

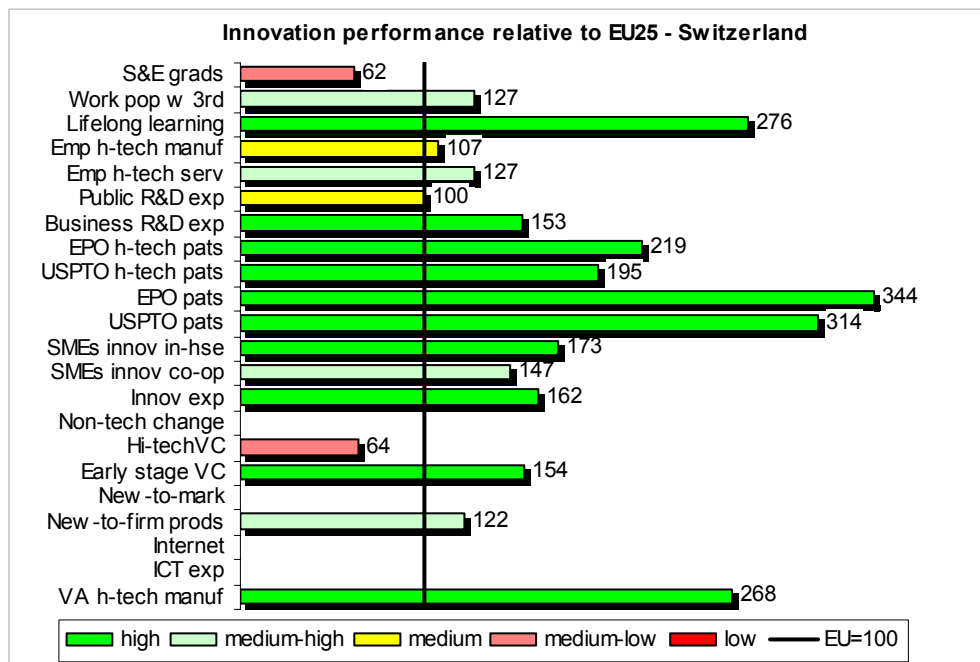
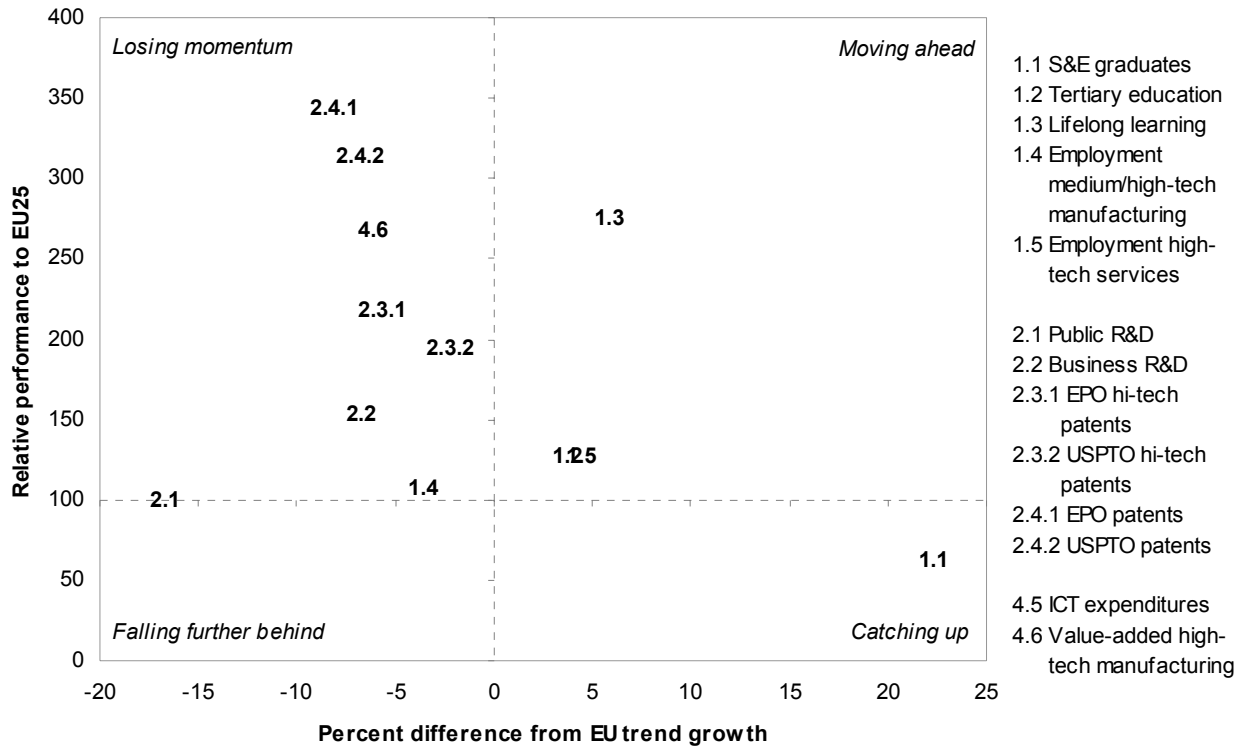
**2004 European Innovation Scoreboard**

**Country Pages**

**Associate countries**

# SWITZERLAND

## 2004 European Innovation Scoreboard - SWITZERLAND

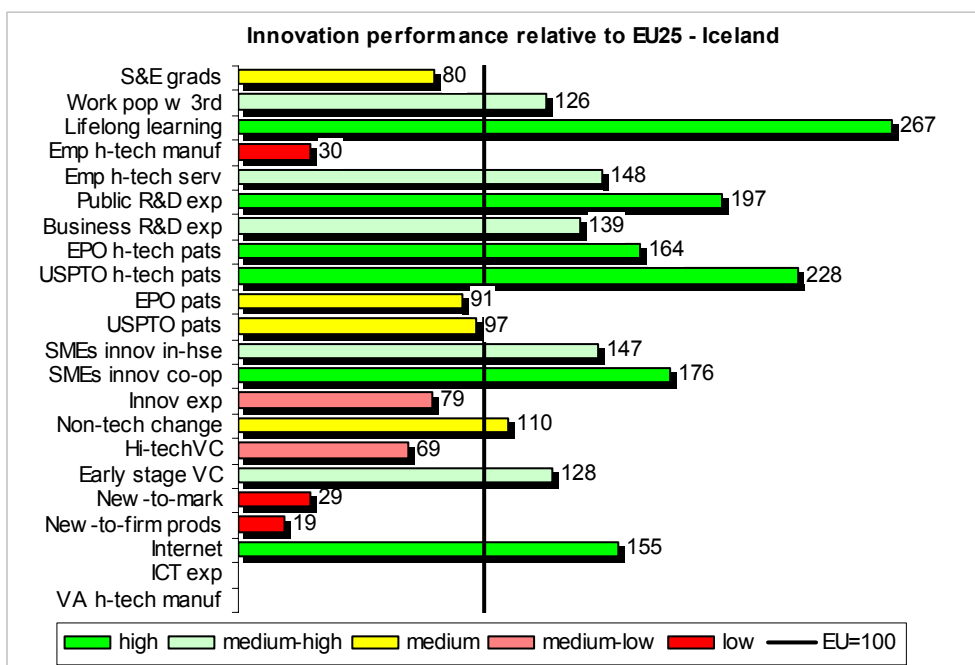
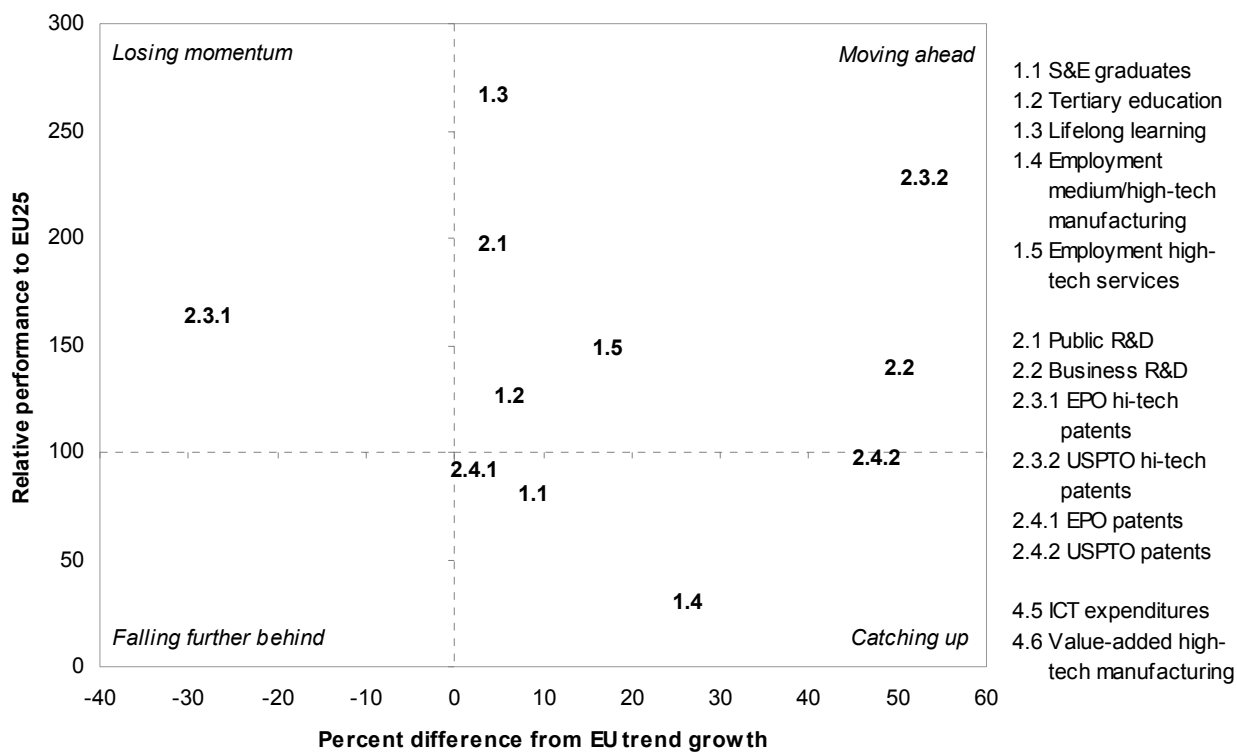


<b>SWITZERLAND</b>										Latest Rank (EU25 among EU25)	Current (1)	Trend (2)
	1996	1997	1998	1999	2000	2001	2002	2003				
<b>Human resources</b>												
1.1	S&E graduates	4.1	4.5	4.6	4.6	6.1	7.6	7.2	--	62	-	+
	<i>relative to EU15</i>	--	43	43	41	53	61	57	--			
1.2	Work pop w 3rd educ	--	--	22.9	23.6	24.2	25.4	25.2	26.9	127	+	0
	<i>relative to EU15</i>	--	--	133	115	114	118	116	--			
1.3	Lifelong learning	29.5	29.8	33.3	31.1	34.7	36.0	34.4	24.8	276	++	0
	<i>relative to EU15</i>	518	514	--	379	408	429	405	256			
1.4	Employment hi-tech manuf	--	7.55	7.93	7.60	7.70	8.10	7.48	7.09	107	0	0
	<i>relative to EU15</i>	--	99	103	99	101	107	101	100			
1.5	Employment hi-tech serv	--	3.61	3.36	3.77	3.72	4.10	3.83	4.04	127	+	0
	<i>relative to EU15</i>	--	123	113	118	110	114	108	116			
<b>Knowledge creation</b>												
2.1	Public R&D exp	0.80	--	--	--	0.67	--	--	--	100	0	-
	<i>relative to EU15</i>	114	--	--	--	99	--	--	--			
2.2	Business R&D exp	1.93	--	--	--	1.90	--	--	--	153	++	0
	<i>relative to EU15</i>	164	--	--	--	150	--	--	--			
2.3.1	EPO hi-tech patents	21.6	30.5	40.2	49.0	60.3	72.2	56.9	--	219	++	0
	<i>relative to EU15</i>	184	201	206	211	206	214	184	--			
2.3.2	USPTO hi-tech patents	9.2	12.2	14.8	14.2	15.1	17.0	18.3	--	195	++	0
	<i>relative to EU15</i>	165	228	174	157	159	157	163	--			
2.4.1	EPO patents	336.8	396.8	437.7	445.9	488.1	512.1	460.1	--	344	++	0
	<i>relative to EU15</i>	347	346	337	316	308	304	290	--			
2.4.2	USPTO patents	158.2	156.0	180.1	180.6	187.5	198.2	188.3	--	314	++	0
	<i>relative to EU15</i>	351	331	295	287	281	276	264	--			
<b>Transmission and application of knowledge</b>												
3.1	SMEs innov in-house	--	--	--	--	--	--	54.8	--	173	++	
3.2	SMEs innov co-operation	--	--	--	--	--	--	10.4	--	147	+	
3.3	Innovation expenditures	--	--	--	--	--	--	3.48	--	162	++	
3.4	SMEs non-tech innov	--	--	--	--	--	--	--	--			
<b>Innovation finance, output and markets</b>												
4.1	Hi-tech venture capital	--	--	--	--	58	53	36	32	64	-	(3)
	<i>relative to EU15</i>	--	--	--	--	118	106	69	64			
4.2	Early stage venture capital	--	--	--	0.082	0.052	0.025	0.036	0.039	154	++	(3)
	<i>relative to EU15</i>	--	--	--	283	92	41	97	154			
4.3.1	New-to-market products	--	--	--	--	--	--	--	--			
4.3.2	New-to-firm products	--	--	--	--	--	--	20.5	--	122	+	
4.4	Internet (comp. indicator)	--	--	--	--	--	--	--	--			
4.5	ICT expenditures	--	--	--	--	--	--	--	--			
	<i>relative to EU15</i>	--	--	--	--	--	--	--	--			
4.6	Value-added hi-tech manuf	--	31.4	32.3	32.6	33.3	34.0	35.8	--	268	++	0
	<i>relative to EU15</i>	--	258	258	248	243	240	--	--			
<b>Macro-economic indicators</b>												
	GDP per capita (EU25=100)	--	--	141	135	135	131	129	129			
	Productivity per hour (EU15=100)	--	--	--	--	--	--	--	--			
	Employment rate	--	--	--	--	--	--	--	--			

Value in **bold**: break in series. (1) Current strength “++” if relative to EU25 performance above 150, “+” if above 120, “0” if between 80 and 120, current weakness “-” if below 80, “--” if below 50. (2) Trend strength “++” if relative to EU25 trend above 25, “+” is above 10, “0” if between -10 and 10, trend weakness “-” if below -10, “--” if below -25. (3) Trend data for both venture capital indicators have not been used as these data suffer from high year-to-year fluctuations and are considered to be less reliable.

# ICELAND

## 2004 European Innovation Scoreboard - ICELAND

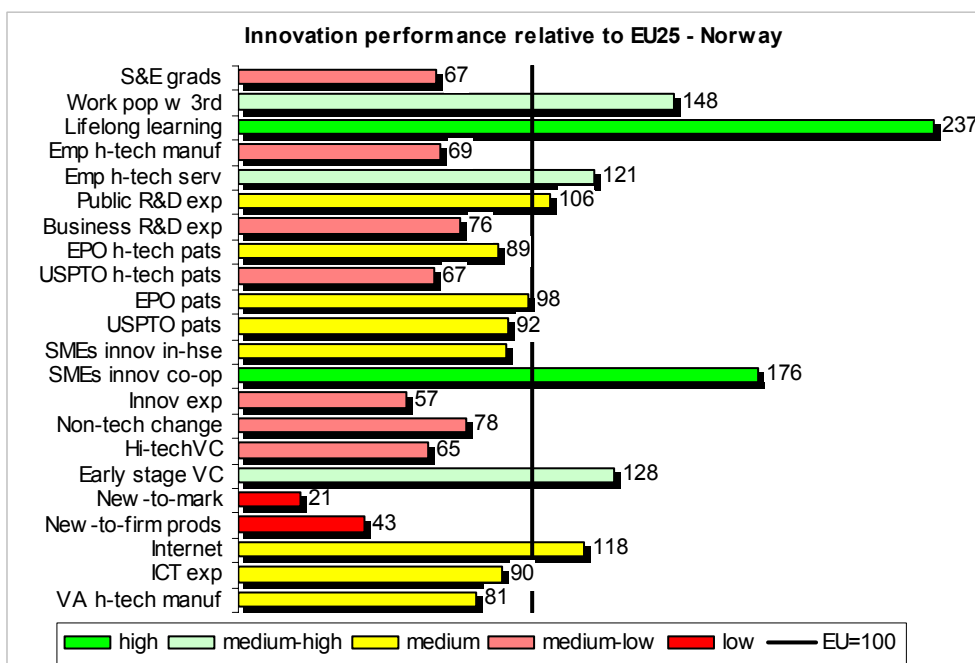
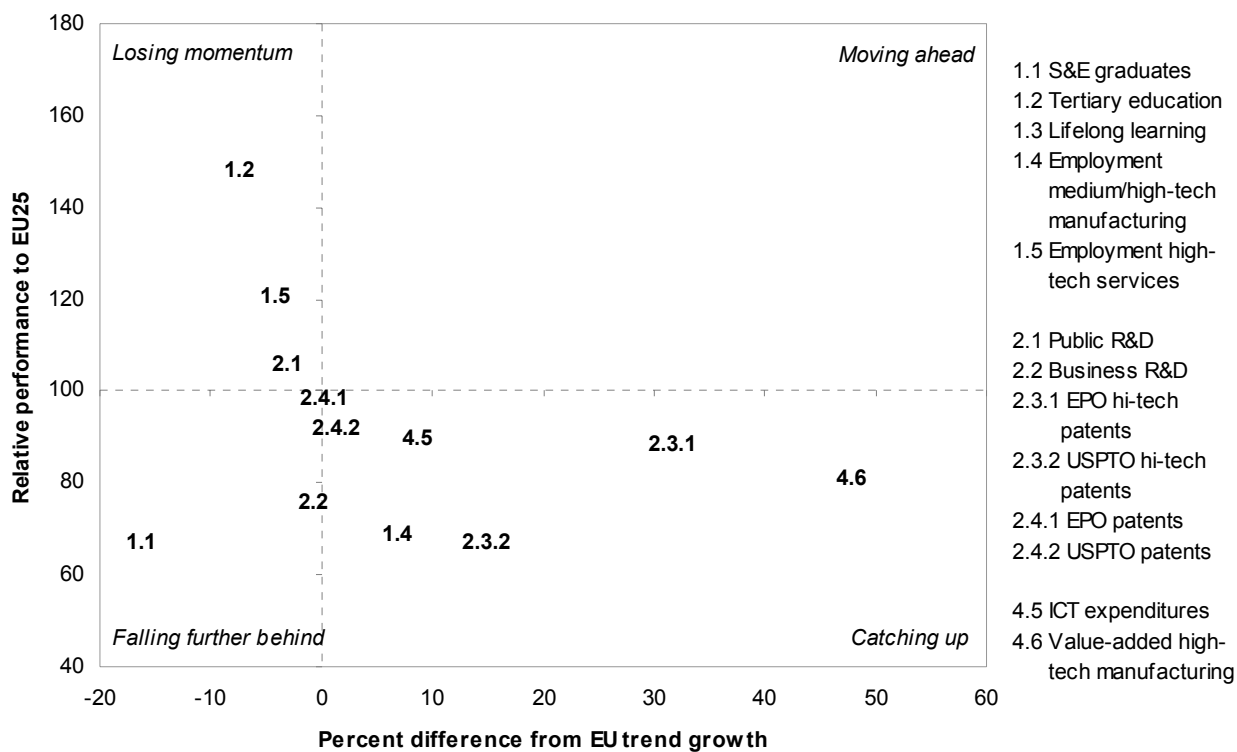


<b>ICELAND</b>		1996	1997	1998	1999	2000	2001	2002	2003	Latest (EU25 =100)	Rank among EU25	Current (1)	Trend (2)
<b>Human resources</b>													
1.1	S&E graduates	7.9	7.7	7.0	6.3	8.4	9.1	9.2	--	80		0	0
	<i>relative to EU15</i>	--	75	65	57	74	74	74	--				
1.2	Work pop w 3rd educ	--	--	--	22.0	23.7	23.9	25.7	--	126		+	0
	<i>relative to EU15</i>	--	--	--	107	112	111	118	--				
1.3	Lifelong learning	15.7	16.5	19.3	20.2	23.5	23.5	24.0	24.0	267		++	0
	<i>relative to EU15</i>	275	284	--	246	276	280	282	247				
1.4	Employment hi-tech manuf	--	1.87	1.94	1.59	1.49	1.74	2.02	--	30		--	++
	<i>relative to EU15</i>	--	24	25	21	20	23	27	--				
1.5	Employment hi-tech serv	--	3.70	3.90	3.99	4.41	5.50	4.81	--	148		+	+
	<i>relative to EU15</i>	--	126	131	125	130	152	135	--				
<b>Knowledge creation</b>													
2.1	Public R&D exp	--	1.12	1.31	1.27	1.20	1.26	1.32	--	197		++	0
	<i>relative to EU15</i>	--	165	193	190	176	185	191	--				
2.2	Business R&D exp	--	0.76	0.76	1.11	1.55	1.80	1.77	--	139		+	++
	<i>relative to EU15</i>	--	64	63	89	122	138	136	--				
2.3.1	EPO hi-tech patents	1.9	14.8	17.1	26.4	53.9	27.1	42.6	--	164		++	--
	<i>relative to EU15</i>	16	98	88	114	184	80	138	--				
2.3.2	USPTO hi-tech patents	0.0	2.5	7.3	18.7	21.5	34.1	21.5	--	228		++	++
	<i>relative to EU15</i>	0	46	86	208	226	314	191	--				
2.4.1	EPO patents	30.1	62.8	84.8	109.6	114.0	117.9	121.8	--	91		0	0
	<i>relative to EU15</i>	31	55	65	78	72	70	77	--				
2.4.2	USPTO patents	16.8	11.9	23.9	36.9	59.3	70.1	58.0	--	97		0	++
	<i>relative to EU15</i>	37	25	39	59	89	98	81	--				
<b>Transmission and application of knowledge</b>													
3.1	SMEs innov in-house	--	--	--	--	46.5	--	--	--	147		+	
3.2	SMEs innov co-operation	--	--	--	--	12.5	--	--	--	176		++	
3.3	Innovation expenditures	--	--	--	--	1.70	--	--	--	79		-	
3.4	SMEs non-tech innov	--	--	--	--	54	--	--	--	110		0	
<b>Innovation finance, output and markets</b>													
4.1	Hi-tech venture capital	--	--	--	--	33	53	36	--	69		-	(3)
	<i>relative to EU15</i>	--	--	--	--	67	105	69	--				
4.2	Early stage venture capital	--	--	--	0.186	0.294	0.236	0.048	--	128		+	(3)
	<i>relative to EU15</i>	--	--	--	641	519	393	128	--				
4.3.1	New-to-market products	--	--	--	--	1.7	--	--	--	29		--	
4.3.2	New-to-firm products	--	--	--	--	3.2	--	--	--	19		--	
4.4	Internet (comp. indicator)	--	--	--	--	--	--	1.08	--	--			
4.5	ICT expenditures	--	--	--	--	--	--	--	--	--			
	<i>relative to EU15</i>	--	--	--	--	--	--	--	--				
4.6	Value-added hi-tech manuf	--	--	--	--	--	--	--	--	--			
	<i>relative to EU15</i>	--	--	--	--	--	--	--	--				
<b>Macro-economic indicators</b>													
GDP per capita (EU25=100)		--	--	129	129	127	126	120	117				
Productivity per hour (EU15=100)		91	91	92	89	87	88	87	85				
Employment rate		--	--	--	--	--	--	--	--				

Value in **bold**: break in series. (1) Current strength “++” if relative to EU25 performance above 150, “+” if above 120, “0” if between 80 and 120, current weakness “-” if below 80, “--” if below 50. (2) Trend strength “++” if relative to EU25 trend above 25, “+” is above 10, “0” if between -10 and 10, trend weakness “-” if below -10, “--” if below -25. (3) Trend data for both venture capital indicators have not been used as these data suffer from high year-to-year fluctuations and are considered to be less reliable.

# NORWAY

## 2004 European Innovation Scoreboard - NORWAY



<b>NORWAY</b>		1996	1997	1998	1999	2000	2001	2002	2003	Latest Rank (EU25 among EU25 =100)	Current (1)	Trend (2)
<b>Human resources</b>												
1.1	S&E graduates	9.1	8.4	7.5	7.2	7.9	8.6	7.7	--	67	-	-
	<i>relative to EU15</i>	--	<b>82</b>	<b>70</b>	<b>65</b>	<b>69</b>	<b>69</b>	<b>62</b>	--			
1.2	Work pop w 3rd educ	--	--	28.5	29.6	31.6	33.8	34.2	31.4	148	+	0
	<i>relative to EU15</i>	--	--	<b>166</b>	<b>144</b>	<b>149</b>	<b>157</b>	<b>157</b>	--			
1.3	Lifelong learning	16.5	16.4	--	--	13.3	14.2	13.3	21.3	237	++	
	<i>relative to EU15</i>	<b>289</b>	<b>283</b>	--	--	<b>156</b>	<b>169</b>	<b>156</b>	<b>220</b>			
1.4	Employment hi-tech manuf	--	5.42	5.05	4.75	4.48	4.18	4.59	4.53	69	-	0
	<i>relative to EU15</i>	--	<b>71</b>	<b>65</b>	<b>62</b>	<b>59</b>	<b>55</b>	<b>62</b>	<b>64</b>			
1.5	Employment hi-tech serv	--	3.49	3.60	3.91	3.77	4.37	4.10	3.85	121	+	0
	<i>relative to EU15</i>	--	<b>119</b>	<b>121</b>	<b>122</b>	<b>111</b>	<b>121</b>	<b>115</b>	<b>110</b>			
<b>Knowledge creation</b>												
2.1	Public R&D exp	--	0.71	--	0.73	--	0.64	0.71	--	106	0	0
	<i>relative to EU15</i>	--	<b>104</b>	--	<b>109</b>	--	<b>94</b>	<b>103</b>	--			
2.2	Business R&D exp	--	0.93	--	0.92	--	0.96	0.96	--	76	-	0
	<i>relative to EU15</i>	--	<b>78</b>	--	<b>74</b>	--	<b>74</b>	<b>74</b>	--			
2.3.1	EPO hi-tech patents	5.1	8.9	17.0	11.8	15.7	26.4	23.0	--	89	0	++
	<i>relative to EU15</i>	<b>44</b>	<b>59</b>	<b>87</b>	<b>51</b>	<b>54</b>	<b>78</b>	<b>74</b>	--			
2.3.2	USPTO hi-tech patents	2.9	1.0	2.8	4.1	4.9	4.6	6.3	--	67	-	+
	<i>relative to EU15</i>	<b>51</b>	<b>18</b>	<b>33</b>	<b>45</b>	<b>52</b>	<b>42</b>	<b>56</b>	--			
2.4.1	EPO patents	87.1	104.7	118.1	121.5	136.2	156.1	131.3	--	98	0	0
	<i>relative to EU15</i>	<b>90</b>	<b>91</b>	<b>91</b>	<b>86</b>	<b>86</b>	<b>93</b>	<b>83</b>	--			
2.4.2	USPTO patents	31.4	32.2	44.0	51.0	55.2	59.0	55.1	--	92	0	0
	<i>relative to EU15</i>	<b>70</b>	<b>68</b>	<b>72</b>	<b>81</b>	<b>83</b>	<b>82</b>	<b>77</b>	--			
<b>Transmission and application of knowledge</b>												
3.1	SMEs innov in-house	--	--	--	--	28.8	--	--	--	91	0	
3.2	SMEs innov co-operation	--	--	--	--	12.5	--	--	--	176	++	
3.3	Innovation expenditures	--	--	--	--	1.22	--	--	--	57	-	
3.4	SMEs non-tech innov	--	--	--	--	38	--	--	--	78	-	
<b>Innovation finance, output and markets</b>												
4.1	Hi-tech venture capital	--	--	--	--	33	42	37	33	65	-	(3)
	<i>relative to EU15</i>	--	--	--	--	<b>68</b>	<b>83</b>	<b>71</b>	<b>65</b>			
4.2	Early stage venture capital	0.005	0.004	0.006	0.015	0.039	0.046	0.035	0.032	128	+	(3)
	<i>relative to EU15</i>	<b>91</b>	<b>50</b>	<b>40</b>	<b>52</b>	<b>69</b>	<b>76</b>	<b>95</b>	<b>128</b>			
4.3.1	New-to-market products	--	--	--	--	1.2	--	--	--	21	--	
4.3.2	New-to-firm products	--	--	--	--	7.2	--	--	--	43	--	
4.4	Internet (comp. indicator)	--	--	--	--	--	--	0.73	--	--		
4.5	ICT expenditures	--	--	--	--	5.4	5.2	5.2	5.6	90	0	0
	<i>relative to EU15</i>	--	--	--	--	<b>83</b>	<b>81</b>	<b>85</b>	<b>90</b>			
4.6	Value-added hi-tech manuf	--	--	--	5.9	7.0	6.7	10.3	--	81	0	++
	<i>relative to EU15</i>	--	--	--	<b>45</b>	<b>51</b>	<b>47</b>	--	--			
<b>Macro-economic indicators</b>												
GDP per capita (EU25=100)		--	--	134	142	163	160	150	149			
Productivity per hour (EU15=100)		125	126	118	126	147	147	141	142			
Employment rate		--	--	--	--	--	--	--	--			

Value in **bold**: break in series. (1) Current strength “++” if relative to EU25 performance above 150, “+” if above 120, “0” if between 80 and 120, current weakness “-” if below 80, “--” if below 50. (2) Trend strength “++” if relative to EU25 trend above 25, “+” is above 10, “0” if between -10 and 10, trend weakness “-” if below -10, “--” if below -25. (3) Trend data for both venture capital indicators have not been used as these data suffer from high year-to-year fluctuations and are considered to be less reliable.