

Statistics on Participation in the Annual Science Conference, 1992-2001

This document is an expanded version of a paper that the General Secretary presented to the Bureau at the 2002 mid-term meeting. The Bureau asked that it be drawn to the attention of the Delegates for information, and as an indication of the levels of university participation which it is desired to improve. The Bureau asks Delegates to consider what might be done (a) by Delegates and (b) within ICES, to increase university participation in the ASC.

The purpose of the original Bureau paper was to examine the effects of the "Open Door" policy that ICES adopted in 1996 in order to facilitate open attendance at the scientific sessions (and which was implemented for the first time in 1997), and to generate some basic data when preparing draft text for Goal 8 of the Action Plan ("Broaden the Diversity of the Participating Scientists"). In 1996, the requirement that ASC/Statutory Meeting participants had to be nominated by either of their national Delegates was abandoned; with effect from 1997, the ASC would be *"open to all bona fide scientists registered for attendance purposes with the ICES Secretariat and the host country. For submission of papers and posters to the 'open sessions' of the ASC, it would be no longer obligatory for participants to obtain approval for attendance from their national delegates to ICES"* (Annual Report for 1996, page 42).

The Secretariat examined the addresses provided by registered ASC participants in each of the ten years 1992-2001. This paper examines the numbers and proportions of ASC participants giving a university address, and the numbers and proportions of those coming from non-Member Countries of ICES.

University participation

Table 1 separates the number of people from each country who registered under a university address in each of the years under review. That may underestimate the real number of people from Third Level educational laboratories, because there may be some places whose name does not immediately indicate that it belongs in the university category. Nevertheless, the data should be acceptable for the purposes of the exercise.

The results are disappointing. Comparing the percentage university participation during the five years since the introduction of the "open door" policy with the immediately preceding five years, the 5-year average has increased by only 4% (21% up to 25%):

ASC	Institutes	Universities	% Universities
1992 (Germany)	306	53	17
1993 (Ireland)	372	74	20
1994 (Canada)	281	71	25
1995 (Denmark)	307	75	24
1996 (Iceland)	375	66	18
1997 (USA)	364	82	23
1998 (Portugal)	455	117	26
1999 (Sweden)	367	79	22
2000 (Belgium)	368	73	20
2001 (Norway)	322	111	34
Average, 1992-96	328	68	21
Av. 1997-2001	375	92	25

The overall picture is given in Fig. 1.

The situation improves somewhat if the figures for individual countries are examined. Only 3 of them (Germany, Norway and USA) send sufficient numbers of university people to make any sort of graph; they show an increasing trend, but with a time-lag of 2 years, 1 year and 3 years respectively (Fig. 2).

Germany and USA are the only countries to have shown a majority of university people in their national participants lists (that happened in 2001). But it is also obvious that holding the ASC in the member countries increases the university participation from that country in that year (see the grey-shaded cells in Table 1).

Non-Member Countries

Clear data concerning Non-member Country participation are available only from 1993 (see Table 2, which distinguishes Observer Countries from other Non-member Countries. The number of Non-member Countries sending participants to the ASC each year during the period 1993-2000 has remained around 8; 11 Non-member Countries took part in 2001. Not surprisingly, the four longest-standing Observer Countries (Australia, Greece, South Africa and New Zealand) have been the most frequently represented of the Non-member Countries. Of the other Non-member Countries, the most frequently represented have been Argentina, Angola and Italy. The total number of ASC participants from Non-member Countries has ranged from 6 to 39. The average percentage of Non-member Countries' university participants during the four years 1993-1996 was 11%; this increased to 17% over the five years after the implementation of the "Open Door" policy. In 1996 and 1998 their proportion of university participants exceeded that of the Member Countries.

Figure 1. ASC participation, 1992-2001

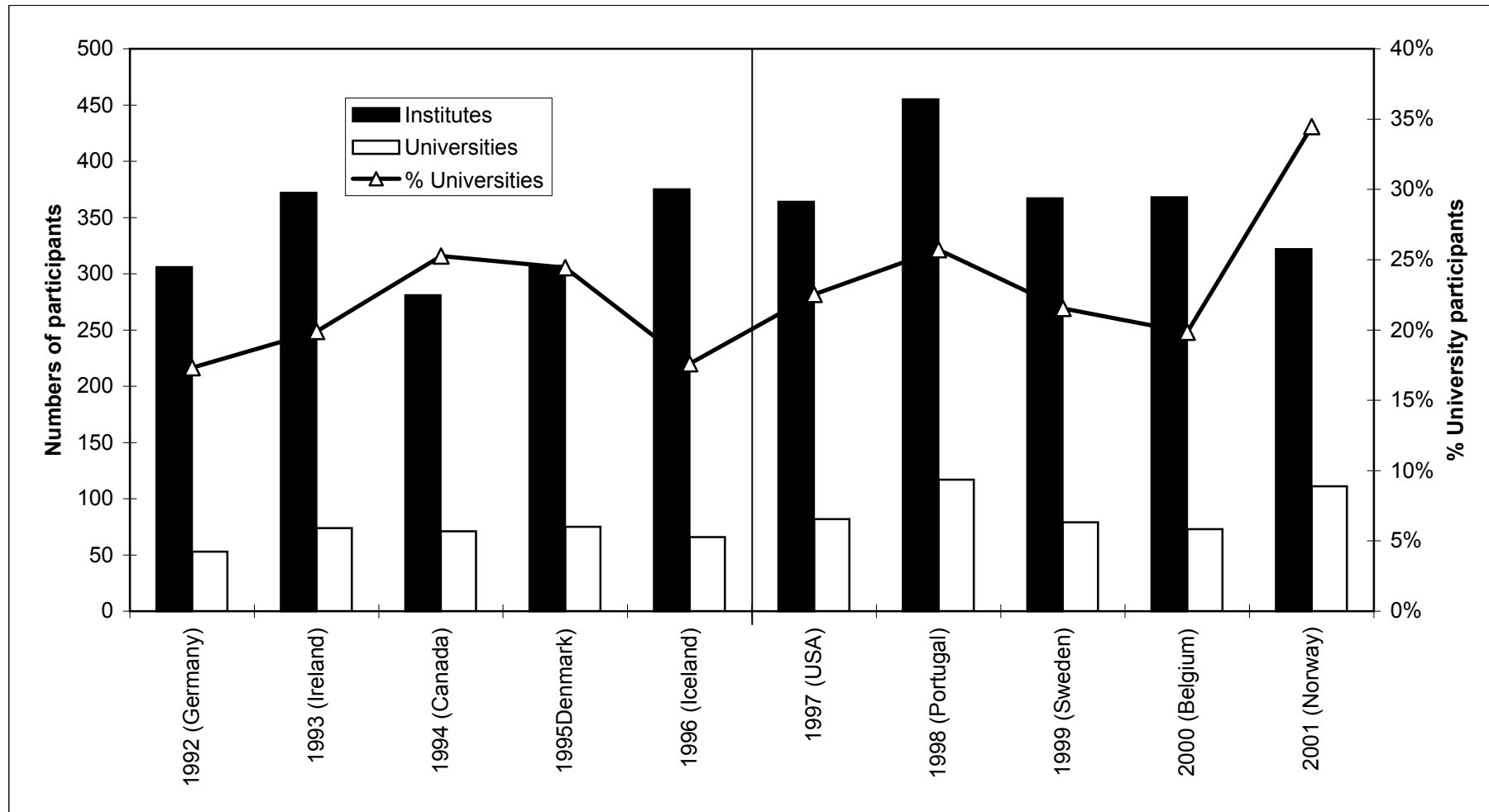


Figure 2. ASC participation from Germany, Norway and USA, 1992-2001

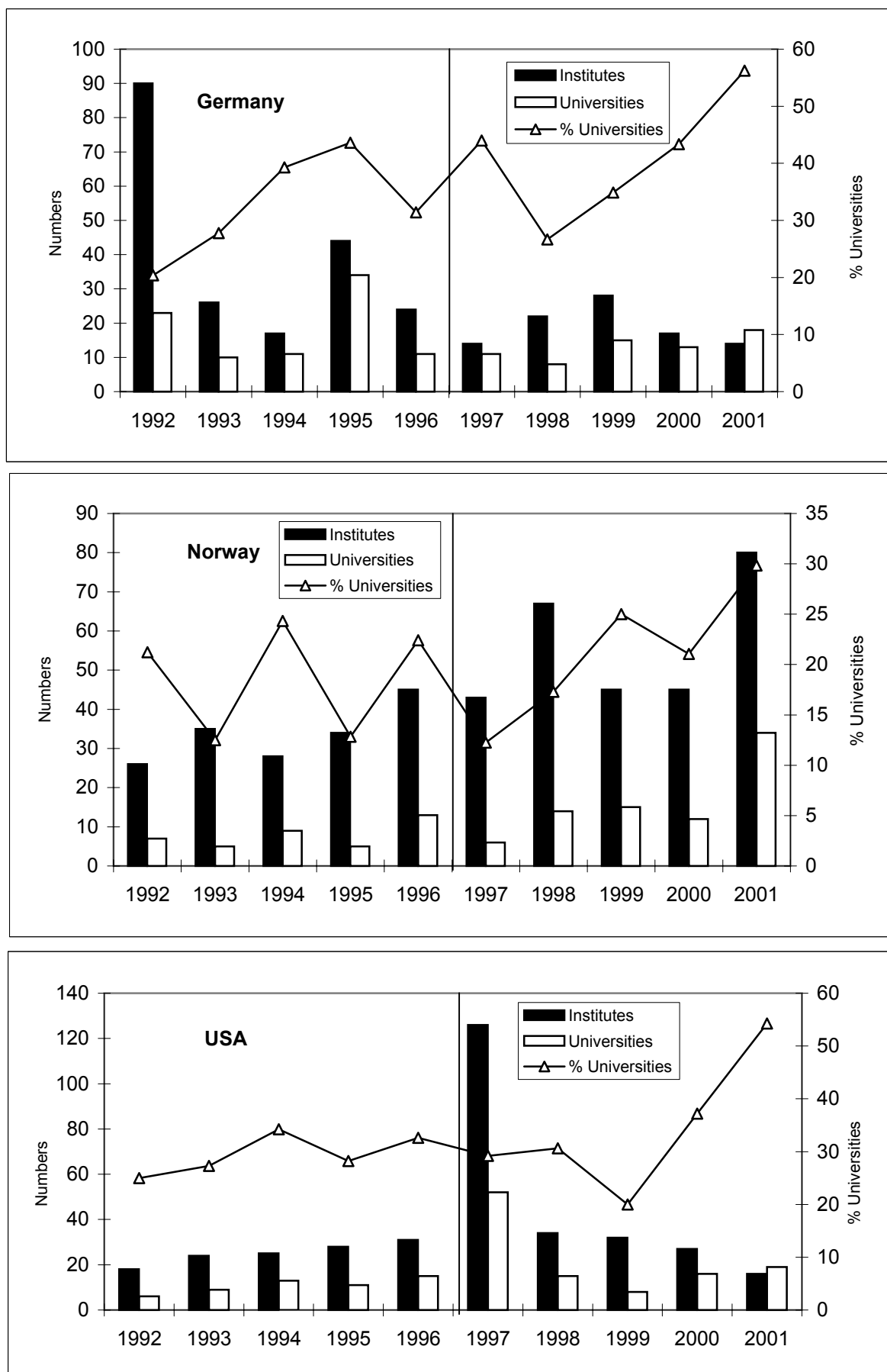


Table 1. Participation at ICES Annual Science Conferences from National Institutes etc., and Universities, 1992-2001

Location	Year	Category	Bel	Can	Den	Est	Fin	Fra	Ger	Ice	Ire	Lat	Ned	Nor	Pol	Por	Rus	Spa	Swe	UK	USA	Total
Rostock	1992	Institutes	4	12	25	0	14	8	90	12	3	0	16	26	14	3	5	15	20	21	18	306
Germany		Universities	1	0	0	0	0	0	23	0	0	0	0	7	1	3	0	0	5	7	6	53
Dublin	1993	Institutes	4	15	25	0	17	19	26	18	75	0	20	35	8	4	7	21	20	34	24	372
Ireland		Universities	1	1	0	0	2	1	10	0	27	0	1	5	2	2	0	4	2	7	9	74
St.John's	1994	Institutes	3	82	22	3	6	12	17	9	2	3	17	28	6	2	4	7	15	18	25	281
Canada		Universities	0	23	1	0	0	1	11	1	0	0	0	9	0	1	1	4	4	2	13	71
Aalborg	1995	Institutes	4	14	45	7	9	8	44	14	5	5	14	34	7	4	11	18	14	22	28	307
Denmark		Universities	0	1	3	0	0	1	34	1	2	0	0	5	0	3	0	1	5	8	11	75
Reykjavik	1996	Institutes	3	20	26	5	13	9	24	86	4	4	12	45	6	12	9	17	16	33	31	375
Iceland		Universities	3	2	2	0	0	2	11	8	0	0	0	13	1	1	0	3	3	2	15	66
Baltimore	1997	Institutes	3	31	30	4	3	13	14	12	2	3	12	43	6	5	10	11	17	19	126	364
USA		Universities	0	1	0	0	0	2	11	0	0	1	0	6	1	0	0	4	1	3	52	82
Cascais	1998	Institutes	5	26	36	4	10	26	22	14	8	6	22	67	5	68	6	32	20	44	34	455
Portugal		Universities	0	5	1	0	1	5	8	0	0	1	0	14	1	45	0	9	2	10	15	117
Stockholm	1999	Institutes	5	26	26	7	15	14	28	8	5	8	20	45	9	6	10	19	55	29	32	367
Sweden		Universities	0	1	0	1	1	0	15	0	0	0	0	15	0	7	0	3	19	9	8	79
Brugge	2000	Institutes	30	41	24	6	4	29	17	9	11	7	25	45	7	15	7	19	10	35	27	368
Belgium		Universities	7	1	0	0	0	1	13	12	0	1	1	12	0	1	0	3	3	9	16	73
Oslo	2001	Institutes	5	34	26	3	9	22	14	11	7	4	15	80	4	3	13	13	13	30	16	322
Norway		Universities	0	0	2	1	1	4	18	1	5	0	1	34	2	9	2	2	2	8	19	111

Table 2. ASC participation from non-member countries (Observer Countries shown in bold)

	1993			1994			1995		
Country	Institute participants	University participants	Total participants	Institute participants	University participants	Total participants	Institute participants	University participants	Total participants
Angola	2	0	2	2	0	2	6	0	6
Argentina	3	0	3	1	0	1	1	0	1
Australia	4	0	4	4	0	4	7	1	8
Brazil	.	.	.	.	.	.	1	0	1
China	.	.	.	.	.	.	0	1	1
Falkland Is.	.	.	.	.	.	.	.	.	.
Greece	1	0	1	.	.	.	1	0	1
Hong Kong	.	.	.	.	.	.	0	2	2
Italy	2	0	2	.	.	.	.	.	.
Israel	.	.	.	.	.	.	.	.	.
Japan	.	.	.	2	0	2	.	.	.
Lithuania	.	.	.	.	.	.	.	.	.
Namibia	.	.	.	.	.	.	.	.	.
N.Zealand	1	0	1	1	0	1	2	0	2
Nigeria	.	.	.	.	.	.	.	.	.
S.Africa	2	0	2	1	0	1	2	0	2
Uruguay	.	.	.	.	.	.	.	.	.
Total	15	0	15	11	0	11	20	4	24
% universities		0%		0%			17%		
Non-member countries		7		6			9		

Year	No. of non-member countries
1993	7
1994	6
1995	9
1996	9
1997	8
1998	9
1999	5
2000	8
2001	11

	1996			1997			1998		
Country	Institute participants	University participants	Total participants	Institute participants	University participants	Total participants	Institute participants	University participants	Total participants
Angola	.	.	.	3	0	3	10	0	10
Argentina	1	0	1	2	0	2	2	0	2
Australia	4	1	5	1	1	2	1	0	1
Brazil	.	.	.	1	0	1	.	.	.
China	.	.	.	.	.	.	.	.	.
Falkland Is.	.	.	.	.	.	.	.	.	.
Greece	1	0	1	2	0	2	2	0	2
Hong Kong	.	.	.	.	.	.	.	.	.
Italy	.	.	.	3	3	6	3	5	8
Israel	0	1	1	.	.	.	.	.	.
Japan	0	1	1	.	.	.	4	6	10
Lithuania	.	.	.	1	0	1	2	0	2
Namibia	1	0	1	.	.	.	.	.	.
N.Zealand	1	0	1	1	0	1	1	0	1
Nigeria	.	.	.	.	.	.	.	.	.
S.Africa	2	1	3	.	.	.	2	1	3
Uruguay	1	0	1	.	.	.	.	.	.
Total	11	4	15	14	4	18	27	12	39
% universities		27%		22%			31%		
Non-member countries		9		8			9		

Country	Years participating (1993-2001)
Australia	9
Greece	8
S.Africa	8
Argentina	7
N.Zealand	7
Angola	6
Italy	6
Japan	5
Brazil	2
Chile	2
Israel	2
Lithuania	2
Namibia	2
China	1
Falkland Is.	1
Hong Kong	1
Nigeria	1
Peru	1
Uruguay	1

Table 2. ASC participation from non-member countries (Observer Countries shown in bold)

	1999			2000			2001		
Country	Institute participants	University participants	Total participants	Institute participants	University participants	Total participants	Institute participants	University participants	Total participants
Angola	.	.	.	.	.	.	3	0	3
Argentina	2	0	2	.	.	.	.	.	.
Australia	1	0	1	4	1	5	6	1	7
Brazil	.	.	.	.	.	.	.	.	.
China	.	.	.	.	.	.	.	.	.
Chile	.	.	.	2	0	2	1	1	2
Falkland Is.	.	.	.	.	.	.	3	0	3
Greece	1	0	1	4	0	4	1	1	2
Hong Kong	.	.	.	.	.	.	.	.	.
Italy	1	0	1	2	1	3	3	0	3
Israel	.	.	.	0	1	1	.	.	.
Japan	.	.	.	6	0	6	0	1	1
Lithuania	.	.	.	.	.	.	.	.	.
Namibia	.	.	.	1	0	1	.	.	.
N.Zealand	.	.	.	.	.	.	5	0	5
Nigeria	.	.	.	.	.	.	2	0	2
Peru	.	.	.	.	.	.	1	0	1
S.Africa	1	0	1	1	0	1	3	3	6
Uruguay	.	.	.	.	.	.	.	.	.
Total	6	0	6	20	3	23	28	7	35
% universities		0%		13%			20%		
Non-member countries		5		8			11		

Country	1993	1994	1995	1996	1997	1998	1999	2000	2001
Angola	x	x	x		x	x			x
Argentina	x	x	x	x	x	x	x		
Australia	x	x	x	x	x	x	x	x	x
Brazil			x		x				
Chile								x	x
China			x						
Falkland Is.									x
Greece	x		x	x	x	x	x	x	x
Hong Kong			x						
Italy	x				x	x	x	x	x
Israel				x				x	
Japan		x		x		x		x	x
Lithuania					x	x			
Namibia				x				x	
N.Zealand	x	x	x	x	x	x			x
Nigeria									x
Peru									x
S.Africa	x	x	x	x		x	x	x	x
Uruguay				x					
Total	7	6	9	9	8	9	5	8	11