Electronics Limited who are developing the cost-efficient, local language and Internet enabled Simputer have also made significant advances in this respect.

IV. Foster an enabling environment

Mrs S.L. Chinnappa (who was responsible for developing the Indian Medlars Centre, bringing Medline to India, and developing library databases for several key institutions in India) noted that,

> WHO while starting a Health Information Network in India should ensure right from the beginning, that the best practices of sharing, exchange of ideas and reciprocal contracts are fostered among the participating institutions - *whether Governmental or non-governmental* - it should truly be a collaborative network. *There should be very low or no regulatory barriers to join the network.*
>
> If WHO wishes to avoid the risk of lapsed time in health care delivery, it should pursue only an 'alliance strategy'. This will broaden the products/ service channels, improve quality of information (especially clinical) and achieve more rapid penetration down to the district and PHC or grass root levels.
>
> ...The cost benefits to society will be immeasurable depending on the speed with which the project is planned, monitored and executed. The key to the success of the project is the pin-pointing of responsibilities, accountability for delays and equal/mutual cooperation among all players whether public or private sector, small or large institutions. The key to the sustainability of the project will be a pilot designed so that it can be replicated right across the board.

b. Government/civil society efforts underway to address this problem

The Indian Government schemes, outlined in section 4.0 of this document, highlight some of the main national efforts in this area. There are several health-related portals in the country mainly targeted at consumers. Some health portals do address the professional medical community (e.g. www.indegene.com). There are have been very few attempts to integrate research information dissemination using Internet technologies, beyond the individual databases and web sites of institutions like the Indian Medlars Centre, the Indian Council for Medical Research and the National Tuberculosis Institute for tuberculosis control. For tobacco control, there is currently an expressed need to collate national and international research information on the subject. The Health InterNetwork aims to integrate with these various efforts and build on the potential synergies between them.

II. Objectives and Strategy

7.0 Programme/Project Objectives, Activities and Anticipated Results

a. Specify goals and objectives

The overall goal of the HIN India pilot is to test scalable, sustainable approaches to bridging the digital divide in health information and between health research, policy and practice. The specific objectives are to,

- Facilitate an Internet-based network of health service providers, researchers and policy makers in the tuberculosis and tobacco control programs
- Provide and test content, connectivity and training options to enable optimal use of this network
- Enhance the capacity of local research institutions and medical libraries to support and scale up the Health InterNetwork

b. Major programme/project activities

The major pilot project activities include

1. Finalizing the project work plan with national and international partners
2. Facilitating development of the Health Research Information System by networking key research institutions related to tuberculosis and tobacco control with the Indian Council for Medical Research
3. Networking key medical college libraries in the two reference states with the National Medical Library
4. Supporting electronic publishing of key medical journals, health research reports and policy documents related to tuberculosis and tobacco control and creating integrated electronic databases of the same
5. Developing interfaces to allow integrated access to various health data sources
6. Establishing Internet connectivity at the selected access points
7. Developing training modules and conducting the initial training for the pilot project participants
8. Managing the project and providing ongoing support
9. Establishing benchmarks to measure the impact of the pilot and providing optimal training towards the same
10. Evaluating the pilot

c. Indicators to measure progress in quantified and measurable terms

Overall the India pilot aims at a 75% increase in the access to health research information and a 50% increase in the use of this research for policy and practice as documented related to the tuberculosis and tobacco programs at the pilot sites in 18 months.

The broad indicators listed below will be refined at the time the project work plan is finalized:

Access indicators

- Inventory of research information, related to tuberculosis and tobacco control, available at the pilot sites before and after the HIN pilot.
- Pilot participant rating of access related needed health research information before and after the HIN pilot (including availability, ease and speed of access, usability and perceived usefulness).

Use indicators

At the selected pilot sites, before and after the pilot, review and compare:

- Workflow related to health research, policy and practice, including collaboration
- Users perceptions of project impact on health service delivery and policy

d. Changes that the project will facilitate and highlight any innovative, catalytic aspects

- Formatting health research information for maximal utility for different stakeholders
- Enabling key linkages and networking between health researchers, policy makers and service providers
- Developing scalable models for the use of information and communication technologies and networking in the public health system
- Testing appropriate and affordable technologies that can be used in a sustainable manner at the community level (e.g. Simputer, solar power, health kiosks, Wireless in Local Loop or radio-based connectivity)

e. Provisions being made to ensure that the project is sustainable (economically, financially, socially, culturally)

The project contributes to long-term national government plans for the use of ICT for health. Focal points have been identified from key national institutions and the private sector to facilitate project ownership and implementation and integration with national infrastructure and capacity building efforts. In addition, as the national government is committed to funding for the use of ICT for health (section 4.0) the potential for sustainability is encouraging.

With regard to the social and cultural aspects, local language and work environments will be key considerations in the project and the project itself will be developed in close consultation with the pilot participants.

f. Gender and equity considerations

It is observed that over 75% of the Internet users are males under the age of 30 from the higher educated strata in the country (Eddie Cheung 2001). This project relates to Internet use in the health system where, in general, professionals higher up in the health system hierarchy, like doctors and policy makers, are predominantly male while the majority of the village and community health workers are female.

Therefore, a dedicated effort is being made in this project to include the community level public health services in the project as well as to have the health reference kiosks in the health centers for easier access for village health workers the majority of whom, as mentioned above, are women.

Currently most of the recognized expert consultants related to the project are women and an effort will be made to have a gender balance in all the key decision-making and expert groups.

8.0 Beneficiaries

a. Primary beneficiaries

The primary beneficiaries are health service providers, researchers, and policy makers and institutions in the public health system in India. The pilot project further focuses on public health services related to tuberculosis and tobacco control.

Health Service Providers

Medical Officer TB Control (8), TB program and lab supervisors (8), Community Health Centers (5), Primary Health Centers (10), Doctors (15), Nurses (15), Multipurpose health workers (15)

Benefits: Desktop PCs at each health center along with a common area health reference kiosk; Simputers with Internet and Smart Card access, Indian language capabilities, forms and decision support applications.

Researchers

Researchers at key tuberculosis and tobacco-control research institutions and at the Indian Council of Medical Research

Benefits: A Health Research Information System; access to electronic publications and databases of key journals and other related information; collaborative tools for research; Internet connectivity where required.

Policy makers

Sub-district, district, state and national levels

Benefits: Training in Internet based information access and use and in the optimal use of health research for policy and practice; Internet connectivity where required for the project.

Libraries

Medical colleges libraries (4); National Medical Library

Benefits: Virtual Health Library system and associated training.

The main target groups for this project were consulted using an information needs questionnaire. Over 600 health service providers, researchers and policy makers responded. The results of this assessment contributed to the development of this proposal. In addition, the representatives from these groups will be on the decision-making and implementation bodies of the project.

b. Secondary beneficiaries

The general public will be the secondary beneficiaries of this project. A lot of the information will be available in the public domain on line so anyone with Internet access will be able to benefit from this key information on health.

In addition the public will benefit from improvements in health services catalyzed through the project.

9.0 Programme Strategy and Risks

a. Strategies for achieving the specific goals, objectives and anticipated results

Three principal considerations have been kept in mind while designing the project:

- Responding to user needs
- Building on synergies between related projects
- Fostering scalability and sustainability

The project plan has been designed in full consultation with the stakeholders and takes into account the long-term strategy of the Government for the use of information and communication technologies for health. At the same time, care has been taken to incorporate elements that address some of the key concerns particular to the Health InterNetwork (e.g. scalable solutions for the strategic use of ICT in health, global standards for equity of access).

b. Identified risks

1. The biggest challenge for the project may be in facilitating and supporting the associated cultural and attitudinal changes
2. A principal risk is the potential unpredictability of the time and effort required to establish this virtual network through collaboration of the various stakeholders. This could be due cultural reasons, complexity of project coordination, limited availability of quality content over the pilot period and the technical challenge of setting up error-minimized, user-friendly networks and application software to meet the needs of the various stakeholders.
3. In previous projects related to the use of the Internet for health the biggest challenge has been getting doctors, policy makers and senior mangers to adopt and use new technology.
4. Connectivity, especially low bandwidth and slow connections, remains a major impediment to the acceptance and use of IT.
5. The bulk of Internet users are urban people who belong to the upper middle strata of society. Addressing the functionaries in rural areas and lower socioeconomic groups, like the village health workers, remains a challenge.
6. Local language content is sparse, but crucial for access and ease of use of the network.

c. Measures required to minimize these risks

Activities have been incorporated to enhance the adoption of the project through targeted publicity and interaction amongst the stakeholders to hasten the required cultural and attitudinal environment for collaboration. A careful needs analysis and the inventory of available content is planned to address the problem of content relevance. Engaging the best technology partners and adapting proven technologies for the systems to be built, is expected to minimize the risks related to the technology used. Some of the other identified risks and the action to minimize them are summarized in the table that follows.

RISK ANALYSIS (Note: 'H' stands for 'High', 'M' for 'Medium' and 'L' for Low)

Risk	Rating	Action / Contingency
New systems can't be developed, because of time and resources, to meet the specific requirements of HIN	H	Use standard interfaces to systems which have been previously established
Usage may vary fluctuate from anticipated levels OR Pilot traffic runs out of control	H	Employ scalable architecture Monitor usage levels during pilot Control and monitor usage after launch
Authorization level required for each specific service may not be fully defined	M	Support fast resolution through inter-agency working group to define authorization levels
Private partner branding may not match WHO/HIN objectives	L	Relevant WHO guidelines on potential conflict of interest apply
Half-hearted launch may lead to poor user perceptions	H	Have some quick-win applications; Ensure targeted publicity and controlled launch
Participants may be unable to access the full range of needed services through HIN	H	Clarify that the services provided through HIN pilot are primarily those which relate to tuberculosis and tobacco control
Expected impact of the Health InterNetwork project not clearly understood	M	Clearly define and discuss HIN objectives, expected impact and relationship with related projects with stakeholders
Late joiners are precluded because the standards have been defined by those participating at the beginning	M	Keep architectures and processes open
Increased access may lead to more demand and greater than expected resource requirements	M	Acknowledge and take into account for scale-up phase
Partners' services are not available in time for the pilot	H	Define up front scope of requirements and implementation times; Identify a "long list" of potential services; Prioritize services which are already available in electronic format
Network becomes known externally through press, etc, causing congestion, or misunderstanding of pilot status	H	Ensure that knowledge of the network is restricted during pilot stage
Participants' expectations not met because of the scope of the pilot	H	Need to raise awareness that this is only a 'pilot' network, which does not portray the full "network" when all content and countries linked

10.0 Value Added from Joint UN Intervention

The Health InterNetwork is a UN project and the different UN agencies have to play synergistic roles based on their core competencies in order for the project to have maximal impact.

- WHO - Public health strategy, health content, and related field experience in the country office (Coordinated with WHO Headquarters and the WHO South East Asia Regional Office - SEARO)
- UNDP - Country level infrastructure development and capacity building
- UNICEF - Extensive country level experience and field support staff; health content

11.0 Value Added from NGO and Civil Society Partnerships

The *Health InterNetwork* is a public-private initiative that brings together international agencies, the private sector, foundations, non-governmental organizations and country partners to bridge the digital divide in health.

Partner interventions

International partners

- Harvard Center for International Development and MIT Media Lab - expertise on e-readiness, connectivity and technology; collaboration on connecting primary health centers and on development of health kiosks
- Cornell University - expertise on development communication and research on the same
- BIREME - Provision of the Virtual Health Library System and consultation on the same
- Collexis International Data Corporation - Technology for structuring the collaborative research environment
- Project.net Inc. - integrated web-based system for project management and coordination

National partners

- Ministry of Health and Family Welfare - responsible for public health in the country including coordination of health research, policy and practice
- Ministry of Information Technology - policy and infrastructure related to Internet access and telecommunications in the country
- National Tuberculosis Institute - lead agency for coordination of HIN India pilot project as related to the tuberculosis control program
- Tata Institute of Social Sciences - expertise in project evaluation and strategy
- Bharat Electronics Ltd. - Production of Simputer, have radio enabled Internet access, solar photo-voltaic cells (first developed for national defense systems now available for development use)
- NIIT - Information technology training; research and development of community health kiosks

- Tata Consultancy Services - Consultancy on computer software and systems integration
- Indegene Life Systems - have leading health portal for the medical community in India (www.indegene.com), create health content for several digital devices, including WAP and Simputer
- 2 Streams Media - integration of ICT with mass media techniques for development of innovative audio and visual user interfaces
- NGOs (e.g. Sochara) extensive field experience and networks related to tuberculosis and other public health programs

As the project moves forward, space will be created for engaging more civil society institutions. The partner institutions and projects across the country using Internet technologies for health are presently poorly networked. The convergence created by bringing these leading institutions and initiatives together will build on existing synergies, optimize use of resources and skills and enhance the impact much beyond the immediate gains from the HIN pilot project.

12.0 Charitable Purposes Justification for UNF

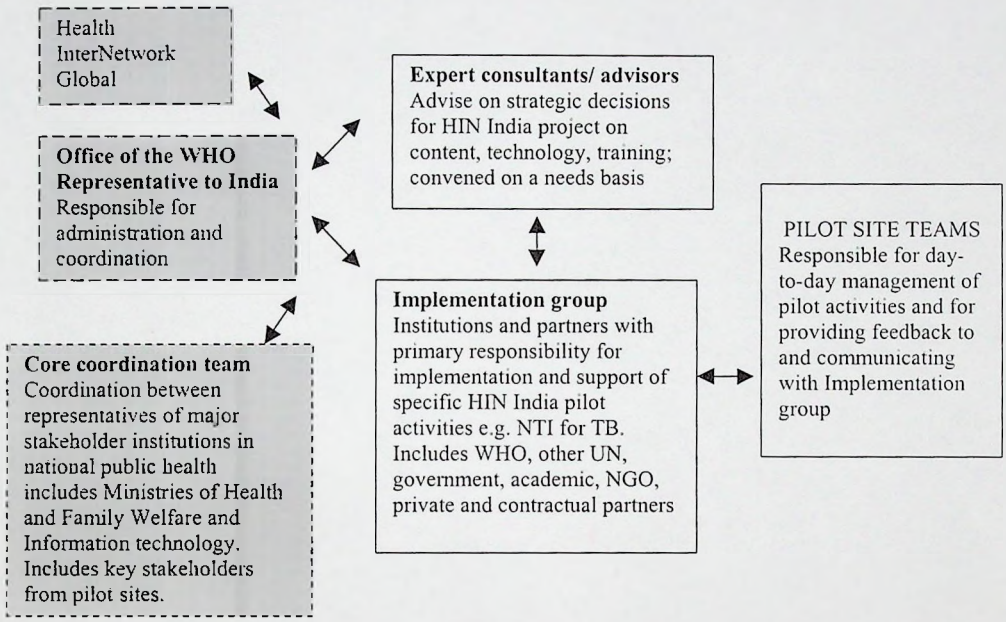
This project can be deemed an exclusively charitable project because, as described in the project objective, it furthers the advancement of education and science with the specific objective of improving health amongst the people of developing countries in an equitable manner.

III Program Management and Implementation

13.0 Management and Administration

a, b. Management structure

The management structure for the HIN India pilot is illustrated below.



c. Implementation

WHO will be accountable for the implementation of the project with support from UNDP and UNICEF through their representative offices in India.

d. Administration

The administration of this project will be coordinated through the office of the WHO representative to India. The implementation group in consultation with the core coordination team and experts will make the financial decisions.

e. Funding, accounting and reporting arrangements

The project is expected to be financed with extrabudgetary funds administered through WHO headquarters. The current accounting and reporting procedures for UNF funded projects will be followed.

f. Administrative cost charges

The Program Support Costs @ 5% have been added to the project cost to meet the costs of administering the program.

g. Co-financing and matching arrangements

The project has complementary objectives to the programs of the Government of India for application of information technology to health. There are several investments the government has made or is planning that will supplement the HIN project. For example, the Government of India has already launched a scheme for networking 23 medical college libraries in the country with an outlay of INR 10 million. In addition the Indian Council for Medical Research will co-finance the National Health Research Information System component.

Several international and national institutions are also providing technology and training support to the project. Three principal examples are the Latin American and Caribbean Center on Health Sciences Information (BIREME) for the Virtual Health Libraries Network, Collexis International Data Corporation for the National Health Research Information System, and the Harvard Center for International Development and MIT Media Labs for technical assistance.

In the course of the pilot planning process and its implementation, effort will be made to engage other private sector partners and civil society institutions as required.

This India Pilot of the Health InterNetwork project is being submitted for funding consideration to the Bill and Melinda Gates Foundation in follow-up to the global planning funds provided by the UN Foundation in September 2000. Similar co-funding arrangements from the public and private sectors are envisaged for the other pilots.

14.0 Inputs

The funds received from UNF will support the following inputs for the project,

- Detailed requirements assessments and workshop for finalizing the project work plan along with partners
- Systems analysis, development and implementation of the National Health Research Information system
- Establishment of the virtual health library system and network of the medical college libraries
- System of on-line full text publication of research information and dissemination
- Design of the most appropriate user interfaces for the different target groups, including local language content
- Provision of hardware, software and Internet connectivity to selected users
- Development of training modules and training of the target users for access and use of research information for health policy and practice

15.0 Reporting

Periodic financial reports, annual progress reports and final project reports for the Health InterNetwork Pilot will be provided in accordance with existing UNF/UNFIP arrangements.

The Project Manager of the HIN India Pilot, situated in the Office of the WHO Representative to India, will be responsible for the reporting. The reports will be transmitted through WHO headquarters in Geneva.

The pilot project will be implemented over the period July 2001 to December 2001. It will be operational for a period of one year from January 2002 to December 2002. The following reporting schedule is proposed:

Period	Report by	Type of report
July 1, 2001 to December 31, 2001	January 31, 2002	Annual report
January 1, 2002 to December 31, 2002	January 31, 2003	Annual report
July 1, 2001 to December 31, 2002	May 15, 2003	Final project report

16.0 Monitoring and Evaluation

The baseline data/benchmarks, which define the starting point at the outset of project activities, will be determined by the detailed site assessments.

The project milestones detailed in the Gantt chart (Annex II) are discreet and quantifiable and refer to specific activities that have an implementation duration and budget. The progress of the project implementation will be measured against these milestones:

- Detailed needs analysis completed: 2 August 2001
- Project work plan finalized along with partners: 9 August 2001
- Training modules developed: 6 December 2001
- Key research institutions connected with ICMR: 13 December 2001
- Key medical college libraries and NML connected: 13 December 2001
- User interfaces and tools for accessing information operational: 27 December 2001
- Electronic publishing of key journals and documents in place: 3 January 2002
- Connectivity established at pilot district access sites: 3 January 2002
- Initial training conducted: 3 January 2002
- Pilot begins: 4 January 2002
- Evaluation of HIN India pilot completed: 27 February 2003

Quarterly evaluations and an end of project evaluation are envisaged. The expert advisors, HIN task force in Geneva and the local UN offices will together decide who performs the evaluations. This could include contractual assistance where needed especially for the technology evaluations.

The indicators to be measured are outlined in section 7 c. of this document. Details on how the evaluations will be conducted will be defined at the time of finalizing the project work plan.

A provision of USD 33,660 (4.5% of the total budget) has been made for monitoring and evaluation and a common format for all monitoring and evaluation reports will be established after the needs assessments.

A system of program review by the administrative groups (Section 13 a, b) as well as by the stakeholders and beneficiaries has been planned. The outcome of these reviews will inform the progress of the project.

References

Dr Gro Harlem Brundtland, *WHO's International Conference on Global Tobacco Control Law: Towards a WHO Framework Convention on Tobacco Control,* New Delhi, India.

Dr.C.P.Thakur 2001, *TB India 2001: RNTCP status report,* New Delhi, India.

Eddie Cheung. Profiling Indian Internet Users: Part 1. eMarketer . 4-1-2001. 27-5-2001.

International Telecommunication Union 1998, *World Telecommunications Development Report 1998. Universal Access. Executive Summary.*

Shobha Warrier. The Negroponte switch: An interview with Dr Ashok Jhunjhunwala of IIT Madras. Rediff on the Net . 5-6-1997.

Subbiah Arunachalam 1999, "Information and Knowledge in the Age of Electronic Communication: A Developing Country Perspective", *Journal of Information Science*, vol. 25, no. 6, pp. 465-476.

Subbiah Arunachalam & Subbiah Gunasekaran, 2001, "Tuberculosis research in India and China as reflected by the literature: From scientometrics to health care policy", *Paper under submission.*

TB India 2001. Central TB Division, Directorate General of Health Services, Ministry of Health and Family Welfare. *TB India 2001: RNTCP status report* New Delhi, India.

'We the Peoples'- The Role of the United Nations in the 21st Century: Millennium Report of the United Nations Secretary-General.

In addition to UN partners and the Ministry of Health and Family Welfare in India, Tata Consultancy Services, NIIT and the following experts contributed significantly to this proposal: Mr Subbiah Arunachalam, Dr Michael Best, Mrs S.L. Chinnappa, Dr Shiban Gangu, Dr Nirmala Murthy, Mrs Sudha Murthy, Dr Thelma Narayan, Professor. S. Vijaya and Dr C.A.K. Yesudian.

Special acknowledgement of Dr Jagota, Dr Suryanarayana and the staff at the National Tuberculosis Institute in Bangalore who have taken on the lead role for implementing the HIN India pilot.

Annexes

ANNEX I **Logical Framework / Project Summary**

ANNEX II **Implementation plan**

ANNEX III **Budget**

Identify 3 youth volunteers -preferably women from Kanakapura

- Volunteers will be computer literates coordinating with the leaders of various groups in the dissemination of information
- Will coordinate with the leaders of various groups in the dissemination of information
- Will be the only persons authorized to operate the computer system at its location
- Will report to CHC on a regular basis

The dissemination of information will be carried out with bi-monthly Newsletters in English and Kannada

ವಿಧಾನಗಳು

→ ಸ್ವಯಂ ಸೇವಾ ಸಂಸ್ಥೆಗಳನ್ನು ಬಳಸಿಕೊಳ್ಳುವುದು.

→ ವಿದ್ಯಾ ಸಂಸ್ಥೆಗಳನ್ನು ಬಳಸಿಕೊಳ್ಳುವುದು.

→ ಸಾರ್ವಜನಿಕ ಸಂಸ್ಥೆಗಳನ್ನು ಬಳಸಿಕೊಳ್ಳುವುದು.

→ ಆರೋಗ್ಯ ಕೇಂದ್ರಗಳ ಬೇರೆ ಇಲಾಖೆಗಳನ್ನು ಬಳಸಿಕೊಳ್ಳುವುದು.

→ ನೊಂದ ಆರೋಗ್ಯ ಶಿಕ್ಷಣ ಸಾಮಗ್ರಿಗಳನ್ನು ಅಭಿವೃದ್ಧಿಪಡಿಸಿಕೊಳ್ಳುವುದು.

→ ಸ್ಥಳೀಯ ಉದ್ಯಮಿಗಳನ್ನು ಬಳಸಿಕೊಳ್ಳುವುದು.

→ ತೆಂಬಾಕು ಮುಂದಳ ಬಳಸಿಕೊಳ್ಳುವುದು.

→ ಸ್ಥಳೀಯ ಯುವಕರ/ತಿಯರನ್ನು ಕಾರ್ಯಕರ್ತರಾಗಿ ನೇಮಿಸಿಕೊಳ್ಳುವುದು.

→ ಕನ್ನಡ ದಾಗೂ ಇಂಗ್ಲೀಷನಲ್ಲಿ ಸುದ್ದಿಪತ್ರ.

ಸಮುದಾಯ ಸಹಭಾಗಿತ್ವ ವಿಧಾನ

ಉದ್ದೇಶಗಳು;

→ ಸ್ಥಳೀಯ ಸೂಕ್ತ ವಿಷಯಗಳನ್ನು ಕನ್ನಡ ಹಾಗೂ ಇಂಗ್ಲೀಷ್‌ನಲ್ಲಿ ಗುರುತಿಸಿ, ದೊರಕಿಸಿಕೊಡುವುದು.

→ ಗುರುತಿಸಿದ ವಿಷಯಗಳನ್ನು ಉಪಯೋಗ ಮಾಡುವ ವಿಧಾನಗಳನ್ನು/ಪ್ರಕ್ರಿಯೆಗಳನ್ನು ಗುರುತಿಸಲು ಸಮುದಾಯ ಸಹಭಾಗಿತ್ವ ವಿಧಾನ.

ಯೋಜನೆ ವಿವರಣೆ

→ ಇಂಟರ್‌ನೆಟ್ ಮೂಲಕ ಸೇವೆ ಬಡಗಿಸುವವರಿಗೆ, ಸಂಶೋಧಕರಿಗೆ ಉತ್ಪಾಧುನಿಕ ಮಾಹಿತಿ ನೀಡುವುದು

→ ಇಂಟರ್‌ನೆಟ್‌ನಲ್ಲಿ ದೊರೆಯುವ ಮಾಹಿತಿಯ ಪರಿವಿಡಿ, ಸಂಪರ್ಕ ಉತ್ತಮಗೊಳಿಸಲು ತರಬೇತಿ.

→ ಸ್ಥಳೀಯ ಸಂಘ, ಸಂಸ್ಥೆಗಳ ಸಾಮರ್ಥ್ಯ ಹೆಚ್ಚಿಸುವುದು.

ಭಾರತದ ಭೂಪಟದಲ್ಲಿ

ಕರ್ನಾಟಕ ಒಡಿಸ್ಸಾ

ಚಿಂಗಲ್ಪೂರು (ಗ್ರಾ) ಜಿಲ್ಲೆ ದೇವಘಡ ಜಿಲ್ಲೆ.

- ಕನಕಪುರ ತಾಲ್ಲೂಕು ಆಸ್ಪತ್ರೆ
- ಸಾತನೂರು ಪ್ರಾ. ಆ. ಕೇಂದ್ರ
- ದೊಡ್ಡಮರಳವಾಡಿ ಪ್ರಾ. ಆ. ಕೇಂದ್ರ
- ತೊಬಗರೆ ಪ್ರಾ. ಆ. ಕೇಂದ್ರ.
- ದೊಡ್ಡಮರಳವಾಡಿ ಪ್ರಾ. ಆ. ಕೇಂದ್ರ
- ಬಿಡದಿ ಪ್ರಾ. ಆ. ಕೇಂದ್ರ

ಸಮುದಾಯ ಆಧಾರಿತ ವಿಧಾನ.

Sathanur (ಸಾತನೂರು) - 42,450

ದೊಡ್ಡಮರಳವಾಡಿ - 40,219.

ಕನಕಪುರ - ₹0,000.

ಕೃಪೆ :- ತಾಲೂಕು ಆಸ್ಪತ್ರೆ
ಕನಕಪುರ.

ಹೆಲ್ತ್ ಇಂಟರ್‌ನೆಟ್ ವರ್ಕ್ (ಹೆಚ್.ಪಿ.ಎನ್)

ಗುರಿ: ಆರೋಗ್ಯ ಮಾಹಿತಿ ಹಾಗೂ ತನ್ಮೂಲಕ ಆರೋಗ್ಯ ಸಂಶೋಧನೆ, ನೀತಿ, ಅಭ್ಯಾಸ ಹಾಗೂ "ಜಾಗೃತಿ"ಯ ನಡುವೆ ಅಂತರ ಕಡಿಮೆಗೊಳಿಸುವುದು.

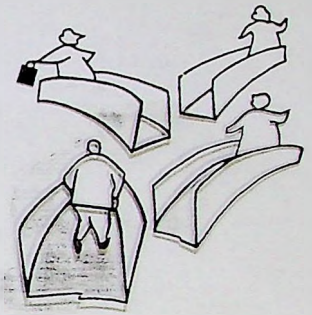
ಭಾರತದಲ್ಲಿ ಕ್ಷಯ ಹಾಗೂ ತಂಬಾಕು.

ಕ್ಷಯ	ತಂಬಾಕು
1. ಪ್ರತಿದಿನ 2000ಕ್ಕೂ ಹೆಚ್ಚು ಸೋಂಕು 5ಂಗಾ ಕಾಯಿಲೆ	ಪ್ರತಿವರ್ಷ 6.5 ಲಕ್ಷ ಜನರನ್ನು ಕೊಲ್ಲುತ್ತದೆ.
2. 3 ಲಕ್ಷಕ್ಕೂ ಹೆಚ್ಚು ಮಕ್ಕಳು ಹಾಗೂ ಇತರರನ್ನು ಹಂಸಿಸುತ್ತದೆ.	ಕ್ರಿ.ಶ 2030 ವೇಳೆಗೆ 10 ಲಕ್ಷಕ್ಕೂ ಹೆಚ್ಚು ಜನರನ್ನು ಕೊಲ್ಲುತ್ತದೆ

- ವಿಶ್ವ ಸಂಸ್ಥೆ ವರದಿ 2001.

Methodology (Objective 2)

- Identify existing networks among doctors, school & college teachers, Panchayati Raj members, Anganwadis, NGOs, Junior Health Assistants (F), and local Dais etc, if any or create the need for a network among these groups and involve the formal/informal leaders with community preparatory workshops



- Nominate a leader in each of the Identified groups

- Women and child development/RDPR departments
- Agriculture department regarding information on Tobacco/pesticides etc
- Beedi rolling -factories/cottage industry etc
- Tobacco board
- Relevant studies/awareness on public health programs conducted in schools and colleges in Kanakapura Taluk
- Literature search of relevant studies in public/institutional/private libraries pertaining to Kanakpura

Methodology (Objective 1)

- Networking and snowballing with groups in voluntary, institutions/colleges, public and private sector

- **Voluntary sector**

  BELAKU, Sri Ramana Maharshi Academy for Blind etc

- **Institutions/Colleges**

  B R Ambedkar Medical College, V S Dental College etc

- **Public Sector**

  NIMHANS, KIDWAI, Indira Gandhi Institute of Child Health etc

Com H-54

EuroHealthNet

the European network for public health, health promotion and disease prevention

HEALTH AND SOCIAL INCLUSION IN THE CONTEXT OF LISBON

WORKING PAPER:
October 2004

www.eurohealthnet.org

HEALTH AND SOCIAL INCLUSION IN THE CONTEXT OF LISBON

WORKING PAPER:
October 2004

Contents:

I. The European Social Model
II. The Lisbon Strategy
III. Components of the Lisbon Strategy
  A. Economic Policy
  B. European Policy/European Employment Strategy
  C. Social Policy/Social Protection
    1. Pensions
    2. Social Inclusion
    3. Health and Long Term Care
IV.Streamlining
V. Evaluation
VI. Health and Social Inclusion in the context of Lisbon

Introduction

This briefing describes the nature and discusses the Lisbon Strategy and its objectives. The aim is to place the EU Social Inclusion Strategy, and EuroHealthNet's projects on Health Inequalities and Health and Social Inclusion, into its wider policy context. (This can clarify how the health sector can contribute to advancing social objectives within the EU.)

I. THE EUROPEAN SOCIAL MODEL

The European Union was founded upon the idea that economic integration would lead to greater prosperity and generate peace and security. The Treaty on European Union states that its objective is to promote peace, its values and the well being of people. In addition, Article I-2 of the Treaty notes that the Community shall have as its task:

> ... to promote throughout the Community a harmonious, balanced and sustainable development of economic activities, a high level of employment and of social protection, equality between men and women, sustainable and non-inflationary growth, a high degree of competitiveness and convergence of economic performance, a high degree of protection and improvement of the quality of the environment, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States.

This Article indicates that the aims and objectives of the European Union go beyond economic integration, and also aim at achieving social development. Indeed, economic and social development are tightly interlinked. Without sound economies, no sustainable progresses can be achieved in social protection. Economic development and integration are not a goal in itself but a means to increase the well being of society and the majority of the population.

EU Member States are, however, hesitant to give the EU too many powers on issues relating to social protection and want to maintain the right to structure their welfare states according to their national traditions and politics. The EU therefore only has shared (rather than exclusive) competence[1] in certain areas of social policy, and the principle of subsidiarity[2] persists in this area. The way Member States have organised their societies, their tax-benefit regimes and their social welfare policies differ widely.

Despite the fact that there is no homogenous legal framework of social welfare in Europe, terms like 'Social Dimension of the EU' and the **'European Social Model'** are widely used in both academic research and policy debates, when a unifying concept is sought to identify the European Union, its way of life and its approach to society, as distinct from

---

[1] The principle of conferral of competencies states that the European Union shall act within the limits conferred upon it by Member States in the Constitution.

[2] This principle holds that in areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or the effects of the proposed action, be better achieved by the Community. Any action by the Community shall not go beyond what is necessary to achieve the objectives of the Treaty. A more descriptive analysis of the principle can be found in Protocol 30 to the EC Treaty.

the world. These terms allude to common values held by EU Member States (and, in many cases, to distinguish the EU from models applied within the US or Asia).

The big difference between the European economic and social model and models found in other developed countries is the extent to which the role of the state is used to mitigate the social effects of free-market capitalism. European populations generally pay higher taxes, thereby indicating a greater willingness to pool risk through the state, both to ensure that it will provide for them when they need it, and to ensure that a degree of social cohesion is maintained. This unique balance between state, individual and market is embedded in European Treaties and policy-making traditions.[3]

The Barcelona European Council of March 2002 adopted the following definition of the European social model: "(it) is based on good economic performance, a high level of social protection and education and social dialogue".[4] According to the High Level Group on the Future of Social Policy in an Enlarged EU, the European social model thus stands for the parallel development of economic and social prosperity and rests on the consistency between economic efficiency and social progress. It aims to maintain continually rising productivity and living standards across the Union, while helping to ensure that the benefits are widely shared.[5]

Although the term 'European Social Model' is commonly applied, one cannot speak of a single European 'economic and social model'. There are a number of different models that can be categorised into very different types of 'sub-models' (Liberal/Anglo Saxon, Conservative/Continental, Nordic/Universal/Social Democratic, Southern European/Mediterranean). All of these models have their strong and weak points. Noteworthy is that Nordic countries are leading in most global competitiveness surveys, such as the IMD World Competitiveness Report, with three of these economies, Finland, Sweden and Denmark, emerging among the top five most competitive economies in the world.[6] The Nordic model, in particular, thereby serves as an example that economic, social and environmental performance can go together, and that the role of the state is crucial in achieving competitiveness.[7]

Nor should the European Social Model be regarded as a simple extrapolation of the models of individual Member States to a European level. The 'EU level' model has, rather, been described as a set of constitutional policies and principles, a basic floor of social guarantees upheld by pan-European regulations, a fairly articulated co-ordination regime that forces national systems to communicate with each other through forms of mutual recognition, and a wider collection of aspirations, objectives and concerns.[8]

Thus, while EU Member States share common principles, the EU does not have the competency to 'harmonize' social policy. EU Member States nevertheless face many of the same tough challenges, which affect their ability to maintain existing balances between the state, individuals and the market and to generate economic growth while

---

[3] EPC. 2004, pg. 11
[4] DG EMPLOI. Report of the High Level Group on the future of social policy in an enlarged European Union. May 2004, page 5
[5] ibid.
[6] EPC. 2004, pg.46
[7] ibid. pg.21
[8] Ferrera in de la Porte, C. and Pochet, P. 2001, pg. 134

retaining social cohesion. They face common internal challenges, such as demographic change and the need to alter the structures of government to address contemporary realities. They also face common external challenges, such as the rise of a knowledge based economy and greater competition generated by the processes of globalisation. These developments are eroding Member State's abilities to maintain the fiscal basis of their social models. They require Member States to develop appropriate policy responses, to introduce policies and programmes that aim to restructure their societies, and find new optimal balances between economic efficiency and social progress.

II. LISBON STRATEGY

In the face of, and in response to these challenges, the European Council in Lisbon of March 2000 set out a new paradigm, or ambition, for the EU. European governments committed themselves to work towards a new strategic goal for the next decade: "to become the most competitive and dynamic knowledge-based economy capable of sustainable economic growth with more and better jobs and greater social cohesion". The objectives of Lisbon constitute a 'virtuous' policy triangle, where economic policy, employment policy and social inclusion interact in a mutually supportive manner. Social policy underpins economic policy, and employment has not only economic but also a social value.[9]

Social policy
Social Protection/Social Cohesion

Competitiveness/Dynamism of work
Economic Policy

Quality/quantity of work
Employment policy

The Commission notes that if any one of the corners of this triangle were missing, the Union would not reach its fundamental objectives, nor would it have legitimacy in the eyes of the citizens. The Strategy touches on almost all of the EU's economic, social and environmental activities.

The **European Social Policy Agenda**, launched by the Commission in June 2000, and endorsed by the European Council of Nice in December 2000, bring together the various initiatives and policy strands in the area of social policy within the Lisbon Strategy. It is a large work programme, providing a comprehensive and coherent approach for the EU to confront the new challenges to social policy which result form the radical transformation of Europe's economy and society, such as those generated by the new knowledge-driven economy. It is, in this sense, a strategic response to modernise the European social model and to translate the political commitments made at the Lisbon Summit into concrete action.[10]

---

[9] Social Policy Agenda. pg.13

[10] The EU also launched a Sustainable Development Strategy in May 2001. The Strategy recognizes the 'triangle' between social, economic and environmental aspects and the importance of balancing all three. It contains a number of concrete proposals on how the European Union can improve its policy making to make

Implementation
The EC has a number of instruments that it can use to take forward the Lisbon Strategy. The most powerful of these is (1) the development of legislation, which Member States must implement nationally. As noted, however, the EU can only act in those areas where the Member States have agreed to give it competency. These areas, or the so-called *acquis communautaire*, are set out in the Treaties. The EU also uses (2) financial instruments in the form of Structural Funds to promote common objectives. In addition it engages in a number of (3) 'accompanying' activities such as research, the development of common indicators, dissemination of information, networking and training activities to support policies developed in the social policy and other fields.[11]

Open Method of Coordination (OMC)
An important mechanism that the EU has developed in order to achieve the Lisbon objectives is the Open Method of Coordination (OMC). Lisbon aimed to limit as far as possible new legislation at a European level and to achieve the established objectives within the parameters of existing legislation. [12] The Lisbon European Council therefore developed the OMC, which was modelled after the European Employment Strategy (discussed further below.) The OMC is built on the recognition that different approaches within Europe can be very instructive for policy development and that there is strong added value in co-ordinating and developing common policies and addressing common problems and challenges.

Through the OMC, Member States decide what goals they aim to achieve in a policy area, and develop a list of common objectives. Each Member State works this out in a national action plan, which involves fixing guidelines with specific timetables for short, medium and long terms. Member States also establish, where appropriate, quantitative and qualitative indicators and benchmarks as a means of comparing best practices. They should, then, translate the guidelines into national and regional policies by setting specific targets and adopting measures. Member States comment on one another's plans and exchange good practices. The European Commission coordinates this process and compares countries with one another. This process of periodic monitoring, evaluation and peer review aims to stimulate excellence, achieve greater convergence on EU goals and strengthen the learning process of those involved.

Under the OMC, key competences remain at the Member State level. The process is founded on the belief that governments and other stakeholders will take the process seriously and address shortcomings by adapting their own systems and methods in line with best European practice.[13] The approach, sometimes referred to as 'soft law', is essentially voluntary, and helps to expand policy activities beyond legally limited spheres. It also seeks to enhance policy integration and linkage (e.g. between economic and social policies, pensions, employment, immigration, etc.)[14]

---

it more coherent and focussed in the long term, as well as a number of specific headline objectives and measures required to achieve them. The Strategy was reviewed in 2004.

[11] The European Commission's annual Spring Report examines the Strategy in detail. The Spring Report is the only document on the agenda of the Spring European Council, where EU Heads of State and Government assess the progress of the strategy and decide future priorities in order to realize the Lisbon targets.

[12] EPC (2004) pg. 37

[13] ibid., pg.13

[14] de la Porte, C. and Pochet, P. pg. 3

III. COMPONENTS OF THE LISBON STRATEGY

The following sections briefly discuss the components of the Lisbon triangle and the mechanisms that have been developed under each of them to take forward the Lisbon process. These policy tools have been designed at separate times, and 'grafted' on to one other. The final section will therefore discuss steps that are being taken to 'streamline', or ensure a better coordination of these activities, so that they can reinforce one another in the effort to achieve the Lisbon goals.

A. Economic Policy (Competitiveness/Dynamism)

The real driving force of the European Union is economic integration. Without sound economies, no sustainable progress can be achieved in social protection. Coordination at European level in this area aims to achieve sustained economic growth with low inflation and sound public finances.

Broad Economic Policy Guidelines

The 1993 Maastricht Treaty first introduced a system for co-ordinating the economic policies of EU Member States. Articles 98-104 of the Treaty Establishing the European Community set out the process used for the co-ordination of economic policy. Article 99 of the Treaty states that Member States *"shall regard their economic policies as a matter of common concern and shall co-ordinate them."* This coordination takes place through the Broad Economic Policy Guidelines (BEPG), which lay down the EU's medium-term economic policy strategy. The guidelines provide a benchmark enabling economic developments in Member States to be monitored and compared.[15] The guidelines are concentrated around three main themes: growth and stability-oriented macroeconomic polices; economic reforms to raise Europe's growth potential; and strengthening sustainability.

While this process of establishing and monitoring Member States adherence to guidelines resembles that of the OMC, it can be considered 'hard' (rather than 'soft') coordination, since these activities are justified under Article 99 of the Treaty. The BEPG are, in addition, linked to the Economic Monetary Union (EMU) and the Stability and Growth Pact, which are in theory exclusive EU competencies, which must be applied in 12 of the 25 EU Member States that are currently participating in the EMU. The recommendations issued by the Commission are therefore much more influential than those issued through the OMC processes that take place in the area of social protection, discussed further below.

B. Employment Policy / European Employment Strategy

Beyond coordinating economic policies in order to optimise economic growth, it is also important to ensure that this growth occurs in a way that generates higher levels of

[15] The process begins when the Commission adopts recommendations for the guidelines, which are used by the Economic and Financial Council (ECOFIN) to formulate a draft of BEPG. The guidelines contain two parts: a set of horizontal recommendations and a set of country-specific recommendations. Member States report to the Commission about important measures taken by them in the field of economic policy, the Commission prepares reports on the consistency of economic policies of MS with BEPG. The Council may then, acting on a qualified majority, make the necessary recommendations to the Member States concerned (mutual surveillance), the Commission publishes a report making an overall assessment of the implementation of the BEPG's. The process leads to both general and country-specific recommendations. The guidelines are produced on a multi-annual basis, with changes in intervening years only taking into account major new developments. A full review of the guidelines is foreseen for 2006.

employment – since this is of importance to social stability and social cohesion. The Amsterdam Treaty (1997) therefore brought employment formally on the agenda of the European Union and aimed at a closer co-ordination of Member States' employment policies, as a part of the economic policy co-ordination process. This led to the establishment of the European Employment Strategy (EES). The Strategy, launched by the Luxembourg European Council in 1997 (and therefore also known as the 'Luxembourg Process') was designed as the main tool to give direction to and ensure co-ordination of the employment policy priorities to which Member States should subscribe at EU level.

While the strategy was implemented prior to the Lisbon Council of 2000 (and a five year evaluation was conducted in 2002), the Lisbon and subsequent Councils set the following strategic goals: to raise the overall EU employment rate to 70% and to increase the number of women in employment from an average to more than 60%, and that of older workers to 50% by 2010. The aim is also to raise the overall employment rate to 67%, and that of women to 57%, by 2005.[16]

Naps/Employment

Each year following the proposal from the Commission, the European Council agrees on a yearly basis on a series of guidelines setting out common priorities for Member States' employment policies. These are structured around four pillars: (1) employability, (2) entrepreneurship, (3) adaptability and (4) equal opportunities. Member States draw up **NAPs/employment** that describe how these guidelines have been put into practice nationally. The Commission and the Council examine each Member State's NAP/employment and present a Joint Employment Report. The Commission then presents a new proposal to revise the Employment Guidelines for the following year. The Council may then decide, by qualified majority, to issue country specific recommendations upon a proposal by the Commission.

Employment is considered an integral part of economic policies. These processes were therefore streamlined in 2002, and certain outcomes of the employment process are now incorporated in the Broad Economic Policy Guidelines. This gives the EU an important degree of influence in the shaping of Member State's employment policies.

C. Social Policy / Social Protection

The European Social Model' aims, as noted above, to balance economic and social considerations, since the two are mutually reinforcing. Economic growth is necessary to achieve social protection, while a cohesive, well trained and healthy society is more likely to generate growth. Since the creation of the European Communities, however, social policy has always been lagging behind economic policy. One of the major achievements of the Lisbon Strategy is therefore to try to put economic and social policy on an equal footing.

The European Councils have given the following areas the highest priority in the area of Social Protection: 1) Making pensions safe and pension systems sustainable 2)

[16] Currently the EU wide employment rate is only at 64.3%, meaning the Lisbon Target of 67% for 2005 and the 2010 target of 70% are likely to be missed.

Promoting social inclusion, and 3) Ensuring a high quality and sustainable health care throughout Europe. Making work pay by providing a secure income is regarded as a cross cutting theme. These main axes were first identified in a Commission Communication of 1999 on modernising Social Protection.

The Communication also suggested *'enhanced mechanism for exchanging information and monitoring policy developments'* to implement the strategy and provide it with visibility and political profile. This led to the establishment of the Social Protection Committee (SPC) in 2000, whose main tasks are to monitor the social situation and the development of social protection policies in the Member States and the Community and to promote exchanges of information, experience and good practice between Member States and the Commission. The establishment of the SPC is important, since it provided for the first time a forum where serious and fundamental discussion could take place in a well-prepared fashion between MS and EU institutions on issues such as social protection challenges in general and the inter-linkage between economic and social integration. This would lead to tangible and concrete outcomes in the area of social policy. This means that new analysis, exchanges of opinions, discussions and recommendations will have a fair chance of leading to results and political decisions. [17]

1) Pensions

An important issue with far reaching implications with respect to Member State's social and economic policies is Europe's ageing population.[18] The Open Method of Coordination has therefore been applied to this area in order to address the potential challenges that this poses. In 2001, the Social Protection Committee and the Economic Policy Committee produced a joint text in which they agreed on eleven objectives that centred around three particular areas:

- The Adequacy of pensions (ensuring that the capacity of Member State's pension systems is enough to meet future social objectives.)
- Financial Sustainability of Pensions (ensuring that Member States have a multi-faceted strategy to place pension systems on a sound financial footing.)
- Modernisation of pension systems in response to the changing needs of the economy, society, and individuals.

National Strategy Reports (NSR/Pensions)

In September 2002, Member States submitted their first National Strategy Reports (NSR) for pensions, in which they presented the measures that they have undertaken and are undertaking in view of these European-level objectives. A peer-review session took place, and the Commission adopted a draft Joint Report that evaluates the national strategies. The Council is currently in the process of assessing these outcomes and of deciding upon the objectives, methods and timetables for the future of the pension strategy. The agreed upon guidelines are integrated into the BEPG's, giving the EU more influence in this area.

---

[17] de la Porte, C. and Pochet, P. pg. 89

[18] Women in Europe have on average only 1.4 births. Governments are concerned about too few workers in future years to support the growing retirees in the population. Ageing population strains social security systems and pension plans and puts pressure on health budgets because of high health care costs for the elderly.

2) Social Inclusion

Articles 136 and 137 of the Amsterdam Treaty provide the European Community with the legal competence to play an active role in supporting and complementing the activities of Member States in combating social exclusion. The Lisbon European Council of March 2000 also agreed, on this basis, to take steps to make a decisive impact on the eradication of poverty by 2010.[19]

In December 2000 the Nice European Council decided to launch the OMC in the field of combating poverty and social exclusion and defined the following set of common objectives:

1. To facilitate participation in employment and access to resources, rights, goods and services for all
2. To prevent the risks of exclusion
3. To help the most vulnerable
4. To mobilize all relevant bodies

The Commission and Member States also agreed, in 2001, on 18 common indicators to approach the measurement of poverty and social exclusion. These indicators cover a variety of domains, such as income poverty, long-term unemployment, health and lifelong learning, to reflect the multidimensional nature of poverty and social inclusion, which cannot be reduced to a single variable. The indicators serve as a basis for the EU and individual Member States to assess the progress of the social inclusion process on the basis of verified outcomes.

National Action Plans for Social Inclusion (NAPs/inclusion)

The 15 EU Member States submitted their first round of National Action Plan for Social Inclusion (NAPs/inclusion), which indicate how they will take forward the common objectives mentioned above, in 2001. The NAPs/inclusion translate the common objectives into national policies, while taking into account individual circumstance and the particular nature of national social protection systems and social policies. The Commission drew up its first Joint Report on Social Inclusion, which was endorsed by the Council, summarising the results of the examination of the NAPs. Member States submitted their second round of NAPs (2003-2005) in July 2003, which were also summarised in a Commission/Council Joint Report and are currently in the process of implementing these.[20] Accession countries where also asked to submit Joint Inclusion

---

[19] The Joint Report on Social Inclusion (2003) summarises the current situation in the EU with regard to social inclusion. 15% of the EU population is living at risk of poverty in 2001. There were more than 55 million people at risk, of whom more than half live persistently on low relative income. The situation with respect to Social Inclusion varies greatly between countries: lowest levels of exclusion can be found in Sweden (10%) while the highest can be found in Ireland (21%). New EU Member States also fall within this range, although the results of individual indicators differ greatly compared to that of the 'old' Member States: while these countries face high levels of unemployment and low levels of perceived integration, there are high levels of lifelong learning and income equity.

[20] Member States have also been urged to give particular attention to the following six policy priorities in the current round of NAP's (2003-2005), since these are regarded to be especially relevant in the context of a continuing uncertain global economic and political climate:

1. Promote investment in and tailoring of active labour market measures and education and training systems to meet the needs of those who have the greatest difficulties in accessing employment

Memorandums (JIMs) outlining the situation and policy priorities in relation to poverty and social exclusion in their countries. They submitted their first round of NAPs/inclusion (2004-2006) in July 2004.

Action Programme
The Commission is also implementing an Action Programme (2001-2005) as part of its Social Inclusion Strategy. Based on the OMC, it aims to encourage co-operation among Member States, to strengthen the effectiveness and payoff of policies combating social exclusion. The Action Program has three objectives:
-to improve the understanding of social exclusion
-to organise co-operation and reciprocal training in the context of the NAPs/inclusion
-to develop the capacity of players to address social exclusion effectively

EuroHealthNet's project on Health and Social Inclusion is funded under Strand 2 (Trans-national Exchange Program) of the Action Program. The project focuses on the contribution that health related policies, programmes and interventions can make to tackling social exclusion. This is taking place through a cross-national exchange and comparison of effective policies and integrated, transferable good practices in Europe in this field. Phase I of the project was successfully completed in 2003 and led to two reports: *Health, Poverty and Social Inclusion in Europe: Literature review on concepts, relations and solutions*, and *Health, Poverty and Social Inclusion in Europe: Health analysis of national action plans on social inclusion.* Project partners are now engaged in Phase II of the project (2004-2005), which involves the exchange of good practices, field visits and a a final exhibit and conference to highlight the contribution that the health sectors can make to social inclusion.

3) Health and Long Term Care
Health care systems remain the competence of Member States, and governments have, traditionally, renounced EU interference in this area. The development of the Internal Market has, however, had important implications for the stability and sustainability of Member States health care systems since it has and will continue to lead to increased patient and professional mobility, and affects national policies with respect to, for example, advertising and the pricing of pharmaceuticals. Such policies have been developed from an economic approach, while health and social considerations may not be sufficiently taken into account when drafting them. The need for greater involvement from policy makers in the health and social sector at EU level, as well as greater coordination between Member States in this area is becoming more apparent.

In December 2001 the Commission therefore issued a Communication on the future of health care and care for the elderly, which spells out the common objectives for the European health care systems: accessibility, quality and financial viability, and provides details of the problem of maintaining these principles. This was followed by a report from

2. Ensure that social protection schemes are adequate and accessible for all and that they provide effective work incentives for those who can work;
3. Increase the access of the most vulnerable and those most at risk of social exclusion, including disabled people, to decent housing, quality health and lifelong learning opportunities;
4. Prevent early school leaving and promote smooth transition from school to work;
5. Develop a focus on eliminating child poverty and social exclusion among children;
6. Make a drive to reduce poverty and social exclusion of immigrants and ethnic minorities

the Social Protection Committee (SPC) and the Economic Policy Committee (EPC) which led the Council to conclude that 'useful lessons could be drawn from the sharing of information and best practice regarding actions being taken by Member States to secure the core social objectives of care and healthcare systems while ensuring their long term sustainability.'

National Reports on Health and Long Term Care

In 2002, EU Member States filled out questionnaires in which they were asked to identify and analyse the difficulties and challenges they faced that could block access to high quality care and long-term care. Agreement will be reached, in 2004, on objectives and indicators in this area. Member States will then submit national reports on Health and Long Term Care by Spring 2005. These will be analysed in the broader context of other Open Method of Coordination in the area of social protection and in relation with the Lisbon strategy. DG EMPLOI and DG SANCO will coordinate work in this area. The Social Protection Committee (SPC), the Economic Policy Committee (EPC) as well as a new High Level Group on Health Services and Medical Care that was recently established by DG SANCO, will be jointly responsible for this process.[21] This group is comprised of representatives of Health Ministries of the EU Member States.

While the focus of this process appears to be on health care of the quality and accessibility of health care services for the elderly, this will automatically lead to an assessment of health care services in general. Eventual future guidelines will be integrated into the Broad Economic Policy Guidelines (BEPGs).

IV. Streamlining Process

The mechanisms that have been developed to take forward the Lisbon objectives have all developed independently, making it a rather complex task to monitor all of these processes as well as to ensure that they all send out similar political messages. It is, however, vital that Member States ensure coherence between their economic, employment and social protection policies.[22] There is therefore a need to move towards a more integrated approach that acknowledges the interdependence and complementarity of these policies.

Economic and employment policies were already, accordingly, streamlined in 2002. The social processes underway in the field of social protection will now also be synchronized with the employment and economic processes. This involves creating a standardised process based on a common set of objectives –concerning social inclusion, pensions and healthcare, – and simplifying the procedures for submitting reports. The different reports of the Social Protection Strategy (NAPs/incluson, NSR/Pensions, National Reports on Health and Long Term Care) will still be produced by Member States and provide the basis for a Commission Joint Report on each of these topics. The different reports will then be synthesized into a single, triennial Joint Synthesis Report that will be an official Council and Commission document. By 2006 the social process will therefore be in step with those of the European Employment Strategy and the Broad Economic Policy Guidelines, so that all three reports can be compared to one another to ensure a

[21] The High Level Group on Health Services and Medical Care is a Permanent Committee that first met on 1 July 2004. It will also be involved in the Recommendations of the High Level Process of Reflection on Patient Mobility.

[22] Joint Report, 2003, pg.11

consistent approach. The first Joint Report on Social Protection and Inclusion will be published in 2005.

V. Evaluation

2005 will be an important year for the Lisbon Strategy. In 2004, the Commission as well as the 'High Level Group' chaired by Former Dutch Prime Minister Wim Kok are undertaking Mid-Term reviews of the Lisbon Agenda. The Commission evaluation will focus on progress made within the OMC processes, while the High Level 'Kok Group' will focus on the extent to which the Lisbon objectives are being met and what needs to be done to achieve further progress. This Group is, in theory, a Commission-led process, although members have been nominated by the Member States. Both Mid-Term Review processes will be completed by the end of 2004. The results of these evaluations will be significant, since they will establish the future nature of the strategy and where emphasis will be placed. This will be determined at the 2005 Spring Council. [23]

Work is also underway on a new Social Policy Agenda.[24] A High Level Group that was set up by the Commission in 2003 has just released its report with recommendations in the future Social Policy Agenda (2006 – 2010). The report's underlying philosophy is the need to keep the balance between economic and social policy. It defines three major challenges for the next social policy agenda: enlargement, population aging and globalisation. Amongst the main messages conveyed is the need to foster social inclusion and invest in children and young people in order to convey a positive perception of the future and to develop a new intergenerational balance. The Group also reported, however, that social policy development is currently running behind economic policy development. This must be redressed if the balances represent by the Lisbon triangle are to be maintained.

VI. Health, Health Inequalities and Social Inclusion in the context of Lisbon

Health, as an individual's most valuable resource, and therefore a society's most important collective resource, should play a central role in achieving the Lisbon objectives. The focus should, in this respect, be on increased cooperation to reduce health inequalities between and within Member States as part of initiatives to improve social inclusion and social cohesion.

EuroHealthNet's Literature Review on Health, Poverty and Social Inclusion, which was an outcome of the Phase I of the project on Health and Social Inclusion, illustrates how

---

[23] The conclusions of the High Level 'Kok Group' (expected in early November 2004) are likely to be influential in determining the future of the Lisbon Strategy. Many civil society groups are critical of the Group, and claim that the process lacks transparency and does not include any consultation procedures. There is a fear that the conclusions of the High Level Group will focus exclusively on Economic and Employment Policy, stressing employment and job creation over of quality of employment and competitiveness over cohesion in general. There currently appears, for example, to be a strong focus on 'attracting people to the labour market'. This emphasis stigmatizes the unemployed, who very often want to work, but can't, due to a shortage of good (quality) jobs, or because they are unable to for reasons of ill health. There is a fear that Social Policy in general and the Social Inclusion Strategy in particular are being subordinated to other components of the Lisbon Strategy. (Social Platform. Contribution to Troika meeting preceding the Informal Employment and Social Affairs Council, July 2004.)

[24] The Report is available at:
http://europa.eu.int/comm/employment_social/social_policy_agenda/social_pol_ag_en.html

health, poverty and social exclusion are strongly interlinked. Ill health can lead to social exclusion, while the experience of being excluded can lead to or compound ill health. Investing in health can therefore be an important way of combating social exclusion.

This project also involved a 'health audit' of NAPs/inclusion, which revealed that health related initiatives that were incorporated into the NAPs tend to focus on health care, rather than on health promotion. These were, in addition, initiatives that were carried out at the national, rather than at the local and community level. This reflects a failure to recognise and mobilise an important body of actors that can contribute to efforts to promote social inclusion and generate greater social cohesion.

The Lisbon Strategy has almost reached its half-way mark, and it will take a great deal of political commitment to ensure that the EU gets closer to achieving its objectives, whilst ensuring that a good balance is maintained between social and economic policy. (EU Member States, for example, have only fully ratified and implemented seven of the over forty Directives that relate to the Lisbon objectives.) Nevertheless, some positive developments have taken place regarding the incorporation health related issues. The new OMC process on Health and Long Term Care, for example, indicates increasing focus on health related issues in the area of social protection (although this should focus not only on health care but also on public health and health promotion.) Another positive development is the imminent introduction of 'healthy life years' as a structural indicator in the Strategy.

The establishment of the new EU Constitutional Treaty, which contains new provisions relating to social policy, could also support and strengthen future EU actions in this area. All EU Member States signed the Treaty on 29 October 2004, and have two years to complete ratification. The Treaty increases the scope of EU action in social areas in a number of ways. Part I of the Treaty, outlining the values and objectives of the EU, incorporates human dignity and equality as values, and solidarity as an objective. While these provisions are not binding, they can be invoked for political leverage. In addition, Part III of the Treaty includes a new 'horizontal' article that will force those working in other policy areas to consider the effects of their measures on, amongst other things, social protection and social exclusion or to 'mainstream' exclusion issues. This article is welcomed as an additional tool to tackle exclusion, although the extent to which it will be put into effect remains to be seen. Another important development will be the incorporation in Part II of the Charter of Fundamental Rights, which includes a chapter on solidarity (eg. rights to social protection and heath care). The Charter will, if the Treaty comes into force, have a binding legal force, and European Court of Justice decisions will determine the extent to which it expands the regulatory reach of the EU. Provided that all Member States ratify the Treaty, these provisions will increase the scope for action for actors wishing to advance the ideals represented by the European Social Model.

Much more should currently be done, however, to strengthen the social protection component of the Lisbon Process and to integrate health. Perhaps most important is to raise recognition of the contribution of health as a productive factor. This requires more evidence to highlight the exact cost-benefit of health expenditures and to advocate for investment in health policies. This information should be integrated into the EC Economic Guidelines and Member States should regularly report on this.

Achievement of the Lisbon objectives will also depend on the development of a more cohesive strategy across EU competencies and on greater cooperation between different

policy sectors within the EU and in Member States. Policies relating to, for example, the internal market, regional development, agriculture, education, transport, etc. all have important implications for health and well-being. These sectors as well as all EU institutions must take on the task of mainstreaming health and social issues in their work. There is, in addition, the need for careful redistribution of resources from '*Bads*' (for example elements of agricultural or industrial production) to '*Goods*' (investment in health and well-being for citizens.) This implies a major switch in attitudes in agreement of the forthcoming EU financial perspectives 2007-2013.

Such measures should be taken forward to counteract the current tendency of subordinating the social component of the Lisbon Strategy to economic and employment considerations. Economic development and integration are not, as noted at the start of this paper, a goal in itself but a means to increase the well being of society and the majority of the population. Individual and collective health status can be considered a good measure of whether the objectives of the Lisbon Strategy are being achieved. Higher levels of good health, and reductions in health inequalities are both a means of achieve these objectives, and a reflection of the Strategy's success.

Com H. 54.

[redacted]

www.eurohealthnet.org

EuroHealthNet

the European network for public health, health promotion and disease prevention

Health Literacy and Internet

Recommendations to promote Health Literacy by the means of the Internet

Silke Christmann, EuroHealthNet, April 2005

CONTENTS

INTRODUCTION 3

1. HEALTH LITERACY 3
1.1 Definition of health literacy 3
1.2 Consequences of low health literacy 4
1.3 Levels of health literacy 5

2. INTERNET AND HEALTH COMMUNICATION 6
2.1 Internet and health information 6
2.2 Use of Internet among vulnerable groups 7

3. INITIATIVES OF THE EUROPEAN COMMISSION TOWARDS HEALTH INFORMATION ON THE INTERNET 9

4. RECOMMENDATIONS TO PROMOTE HEALTH LITERACY BY INTERNET 12
4.1 Target Groups: 12
4.2 Possible set of recommendations: 12
4.3 Detailed Recommendations to promote health literacy by the means of the Internet (personal and community empowerment) 13
4.3.1 *Improve Access to the Internet for vulnerable groups (Public Internet Access Points* 13
4.3.2 *Development of a Regional/Local Health Portal, which offers information appropriate to age, culture and language.* 14
4.3.3 *Strengthen individual competence* 16
4.3.4 *Communication Strategy* 17

5. ANNEX 18
5.1 Quality Criteria for Health Related Websites (EC 2002). 18

6. SOURCES 19

INTRODUCTION

Due to a changing pattern in disease burdens from infectious diseases to chronic diseases and the aging of the population in Europe health information becomes increasingly important for citizens to act in a healthy way. Terms like empowerment and informed-shared-decision-making describe a situation that citizens are encouraged to take an active part and accountable role in their own health.
What about citizens, who don't have the ability to be informed? How can an equal access and the ability to use health information in an effective way be assured? The concept of health literacy offers a new approach to health promotion work.
This paper will explore in which way the use of Internet can contribute to improve health literacy among European citizens, especially of those with low health status.

1. HEALTH LITERACY

Primarily used in the context of medical care to help patients understanding health care information, health literacy has recently become a topic in the field of health promotion.
Health literacy is based on improved access to information and knowledge, informed consent and negotiating skills and affects on health care utilization and the active participation in health promotion activities (Kickbush 2001). Health literacy is clearly dependant upon levels of fundamental literacy (Nutbeam 2000). While general literacy and education are important determinants of health and inadequate literacy is a risk factor for low health literacy, literate people are not consequently health literate (Kickbush 2001).
The potential of Health literacy lies in its holistic approach, which takes into consideration not only personal skills and environmental factors but requires tailored information to develop the social and cognitive skills fundamental to act on health determinants. Beside general strategies to promote literacy, stronger cooperation between the health and education sector will therefore be essential so that people are able to make healthy choices.

1.1 Definition of health literacy

The term health literacy is originally used in the United States and describes and explains the relationship between patient literacy levels and their ability to comply with prescribed therapeutic regimens (Ad Hoc Committee on Health Literacy 1999). This approach defines health literacy as "the ability to read, understand and act on health care information"(Center for Health Care Strategies 2000).

Most research and publications about health literacy concentrate on improving the ability to read consent forms and other written health care information, understand and act on written and oral information given by health care professionals (Kickbush 2001).

The US Healthy People 2010 objectives expand the patient-oriented approach of health literacy towards health promotion by defining health literacy as "the capacity to obtain, interpret and understand basic health information and services and the competence to use such information and services to enhance health" (USDHHS 2000).

The broadest definition of health literacy is drawn by the World Health Organization (WHO). Nutbeam describes health literacy in the WHO health promotion glossary as follows: "Health literacy represents the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health. Health literacy means more than being able to read pamphlets and successfully make appointments. By improving people's access to health information and their capacity to use it effectively, health literacy is critical to empowerment."(Nutbeam 1998).

1.2 Consequences of low health literacy

Limited health literacy increases the disparity in health care access among exceptionally vulnerable groups (Partnership for Clear Health Communication 2003). Due to an unequal access to information technology, poor health literate people are less informed and often produce supplementary costs to the healthcare system because of inadequate or inappropriate use. Low health literacy is often linked to chronic health problems because patients know less about their conditions and how to handle symptoms.

According to the Center for Health Care Strategies, poor health literacy is disproportionately more likely among **older people, immigrants and those with low incomes** (CHCS 2003).

The health literacy of disadvantaged groups has therefore to be improved by supporting access to health information, providing special information for people with low health literacy skills and promoting their capacity to use information effectively.

According to Nutbeam, the outcomes of high levels of health literacy will lead to personal benefits, such as healthier lifestyle choices and effective use of the health services. Furthermore, the ability to use information effectively, can lead to social benefits, "e.g. by enabling effective community action for health" (Nutbeam 2000).

1.3 Levels of health literacy

Nutbeam classifies health literacy as a continuum with three levels: functional health literacy, interactive health literacy and critical health literacy. These levels reflect increasing degrees of autonomy and personal empowerment, dependant on cognitive development and exposure to different information (Nutbeam 2000).

Level 1: functional health literacy: Functional health literacy means the "ability to apply literacy skills to health related materials such as prescriptions, appointment cards, medicine labels" (Parker et al. 1995). By communication of factual information, education in this field tends to promote knowledge of health risks, health services and compliance with medical advice.

Examples of activities to improve functional health literacy: production of information leaflets, traditional patient education. (Nutbeam 2000).

Level 2: interactive health literacy: Interactive health literacy is characterized by personal skills like the capacity to act independently on knowledge as well as motivation and self-confidence to provide information and interact with social groups. Activities to improve interactive health literacy will result in individual benefit by focussing on personal and social skill development as well as behavioural outcomes

Examples of activities to improve interactive health literacy: school health education programmes, tailored health communication regarding specific needs of different groups (Nutbeam 2000).

Level 3: critical health literacy: Critical health literacy empowers individuals and communities to critically analyse information and use it to exert greater control over life events and situations. By improving individual and community capacity to act on social, economic and environmental determinants of health, activities to promote critical health literacy will be beneficial for the individual and the community. Helping people to develop confidence to act on knowledge and the ability to work with and support others will best be achieved through community-based actions

Examples of activities to improve critical health literacy: Provision of technical advice to support community action (Nutbeam 2000).
Health literacy is therefore a useful concept, which differs from Health Promotion and Health Education approaches as it really focuses on communication and empowerment of people to act upon the information they receive.

2. INTERNET AND HEALTH COMMUNICATION

Internet proposes an easy-to-use, universal access to information and provides various possibilities to find the latest up-to-date, barrier free information that is independent of location and time. Interactive services like online self-help-groups, chats with experts and forums on special health topics can support active coping and social support in a virtual community by anonymous contact.
Due to a wide-spread pool of information, which can be personalised, Internet can enhance health literacy, health related knowledge and support people to become responsible for their own health.

The paper will now focus on the role of Internet in providing health information as well as the use of this media among vulnerable groups.

2.1 Internet and health information

Internet is increasingly becoming a key source of health information to most people (Kickbush 2001). A majority of the population of the EU-15 (41.5 %) believed that the Internet is a good source of health related information (European Opinion Research Group 2003). About half of the people seeking health information on the Internet believe that the Internet has a major impact on their understanding of health problems and on their interaction with their doctor (Wilson et al. 2004). The proportion of users drops with age and increases with educational level: 35.3 % in the 15-24 age group use Internet for health-related information, compared to 8.3 % in the older age group (55+). Only 5.8 % among people who left full-time education at the age of 15 use the Internet to get information about health.
Interestingly, health information is demanded both by Internet users and non-users of all age groups (European Opinion Research Group 2003).

As with other media, there is a danger that the information provided via Internet is false, of low quality or too complex for the average user. Information provided on Internet is unfiltered, in that it does not always disseminate between user groups (professionals, lay persons, etc.). The information could therefore generate emotional reactions, if, for example, it discusses survival rates for specific diseases. Users may not have adequate support to understand and process this information. Unequal access to the medium can also lead to a widening social gap (Schmidt-Kaehler 2003). Internet can be regarded as a pull-information[1] source rather than a push-

[1] Pull-information require an actively search and selection process by the user to choose the information he needs among a huge pool of information.

information[2] source (Television and printed media). Users may be overwhelmed by the amount of information that they pull. Searching for "health" and "health information" on Google (http://www.google.com), for example, results in 321,000,000 hits and 3,330,000 hits respectively.

In order to use Internet effectively, therefore, the general public must know how and be supported in their efforts to manage this information. Health literacy is crucial to use the Internet in an effective way and being capable to assess the available health information.

2.2 Use of Internet among vulnerable groups

Internet is actually not very attractive and accessible to vulnerable groups. The working document "eInclusion revisited: The Local Dimension of the Information Society" from the European Commission (2005) emphasizes low Internet use among housepersons (especially women), older citizens, retired people and people living in rural areas. Education and income appear to be the most important variables to digital exclusion. According to Eurobarometer 58.0 the subjectively identified reasons for non-use of the Internet among European citizens are non availability of a PC at home (high cost of PC ownership and internet connection); lack of access at work or at Public Access Points, the complexity of technology and the lack of basic skills (EC 2005 a).

While young people as well as people with a higher educational level mention costs as main barrier for their non-use of the Internet, elderly (55+) and low educated (up to 15) see the lack of training as main barrier (figure 1).

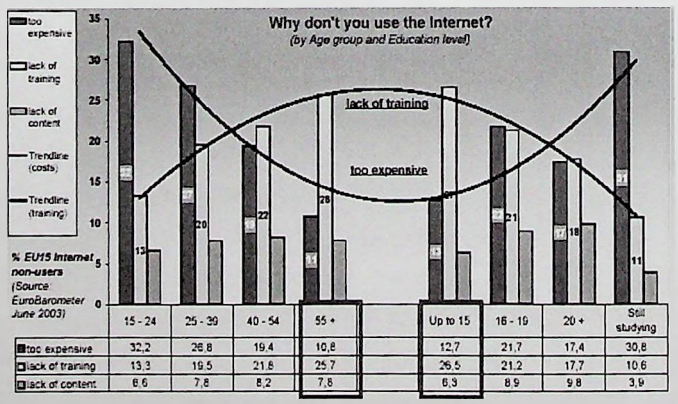
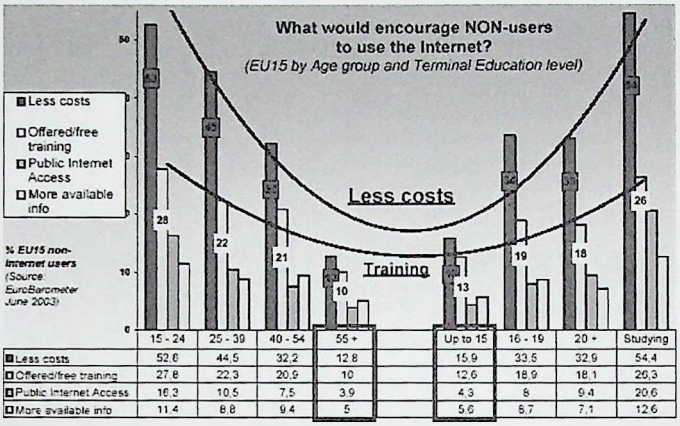


fig. 2. Why don't you use the Internet ? (by Age group and Education level)

[2] Push- information describes an information offer where media professionals have already selected available information so that their reception occurs in a passive way, independently of the recipients' special needs.

In general, the interest in Internet use among elderly and people of lower educational level is significantly lower than among the general public (European Opinion Research Group 2003). Regarding the results of the question "What would encourage NON-users to use the Internet?", the low response rate of 31.7 % of the elderly and 38.4% respectively of low-educated could suggest that there is an additional cause for the non-use, which is specific to vulnerable groups, that has not been identified.



	15 - 24	25 - 39	40 - 54	55 +	Up to 15	16 - 19	20 +	Studying
Less costs	52,6	44,5	32,2	12,8	15,9	33,5	32,9	54,4
Offered/free training	27,8	22,3	20,9	10	12,6	18,9	18,1	26,3
Public Internet Access	16,3	10,5	7,5	3,9	4,3	8	9,4	20,6
More available info	11,4	8,8	9,4	5	5,6	8,7	7,1	12,6

fig. 2 What would encourage NON-users to use the Internet? (EU 15 by Age group and Terminal Educational Level)

That additional cause for the low rate might be the inadequate sensitivity of the value of Internet use in the life of disadvantaged populations as well as the mistrust in technology in general (Chang et al. 2004).

Chang et al. see the digital divide prior in content-related barriers, such as lack of local information, literacy barriers, language barriers and lack of cultural diversity. On the one hand, disadvantaged people believe that Internet is of no use to them and on the other hand they mention the high investment costs for hardware and connection as well as the lack of training as the greatest barrier to using the Internet. The underlying reason, however, could be that people don't use Internet because they are not interested in the information provided (EC 2005 a).

The Internet requires basic skills, such as literacy and much of its content is addressed to better educated people (EC 2005 a). On average, Internet health information requires a 10th grade (= age of 15) or higher reading level and only 10 of 1000 Web sites reviewed provided understandable content for low-literacy adults. Zarcadoolas et al. explains that complex web features, such as animated links, may be too complicated for low-literacy adults to identify and use. Concerning the use of search engines, searching strategies, such as generation of specific search terms,

differentiation between sponsored and non-sponsored sites and the correct spelling of the search terms were sub optimal (Birru et al. 2004).
The literacy level needed to read health information on the Internet appears to inhibit information-seeking efforts of low-literacy adults (Birru et al. 2004). Birru also reports that low-literacy adults who participated in a computer skill workshop felt positive about continuing their online experiences and all expressed enthusiasm to improve their skills (Birru et al. 2004).

These results show that a combined strategy of designing websites providing easy-to-read health information, improving Computer- and Internet-skills and promoting Computer and Internet access is necessary to improve health literacy among vulnerable groups and to encourage them to use the Internet.

3. Initiatives of the European Commission towards health information on the Internet

The European Commission, DG Information Society, declared E-Health as a priority target in 2002. Since the inauguration of the eEurope action plan in 2002 by DG INFO, the importance of Health Information is mentioned in various communications of DG SANCO and "improving health information and knowledge" is the first strand of the EC's current Public Health programme (2000-2006).
What is the role of online health information for the general public in the current public health work programme as well as the eEurope 2005 Action Plan?

The Commissions' communications often refer to the need for quality-proofed and accessible health information. In 2004, the EC mentioned that a "growing number of people are looking proactively for information (..) and want to be actively involved in decisions related to their own health"[3]. But how can the provision and accessibility of this information for everyone be assured?
The "Health Information" strand deals with a wide range of issues such as development of health indicators, analysis and reporting on health or dissemination of health information, mostly focusing on health information for public health professionals. Even in the area of E-health, the EC attaches only a little importance to online health information for the general public. Previous activities of the European Commission, like the establishment of standards for "Accessibility of Public Web

[3] EC 2004 a, p.7

Sites and their Content"[4] and "Quality criteria for Health related Websites"[5], concentrate on establishing formal criteria for barrier-free access instead of ensuring the provision of "barrier-free content". For example, the quality criteria for Health related Websites (see Annex I) contains an entire paragraph on transparency and regularity of updating the information, whereas important factors regarding the content, such as usability and readability, are only enumerated under the point "Accessibility".

The priorities of the EC in the area of e-Health, such as the published quality criteria, are necessary but not sufficient to provide better health information to everyone, including low health literate people. Proposed education campaigns to inform the general public about the existence of quality codes and to educate site developers about minimum quality standards as well as monitoring the member states actions to make health information as accessible as possible to citizens, are useless if the provided information (content) is neither understandable nor designed to answer the information needs of the specific user.

In the context of its Public Health Programme the EC is preparing to establish a European Union-wide public health portal with information "relevant to European citizens"[6], to be launched by the end of 2005. This Portal would be structured thematically, mainly addressed to the general public, with a special section for professionals. Concrete details about for example, what will be included in the "citizens' section" or if the portal pays attention to the specific information needs of different population groups (such as youth, elderly or men, women), have not yet been communicated.

A paper produced in the context of the European Health Policy Forum (EHPF 2005), a multi-stakeholder group of health actors, initiated by the Commission in 2001, points out the importance of health information for the empowerment of citizens. In their latest position paper of 9th march 2005 "Recommendation Paper on Health Information"), the working group on health information encourage the Commission to develop a more coherent and comprehensive approach to health information provided in the EU. For this purpose, the EHPF proposes a policy mapping exercise to identify all EU initiatives and policies addressing health information, as well as a consultation with key stakeholders (providers and user of health information).
This initiative, which takes the various aspects of health communication into consideration and requires the improvement of general health literacy, could

[4] EC 2001, http://europa.eu.int/eur-lex/en/com/cnc/2001/com2001_0529en01.pdf
[5] EC 2002 a, http://europa.eu.int/eur-lex/en/com/cnc/2002/com2002_0667en01.pdf
[6] EC 2004 a, p.20.

contribute to the development of a user-relevant EU public health portal, also accessible to low-health literate citizens.

4. RECOMMENDATIONS TO PROMOTE HEALTH LITERACY BY INTERNET

To achieve functional health literacy, general literacy has to be improved to ensure the ability to read and understand health materials. Existing initiatives in the health care sector to promote functional health literacy among patients should be extended to the general public.

An analysis of the level of comprehension of written health materials (SMOG-readability formula) revealed that only 3% of the available information is suitable for people with a low educational level (Dierks et al. 2000).

The Internet is a developing and interactive media and has great potential to provide understandable and useful health information, especially to people with low literacy skills. New information technologies might address health information in a more visual and interactive manner to make the information more accessible to those having lower reading skills. Interactive tools like video streams and possibilities to use technologies for disabled people like software that read Website content aloud, could contribute to reduce the digital divide. New initiatives should be taken to promote interactive and critical health literacy among vulnerable groups.

4.1 Target Groups:

- Elderly
- Immigrants
- families in poverty (esp. focus on house-hold women, youth)

4.2 Possible set of recommendations:

1. Improve Internet access for vulnerable groups
2. Ensure specific and high quality online health information, which is understandable and relevant to the target group.
3. Provide skill training to develop the capacity of Computer/Internet-use among vulnerable groups.
4. Implementation of a broad communication strategy to promote the general concept of health literacy among public, health professionals and politicians at national level as well as specific projects among vulnerable groups at local level.
5. Further Research/Analysis on how to support vulnerable groups in the use of computers/internet

4.3 Detailed Recommendations to promote health literacy by the means of the Internet (personal and community empowerment)

4.3.1 Improve Access to the Internet for vulnerable groups (Public Internet Access Points)

All citizens should have easy access to Public Internet Access Points, which could be offered in two locations: Those that are highly frequented by the general population on a daily basis (supermarkets, fast-food restaurants, phone-shops and libraries) and social/health centres .The access points should provide long opening hours to ensure accessibility after work and during the weekend and should integrated in existing infrastructure.

Providing Public Internet Points in highly frequented central locations means that people don't have to change their daily routine to get Internet Access.

Health centres offer a fixed location, additional information as well as assistance by professional staff, but have the disadvantage of requiring a high budget for human resources and office costs.

Developing collaboration with the private sector could promote the objective of improving overall accessibility by contributing computers, and reduced or free connection to Internet, as well as broadband access to poorer regions.

4.3.2 *Development of a Regional/Local Health Portal, which offers information appropriate to age, culture and language.*

Regional/local authorities should develop health portals that are accessible through a well-known site. The portal ensures quality information of regional relevance that is written at a level that is easy to understand. Content is kept up-to-date by a network of health professionals, social workers, communication and education specialists and supervised by a independent team. This could stimulate multidisciplinary collaboration between the different professions.

A barrier free and easy to handle health portal encourages person with low Internet experience to start using this media. The most important barriers like having to use search queries and search engines and to differentiate between good quality and sponsored sites or incorrect information will be reduced by providing information on a quality-proofed Portal. With growing media competence, people can leave the easy-to-use and quality-assured area of the central portal.

The regional focus means that users can access relevant information about resources available to them in their community. The aim is to foster social contacts between citizens as well as professionals in the community and to improve knowledge about available health information and services in the area.

The Health Portal should be based on 3 strands:

- **Health information** (tailored and at a basic literacy level; nontextual messages like video streams, graphics and audio should be developed to respond to different learning styles (visual or audio learners)
- **Practical information about the Health System** (regional Infrastructure +. a interactive community map to see where the next doctor, hospital, self-help-group, health promoting activities (nutrition course, walking group, etc.,) is located.
- **Interactive part** (forum, thematically chat rooms, mail to experts, FAQ to share the knowledge of the target group, possibility to valuate offers in the community)

To ensure useful and targetted information, health information needs of vulnerable groups in the community "XY" should be examined through a social assessment. This social assessment should take place in locations frequented by the specific target group, such as schools for children of disadvantaged families, social welfare offices (migrants) as well as hospitals, pharmacies or doctors offices (elderly people).

To guarantee a Health Portal which is oriented to the needs and interests of the target groups[7], representatives of the target group should be actively involved in the designing process. It is strongly recommended that he portal be pre-tested among individuals of the target group.

The Portal should be based on a set of new Guidelines, based on existing quality instruments, such as the quality criteria of health-related websites (EC), afgis[8], HON-Code of Conduct[9] or HIDDEL-vocabulary[10]. In order to ensure that the portal meets the needs of low health literate people, the Guidelines should take into consideration the content of the site, and ensure that the particular needs and abilities of specific usergroups.
Main priorities could be a detailed description on important factors like "Usability" (of the Site[11], as well as the content[12]) as well as "Understandability"(didactics) of the information provided for all citizens.
Additionally, a quality assessment tool (e.g. a short checklist) could be developed to offer all citizens, especially members of the target group a easy-to-use tool to critically use information.

[7] e.g. Elderly: The design of the information offered has to be adapted to their characteristics (decreased attention span, simple and clear web pages, large buttons, large font sizes (14 points or more), high contrast, no sound effects.
[8] The Health Information System Action Forum (afgis) provides criteria for the quality assurance of health information in the new media like transparency, usability, accessibility. www.afgis.de
[9] The Health on the Net Foundation sets an ethical standard for online health information. Provider, commiting to these principles are allowed to put the HON-logo on their Website. www.hon.ch
[10] The Health Information Description, Disclosure and Evaluation Language (HIDDEL) enables the Labeling of Websites based on the use of specific vocabulary to describe the information offer. www.medcircle.org
[11] is the navigation structure intuitive, does the site take into account the site specific needs of the target group? e.g. elderly need simple pages, whereas young people are attracted by interactive tools)
[12] is the provided information relevant to the specific target group

4.3.3 Strengthen individual competence

ICT- skills are nowadays an essential to individual development in our knowledge-based society. It is therefore of great importance that vulnerable groups, especially immigrants and young people, develop these skills, in order to gain professional qualifications and employment opportunities. The community-based trainings can contribute to the building of a social network by learning together.

Modular trainings, focussing on problem-based learning, should therefore be provided to improve the Computer/Internet-skills of vulnerable groups. To overcome mental barriers such as mistrust of new technologies and the lack of useful content, a focus of the training should be on revealing the use amongst specific target group by indicating how it can help facilitate interests or issues that are of real concern to the participants (e.g. how they can use it to find out what specific health promotion courses are offered in their community).

The trainings should be provided in different settings according to the specific target group and preferably by a community member, who takes the role of a peer ("peer to peer teaching"). Offering skill training in less formal circumstances by an instructor from the same culture tends to be more motivating, especially for immigrants and women.
The training programme should contain the following contents:

a) Providing computer and Internet- skills (how to use a computer/ what is the Internet?)
b) How to manage the information overload (Pull-information) (Finding information: How to use search engines (e.g. Google) and define search strategies)
c) Critical reception of information provided (Communication of existing quality criteria, development of a easy to use- tool specific to the needs of the target group to judge the quality of information, exchange about the search results in small groups).

- Additionally, the development of media-competence (in particular PC + Internet) in school curricula should be strongly encouraged.

4.3.4 *Communication Strategy*

Promoting the strategies by a social marketing concept targeted at vulnerable groups, which focuses on concrete values of the Internet use in their every-day-lives. The communication strategy must address thus group's mistrust of technology in general. The communication strategy should take into account the low use of Internet among vulnerable groups by making use of non-digital communication to deliver the message.

The Guidelines should be promoted among producers of health information to ensure high quality information that is understandable to the whole European Population, especially people with low health literacy skills. In addition, a universal tool to facilitate the valuation of information should be promoted among the general public through the use of different media.

5. ANNEX

5.1 Quality Criteria for Health Related Websites (EC 2002).

Quality Criteria for Health Related Websites

Developed in widespread consultation with representatives of private and public eHealth websites and information providers, other industrial representatives, public officials, and representatives of government departments, international organisations, and non-governmental organisations.

These criteria should be applied in addition to relevant Community law

Transparency and Honesty

- Transparency of provider of site – *including* name, physical address and electronic address of the person or organisation responsible for the site (see Article 5 and 6 Directive 2000/31/EC on Electronic Commerce).
- Transparency of purpose and objective of the site
- Target audience clearly defined (further detail on purpose, multiple audience could be defined at different levels).
- Transparency of all sources of *funding* for site (grants, sponsors, advertisers, non-profit, voluntary assistance).

Authority

- Clear statement of sources for all information provided and date of publication of source.
- Name and *credentials* of all human/institutional providers of information put up on the site, including dates at which credentials were received.

Privacy and data protection

- Privacy and data protection policy and system for the processing of personal data, including processing invisible to users, to be clearly defined in accordance with community Data Protection legislation (Directives 95/46/EC and 2002/58/EC).

Updating of information

- Clear and regular updating of the site, with date of up-date clearly displayed for each page and/or item as relevant. Regular checking of relevance of information.

Accountability

- *Accountability* - user feedback, and appropriate oversight responsibility (such as a named quality compliance officer for each site).
- Responsible partnering - all efforts should be made to ensure that partnering or linking to other websites is undertaken only with trustworthy individuals and organisations who themselves comply with relevant codes of good practice.
- Editorial policy - clear statement describing what procedure was used for selection of content.

Accessibility

- *Accessibility* - attention to guidelines on physical accessibility as well as general findability, searchability, readability, usability, etc.

Relevant Community Law is listed in footnote 3. Terms *in italics* are further discussed in the Glossary of Terms

6. SOURCES

Health literacy

Ad Hoc Committee on Health Literacy (1999). Health literacy: report of the Council on Scientific Affairs, American Medical Association. Journal of the American Medical Association, No. 281, 552-557.

Center for Health Care Strategies Inc. (CHCS) (2000). What is Health Literacy? Health Literacy Fact Sheets, No. 1. CHCS,Princeton,NJ.
Online available: http://www.chcs.org/usr_doc/hl1.pdf (02.03.2005).

Center for Health Care Strategies Inc. (CHCS) (2003). Who has Health Literacy Problems? Health Literacy Fact Sheets, No. 2. CHCS,Princeton,NJ.
Online available: http://www.chcs.org/usr_doc/hl2.pdf (02.03.2005).

Duetz, M. & Abel, T. (2004). Health Literacy. Förderung und Nutzen von Gesundheitskompetenzen in der Praxis. Managed Care, No. 5, 33-35.

Kickbusch, I. (2001).Health literacy: addressing the health and education divide. Health Promotion International, Oxford. Vol.16, 289 – 297.

Nutbeam, D. (1998). WHO Health promotion glossary. Online available. http://www.wpro.who.int/hpr/docs/glossary.pdf (02.03.2005)

Nutbeam, D.; Kickbusch, I. (2000). Advancing health literacy: a global challenge for the 21st century. Health Promotion International, Oxford. Vol. 15, 183 – 184.

Nutbeam, D. (2000). Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. Health Promotion International, Oxford. Vol. 15, 259 – 267.

Partnership for Clear Health Communication (2003). Health Literacy. Statistics-at-a-glance. Online available. http://www.askme3.org/pdfs/stats_at_a_glance.pdf (07.03.2005).

Pfizer (2003). Eradicating Low Health Literacy. The First Public Health Movement of the 21st Century. Overview. White Paper. Online available. http://www.askme3.org/pdfs/white_Paper.pdf (07.03.2005).

Rothschild, B. (2005): Health literacy: what the issue is, what is happening and what can be done. In : Health Promotion Practice 6 (1):8-11

St. Leger, L. (2001). Schools, health literacy and public health. Possibilities and challenges. Health Promotion International, Oxford, Vol.16, 197 – 205.

United States Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (2000). Healthy People 2010. Online available: http://www.health.gov/healthypeople.(11.03.2004).

Arnet, B.; Schaer, R. (2003).E-Health. In: Zenger, C.A.; Jung, T. (Editor). Management im Gesundheitswesen und in der Gesundheitspolitik. Verlag Hans Huber, Bern, 241– 254.

Birru, M.S., Monaco, V.M., Charles, L., Drew, H., Nije, V., Bierria, T.,Detlefsen E., Steinman, R.A. (2004). Internet usage by low-literacy adults seeking health information: an observational analysis. Journal of Medical Internet Research. Vol.6. Online available. http://www.jmir.org/2004/3/e25/ (24.03.2005).

Casacuerta, D. (2005). An alternative Approach in the Use of e-Learning for Digital Inclusion. Online available: http://www.elearningeuropa.info/index.php?page=doc&doc_id=5949&doclng=6&menuzone=1 (22.02.2005)

Chang, B.L. ; Bakken, S. ; Brown, S.S.; Houston, T.K., Kreps, G.L.; Kukafa, R.; Safran, C.; Stavri, P.Z. (2004). Bridging the Digital Divide : Reaching Vulnerable Populations. Journal of the American Medical Informatics Association, Vol. 11. Online available. http://www.pubmedcentral.gov/picrender.fcgi?tool=pmcentrez&blobtype=pdf&artid=524624 (22.02.2005).

Demiris, G.; Finkelstein, S.; Speedie, S.M.(2001). Considerations for the Design of a Web-based Clinical Monitoring and Educational System for Elderly Patients. Journal of the American Medical Informatics Association. Vol.8. Online available. http://www.pubmedcentral.gov/picrender.fcgi?tool=pmcentrez&blobtype=pdf&artid=131044 (22.02.2005).

Dierks, M.-L.; Schwartz, F.W.; Walter, U. (2000). Patienten als Kunden. Informationsbedarf und Qualität von Patienteninformationen aus Sicht der Public Health- Forschung. In: Jazbinsek, D. (Editor): Gesundheitskommunikation. Westdeutscher Verlag, Wiesbaden, 150 – 163. Online available. http://www.kommwiss.fu-berlin.de/fileadmin/user_upload/wissjour/Gesundheitskommunikation/J_Dierks.pdf (28.02.2005).

EC (2005 a).eInclusion revisited: The Local Dimension of the Information Society. Commission staff working document. Part I. Brussels (4-02-2005). Online available: http://europa.eu.int/comm/employment_social/news/2005/feb/eincllocal_en.pdf (03.03.2005).

EC (2005 b). Women and the elderly are crossing the digital divide, but the poor still lag behind, says new EU report, Brussels (14-02-2005). Online available: http://europa.eu.int/comm/employment_social/news/2005/feb/einclusion_en.html (02.03.2005).

European Opinion Research Group (EORG) (2003). Eurobarometer 58.0. European Union citizens and sources of information about health. Online available. http://europa.eu.int/information_society/eeurope/ehealth/conference/2003/doc/eb_58_en.pdf (04.03.2005)

Lerch. M. (2001). Gesundheitskommunikation über das Internet. In: Hurrelmann, K.

; Leppin, A. (Editor): Moderne Gesundheitskommunikation- vom Aufklärungsgespräch zur E-Health. Verlag Hand Huber,Bern, 224-231.

Schmidt-Kaehler, S. (2003). Internetkompetenz fuer Menschen mit chronischen Erkrankungen. Institut fuer Pflegewissenschaft an der Universitaet Bielefeld (IPW).

Wilson, P.;Leitner, C.; Moussalli, A. (2004). Mapping the potential of eHealth. Empowering the citizen through ehealth tools and services. Presented at the eHealth conference, Cork, Ireland,5-6 May 2004. Online available. http://www.ehealthconference2004.ie/images/Mapping%20the%20Potential%20of%20eHealth.pdf (25.03.2005)

E-health and the European Commission

EC (2001). eEurope 2002. Accessibility of Public Web Sites and their Content. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of Regions. Brussels. Online available. http://europa.eu.int/eur-lex/en/com/cnc/2001/com2001_0529en01.pdf (28.03.2005).

EC (2002 a). eEurope 2002. Quality Criteria for Health Related Websites. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of Regions. Brussels. Online available. http://europa.eu.int/eur-lex/en/com/cnc/2002/com2002_0667en01.pdf (25.03.2005).

EC (2002 b). eEurope 2005.An information society for all. An Action Plan to be presented in view of the Sevilla European Council 21/22 June 2002. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of Regions,Brussels. Online available. http://europa.eu.int/information_society/eeurope/2002/news_library/documents/eeurope2005/eeurope2005_en.pdf (26.03.2005).

EC (2004 a). E-Health. Making healthcare better for European citizens: An action plan for a European e-health Area. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of Regions,Brussels.Online available. http://europa.eu.int/eur-lex/en/com/cnc/2004/com2004_0356en01.pdf. (26.03.2005).

EC (2004 b). Operating a European Union Public Health Information and Knowledge System. Version 3. Document for the meeting of the Network of Competent Authorities for Health and Knowledge, Luxemburg, 5th and 6th July 20004. Online available. http://www.eu.int/comm/health/ph_information/documents/ev20040705_rd10_en.pdf (29.03.2005).

EC (2005 a). EUROPA. Europe's Information Society Thematic Portal. eEurope 2005. e-Health. Online available. http://europa.eu.int/information_society/eeurope/2005/all_about/ehealth/index_en.html (25.03.2005)

EC (2005 b). EUROPA. Europe's Information Society. Thematic Portal. Quality of Life.

Health. Online available.
http://europa.eu.int/information_Society/qualif/health/print_en.htm (04.03.2005).

EC (2005 c). Community action in the field of public health. Work plan 2005. Online available. http://www.eu.int/comm/health/ph_programme/howtoapply/proposal_docs/workplan2005_en.pdf (28.02.2005).

EU Health Policy Forum (2005). Recommendations on Health Information. 9 march 2005, Brussels. Online available. http://forum.europa.eu.int/Public/irc/sanco/ehf/home (29.03.2005)