



Final presentation of business ratios for ASTEC 1995 - 2007¹

One of the criteria for a successful competence centre is expansion. As seen from the following graphs and tables ASTEC increased its activities in many aspects over the first years. ASTEC were also capable to continue its level of activities during the crisis in the IT-sector during 2001-2003. This was partly achieved by increasing the number of industry partners (Fig 1). Expansion started again as times become well in 2004. Even the last year of activities 2005 increased the industry participation (Fig 2).

The industrial partners could not contribute according to the plan for phase 3. As a result of the restrictions in the agreement was the VINNOVA contribution decreased during 2003 (Fig 2, Tab 1). This had the effect that some VINNOVA funding was transferred into phase 4 (2004 and 2005). To maintain the staff had the academia to increase its contributions during 2002 and 2003. An intensive effort to broaden the industrial base for phase 4 were successful both the number of industrial parts (Fig 3) and their contributions during Phase 4 (Fig 2, Tab 1). The amount of studies and work carried out within ASTEC increased 2000 and 2004 (Fig 3) this is partly explained by increased number of MSc studies these years (Tab 2).

The costs for each man-year were 866 KSEK and the costs for management were 6.6% on average for the 10 years (Tab 1). In total has ASTEC carried out 179 man-years of studies (Tab 1).

ASTEC produced 259 publications, in these publications have 169 authors contributed (Fig 4, Tab 3). The publication rate dropped slightly at the start of each phase. This happens since it takes a while for new projects to obtain publishable results. This phenomenon can be seen at 1995, 1998, 2001 and 2004. The increased cost per publication and time requirement per publication also reflects the start of phases 1, 2 and 3 (Tab 1, Figs 5 and 6).

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¹ ASTEC business ratios are calculated from the costs and activities each year. There is no profit within ASTEC. Contributions from the parts are consumed the same year. The research results are transferred to the participating companies that may profit from them and according to the contracts share the profit with the researchers.



Figure 1) Number of industry partners in ASTEC 1996-2005.

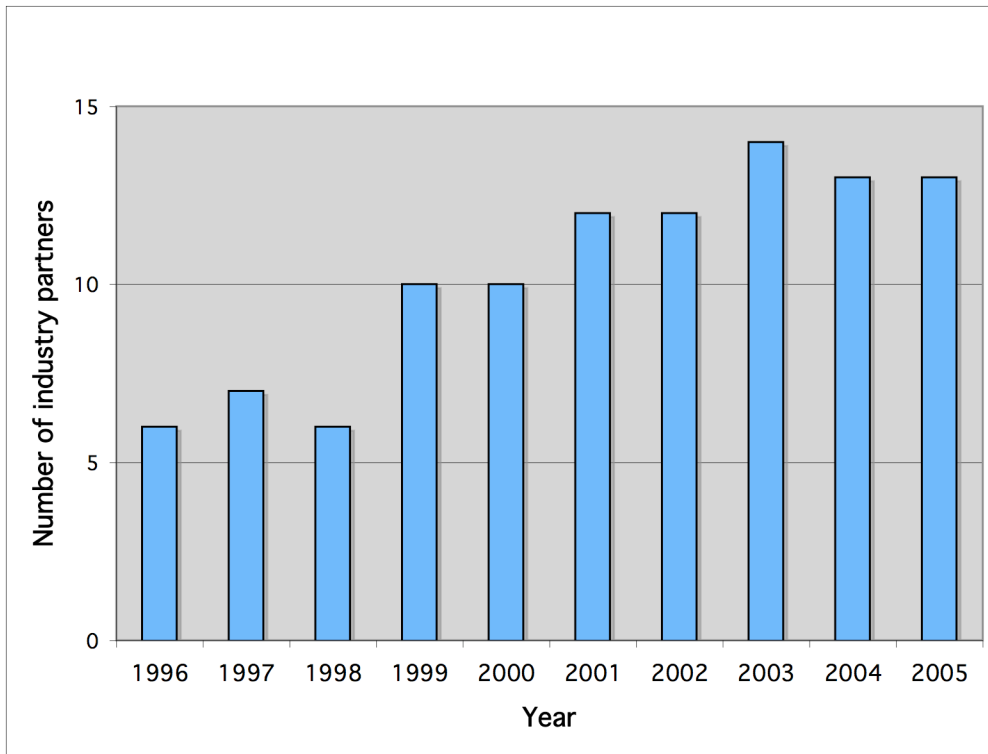


Figure 2) The yearly contributions to ASTEC by NUTEK/VINNOVA, Academia and Industry.

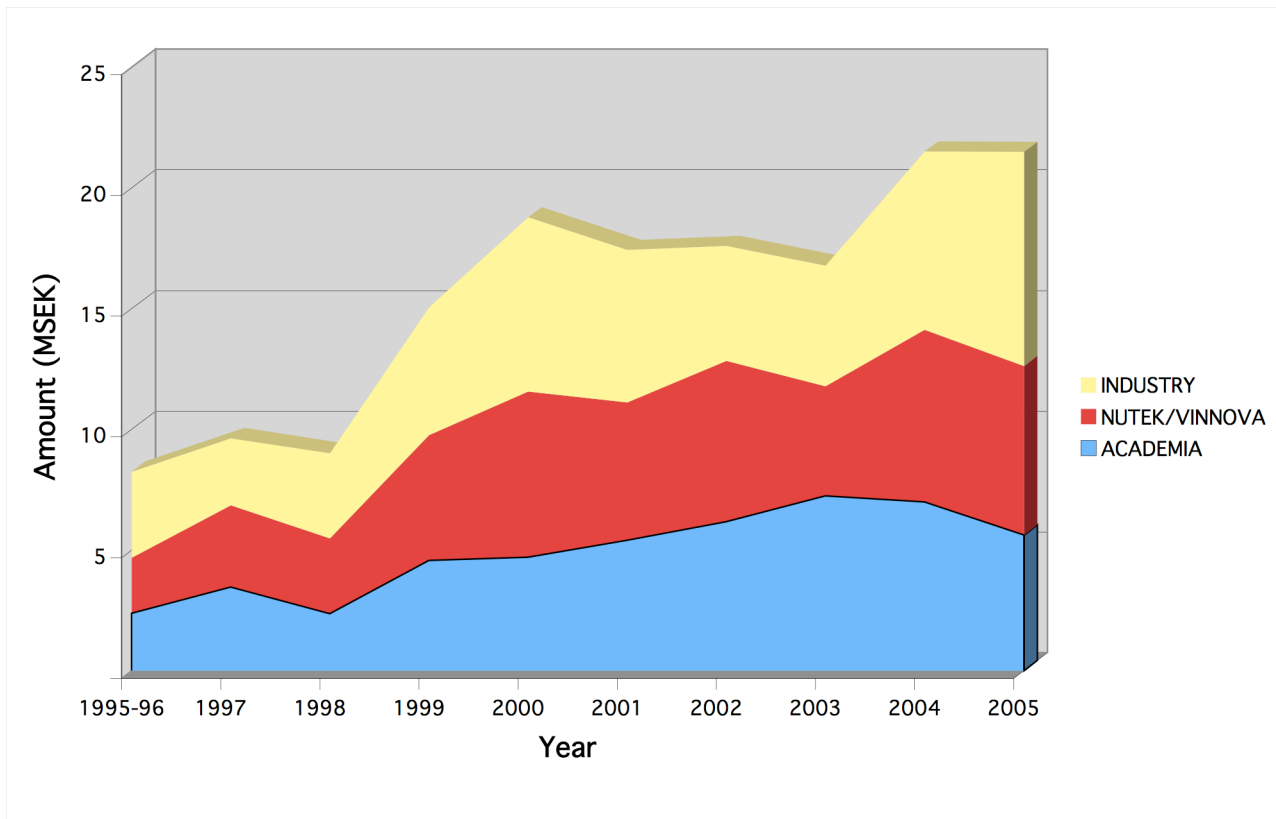




Figure 3) The amount of studies carried out within ASTEC in man years for each year.

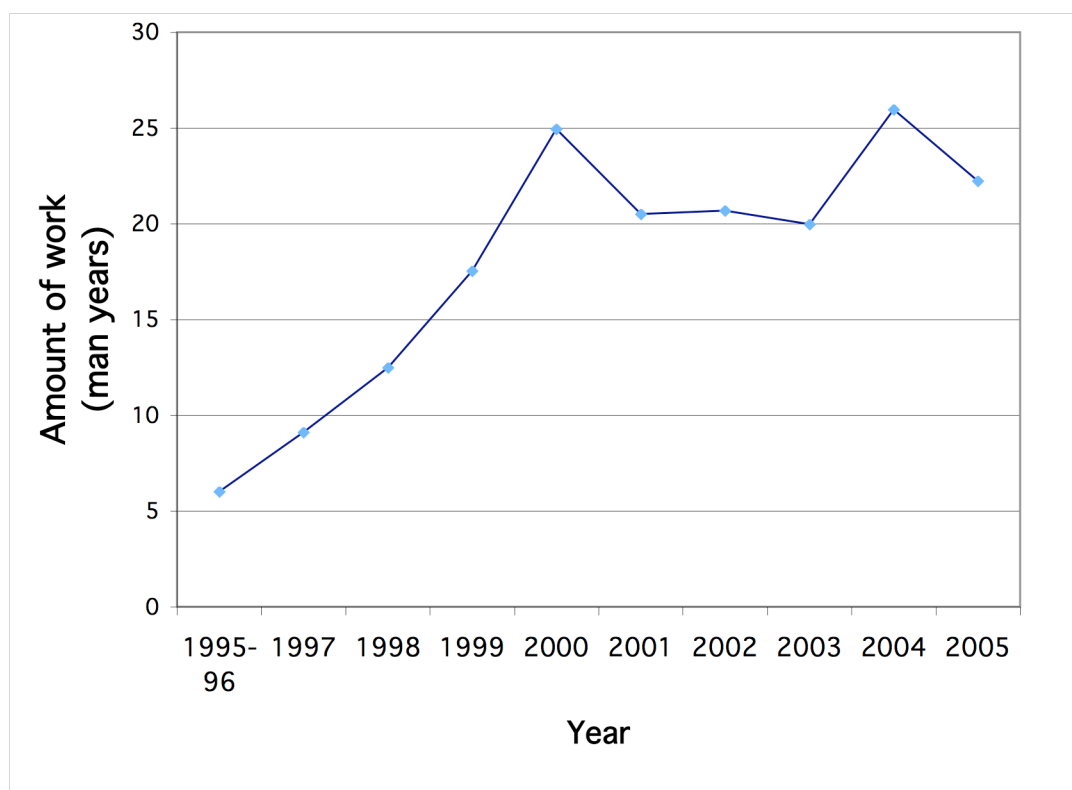


Table 1) The contributions by ASTEC partners and business ratios.

Contributions by	Phase 1		Phase 2			Phase 3			Phase 4		Sum
	1995-96	1997	1998	1999	2000	2001	2002	2003	2004	2005	
INDUSTRY	3568	2778	3520	5293	7219	6317	4759	5000	7385	8866	54705
ACADEMY	2375	3450	2347	4557	4688	5392	6159	7240	6982	5613	48804
NUTEK/VINNOVA	2295	3395	3134	5202	6869	5712	6672	4534	7128	7006	51948
Total (KSEK)	8238	9623	9001	15053	18777	17421	17591	16773	21495	21485	155456
Management (KSEK)	380	818	721	1038	1066	1336	1293	1275	1180	1158	10264
Man power (man years)	6,0	9,1	12,5	17,5	25,0	20,5	20,7	20,0	26,0	22,2	179
Publications (no.)	8	19	12	22	35	28	33	34	29	28	248
											Mean
KSEK/man year	1371	1054	719	858	753	849	851	839	828	968	866
KSEK/Publication	1030	506	750	684	536	622	533	493	741	767	627
Man years/publication	0,75	0,48	1,04	0,80	0,71	0,73	0,63	0,59	0,90	0,79	0,72
Management/Total	5%	9%	8%	7%	6%	8%	7%	8%	5%	5%	6,6%

Table 2) Development of ASTEC staff categories,.

Category	Amount each year (man years)										
	1995-1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Professor	0,5	0,3	0,6	0,6	2,1	1,8	1,4	1,3	1,3	1,0	
Senior researcher	1,2	2,1	2,5	4,1	2,8	2,4	2,1	2,1	2,9	2,5	
PhD student	3,3	4,1	6,3	7,1	9,0	7,1	10,6	8,3	8,4	8,5	
Industry researcher	1,0	1,7	2,2	2,1	3,8	1,7	2,5	2,8	3,5	3,1	
Industry PhD students				2,0	3,0	4,0	1,9	3,1	4,1	2,1	
Master of Science students				1,0	3,9	3,2	1,9	2,1	5,5	4,6	
Technical/administrative		1,1	1,0	0,6	0,5	0,4	0,3	0,3	0,3	0,5	
Total=	6,0	9,1	12,5	17,5	25,0	20,5	20,7	20,0	26,0	22,2	
Increase each year (man years)	-	3,1	3,4	5,0	7,4	-4,4	0,2	-0,7	6,0	-3,7	
Increase each year (%)	-	52%	37%	40%	42%	-18%	1%	-3%	30%	-14%	

Publications and exams

Figure 4) Publication rate and type of publication.

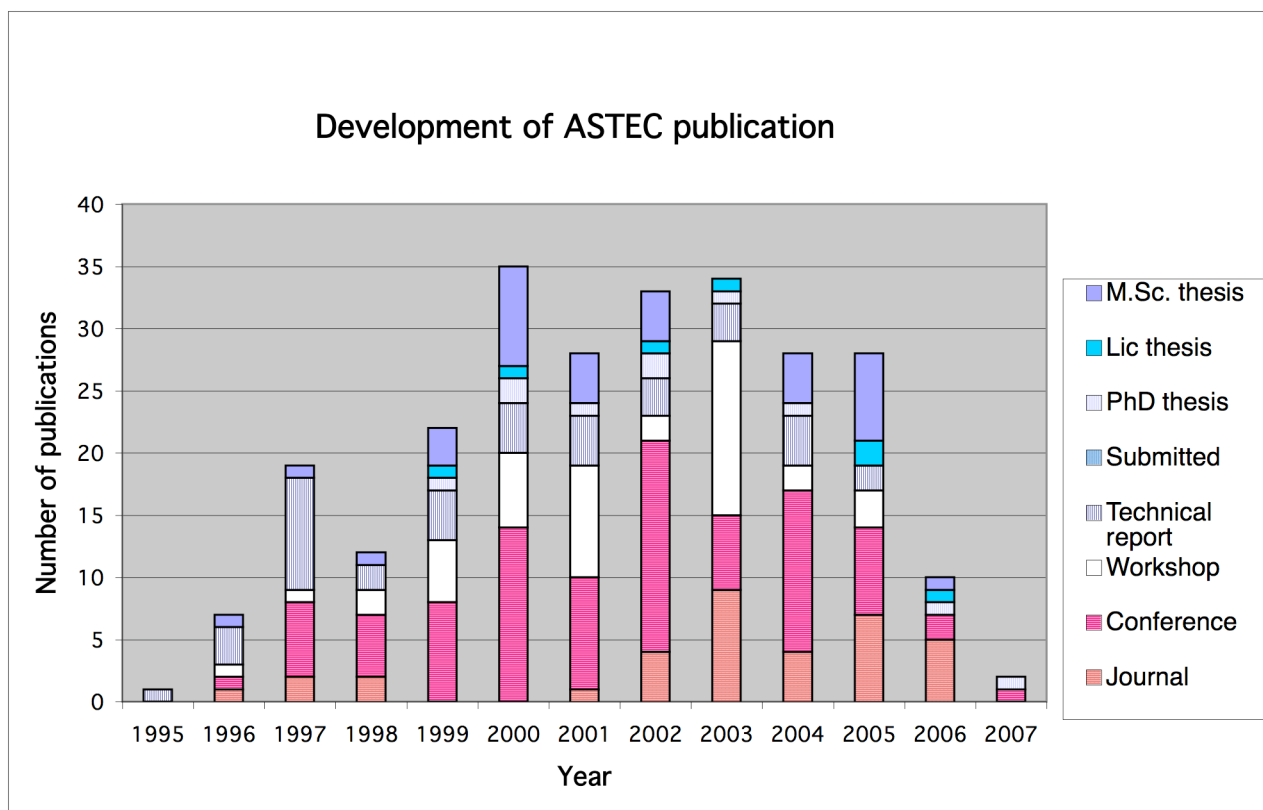


Table 3) Publication divided into different publication categories, note that conference, workshop and technical reports are dominating.

Publications type	year													Sum
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	
Journal		1	2	2			1	4	9	4	7	5		35
Conference		1	6	5	8	14	9	17	6	13	7	2	1	89
Workshop		1	1	2	5	6	9	2	14	2	3			45
Technical report	1	3	9	2	4	4	4	3	3	4	2			39
Submitted														0
PhD thesis					1	2	1	2	1	1		1	1	10
Lic thesis					1	1		1	1		2	1		7
M.Sc. thesis		1	1	1	3	8	4	4		4	7	1		34
Sum	1	7	19	12	22	35	28	33	34	28	28	10	2	259

Figure 5) Time requirement per ASTEC publication, note the decrease in time per publication as a new phase develops. Phase 1 started 1995, phase 2 started 1998, phase 3 2001 and phase 4 in 2004.

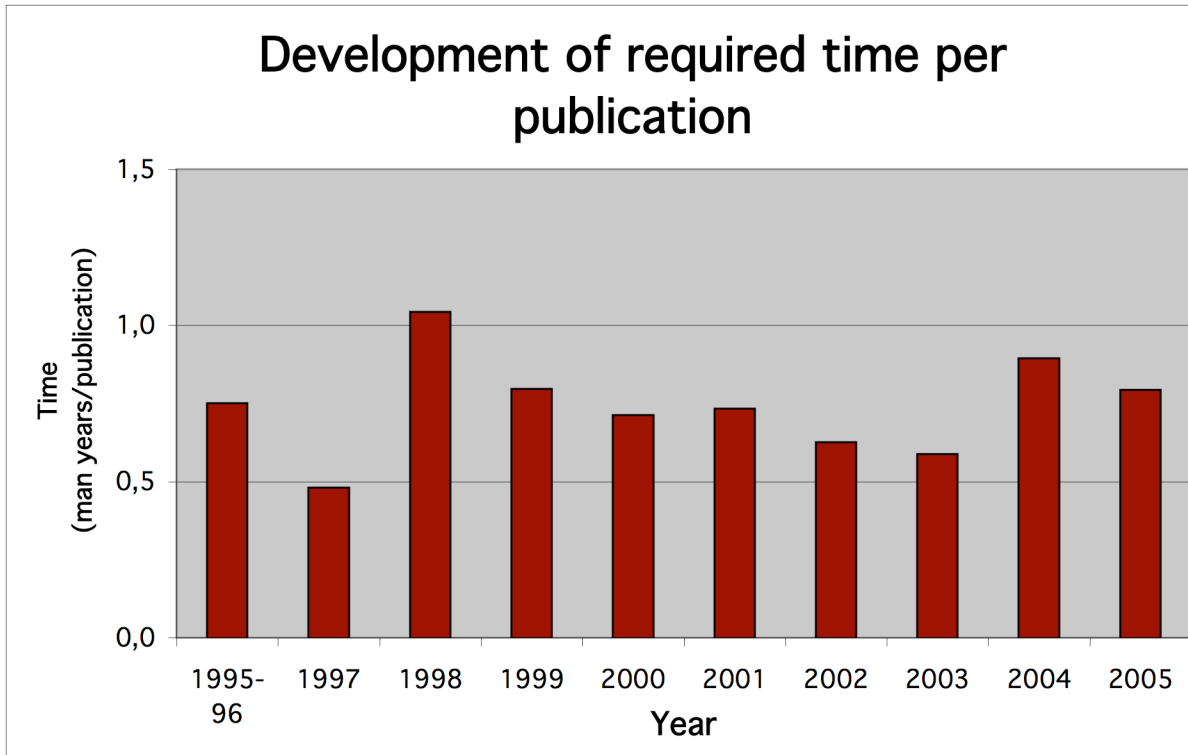


Figure 6) The cost per ASTEC publication, note a similar trend as in the previous figure.

