## **Statistical Annex (Abridged)**

The following tables give details of various activities of the University Computing Service for the year 1 August 2004 to 31 July 2005, with figures for the previous year in italics. Those tables which break down information on an institutional basis all follow a similar pattern:

- (a) Overall summary (University by Faculty group, Colleges, and External groups)
- (b) Cambridge University Faculty and similar groups (by Faculty or Department)
- (c) Colleges (by College)

In this shortened version of the Statistical Annex all the (b) and (c) tables have been omitted.

## **Computing Service Expenditure**

Table 1 shows the estimated expenditure within the various sections of the Computing Service broken down by type as follows:

**Centrally Funded:** UEF, Equipment Grant, PC3 **Cost Recovery:** Recovered from service charges

Figures are for the financial year 2004–05 in units of £1,000.

Table 1 – Section Expenditure

	Cen	trally Funded	d	Cos	t Recovery	Combined
	Staff	Equip.	Other	Staff	Equip./Other	Total
Directorate	148	1	3	0	0	151
Administration	66	5	38	0	0	110
Finance	59	1	3	25	0	87
Building Services	109	1	12	0	0	122
Administration and Finance	382	7	56	25	0	470
Institution Liaison	107	0	4	0	0	111
Information and User Administration	on 219	4	7	51	0	282
Sales, Reception, and Print Room	186	8	8	53	520	776
LLCC	114	0	4	0	0	118
PandIS	80	0	6	94	141	320
USER SERVICES	599	13	25	198	661	1,496
Hardware Support	179	5	10	95	25	315
Software Support	458	13	13	0	9	493
Help Desk	158	3	11	0	0	172
Training	100	1	4	5	40	150
TECHNICAL USER SUPPORT	895	22	38	100	74	1,129
GBN	9	0	1	32	72	115
Network Installation	179	3	8	0	64	253
Network Systems	225	32	10	0	223	490
Network Support	158	3	7	2	0	169
PWF Systems	134	160	55	142	9	404
Managed Clusters	188	54	9	46	5	250
Operations	183	4	8	0	0	194
NETWORK DIVISION	1,075	256	97	223	373	2,023
Web Systems	101	27	36	0	0	164
Unix Support	206	21	23	0	1	250
Electronic Mail	100	23	7	0	0	130
Central Unix Service	99	1	19	0	0	118
	59 59	0				
Database and Archiving			5	0	0	64
Software Development	60	1	2	0	0	62
UNIX SYSTEMS DIVISION	626	72	91	0	1	790
HPCF	52	0	0	0	0	52
eScience	38	0	0	12	0	50
FACILITIES MANAGEMENT	90	0	0	12	0	102
TOTAL COMPUTING SERVICE	3,774	371	312	557	1,109	6,123

## **University Data Network**

Tables 2(a) to 2(c) show Cambridge University Data Network connections by institution. The connections are essentially all ethernet in type and have been divided as follows:

Slow ethernet All 10 Mbps or less Fast ethernet All 100 Mbps Gigabit ethernet All 1000 Mbps

Table 3 gives estimates for the number of IPv4-addresses in use within the University. Global addresses are those visible to the outside world, whilst private addresses are only available for use within the cam.ac.uk domain.

Figures are for the end of 2004–05; end of 2003–04 figures are in italics.

Table 2(a) – Data Network Connections

	S	low	F	ast	Gig	abit
Arts and Humanities			4	4	3	2
Humanities and Social Sciences	1	4	9	6	7	5
Physical Sciences	3	3	4	4	9	8
Technology	1	1	3	4	4	4
Biological Sciences	2	4	5	6	9	7
Clinical Medicine	1	1	3	5	4	4
Other GB Institutions	1	3	7	8	5	3
Council Institutions	6	8	14	15	2	1
Societies	1	1	1	1		
Total University	16	25	50	53	43	34
Colleges	3	5	24	24	10	8
Research Councils	1	1	3	3	1	1
Other external	2	3	1	1		
Total External	3	4	4	4	1	1
TOTAL	22	34	78	81	54	43

 $TABLE\ 3-IPv4\text{-}ADDRESSES$ 

	G	Pı	Private		
Total University	37,700	39,100	3,300	2,400	
Colleges	16,900	17,600	3,000	800	
Total	54,600	56,700	6,300	3,200	

## **JANET Traffic**

Tables 4(a) to 4(c) show the sum of ingoing and outgoing traffic at the gateway to JANET (in Gigabytes) by institution.

Figures are for 2004–05; figures for 2003–04 are in italics.

Table 4(a) – Janet Traffic By Institution

	Traffic (GB)						
Arts and Humanities	4,698	(1.0%)	2,315	(0.7%)			
Humanities and Social Sciences	5,438	(1.2%)	3,275	(1.0%)			
Physical Sciences	66,556	(14.6%)	40,408	(12.5%)			
Technology	52,952	(11.6%)	32,739	(10.1%)			
Biological Sciences	24,997	(5.5%)	17,526	(5.4%)			
Clinical Medicine	12,619	(2.8%)	9,268	(2.9%)			
Other GB Institutions	30,037	(6.6%)	51,988	(16.0%)			
Council Institutions	18,668	(4.1%)	11,119	(3.4%)			
Societies	4,030	(0.9%)	1,381	(0.4%)			
TOTAL UNIVERSITY	219,994	(48.4%)	170,020	(52.4%)			
Colleges	226,501	(49.8%)	148,456	(45.8%)			
Research Council institutions	6,566	(1.4%)	4,390	(1.4%)			
Other external	1,846	(0.4%)	1,369	(0.4%)			
Total External	8,411	(1.8%)	5,759	(1.8%)			
TOTAL	454,906	(100.0%)	324,235	(100.0%)			

## **Electronic Mail**

Tables 5(a) to 5(c) show numbers of Hermes users and messages by institution.

Users Includes users who access Hermes directly and those who have their mail forwarded to

another system such as the CUS.

Messages Includes both messages sent and messages received, which are typically in the ratio 1:12.

Figures are for 2004–05 with 2003–04 in italics.

Table 5(a) – Hermes

	U	sers		N	Aessages ('0	00s)	
2,340	(6.0%)	2,320	(5.9%)	7,957	(6.3%)	5,958	(6.5%)
5,717	(14.7%)	5,677	(14.3%)	12,739	(10.2%)	9,494	(10.3%)
3,527	(9.0%)	3,461	(8.7%)	12,650	(10.1%)	9,409	(10.2%)
3,299	(8.5%)	2,916	(7.4%)	11,792	(9.4%)	7,708	(8.4%)
2,966	(7.6%)	2,907	(7.3%)	9,633	(7.7%)	7,819	(8.5%)
2,397	(6.1%)	2,246	(5.7%)	6,261	(5.0%)	4,875	(5.3%)
1,276	(3.3%)	1,437	(3.6%)	6214	(4.9%)	4,724	(5.1%)
897	(2.3%)	856	(2.2%)	2,770	(2.2%)	2,369	(2.6%)
37	(0.1%)	40	(0.1%)	204	(0.2%)	121	(0.1%)
22,456	(57.6%)	21,860	(55.2%)	70,219	(55.8%)	52,477	(57.0%)
16,063	(41.2%)	17,254	(43.6%)	54,878	(43.6%)	39,006	(42.4%)
352	(0.9%)	337	(0.9%)	488	(0.4%)	404	(0.4%)
133	(0.3%)	123	(0.3%)	223	(0.2%)	199	(0.2%)
485	(1.2%)	460	(1.2%)	711	(0.6%)	603	(0.7%)
39,004	(100.0%)	39,574	(100.0%)	125,808	(100.0%)	92,085	(100.0%)
	5,717 3,527 3,299 2,966 2,397 1,276 897 37 22,456 16,063 352 133 485	2,340 (6.0%) 5,717 (14.7%) 3,527 (9.0%) 3,299 (8.5%) 2,966 (7.6%) 2,397 (6.1%) 1,276 (3.3%) 897 (2.3%) 37 (0.1%) 22,456 (57.6%) 16,063 (41.2%) 352 (0.9%) 133 (0.3%)	5,717       (14.7%)       5,677         3,527       (9.0%)       3,461         3,299       (8.5%)       2,916         2,966       (7.6%)       2,907         2,397       (6.1%)       2,246         1,276       (3.3%)       1,437         897       (2.3%)       856         37       (0.1%)       40         22,456       (57.6%)       21,860         16,063       (41.2%)       17,254         352       (0.9%)       337         133       (0.3%)       123         485       (1.2%)       460	2,340 (6.0%) 2,320 (5.9%) 5,717 (14.7%) 5,677 (14.3%) 3,527 (9.0%) 3,461 (8.7%) 3,299 (8.5%) 2,916 (7.4%) 2,966 (7.6%) 2,907 (7.3%) 2,397 (6.1%) 2,246 (5.7%) 1,276 (3.3%) 1,437 (3.6%) 897 (2.3%) 856 (2.2%) 37 (0.1%) 40 (0.1%)  22,456 (57.6%) 21,860 (55.2%) 16,063 (41.2%) 17,254 (43.6%) 352 (0.9%) 337 (0.9%) 133 (0.3%) 123 (0.3%) 485 (1.2%) 460 (1.2%)	2,340         (6.0%)         2,320         (5.9%)         7,957           5,717         (14.7%)         5,677         (14.3%)         12,739           3,527         (9.0%)         3,461         (8.7%)         12,650           3,299         (8.5%)         2,916         (7.4%)         11,792           2,966         (7.6%)         2,907         (7.3%)         9,633           2,397         (6.1%)         2,246         (5.7%)         6,261           1,276         (3.3%)         1,437         (3.6%)         6214           897         (2.3%)         856         (2.2%)         2,770           37         (0.1%)         40         (0.1%)         204           22,456         (57.6%)         21,860         (55.2%)         70,219           16,063         (41.2%)         17,254         (43.6%)         54,878           352         (0.9%)         337         (0.9%)         488           133         (0.3%)         123         (0.3%)         223           485         (1.2%)         460         (1.2%)         711	2,340       (6.0%)       2,320       (5.9%)       7,957       (6.3%)         5,717       (14.7%)       5,677       (14.3%)       12,739       (10.2%)         3,527       (9.0%)       3,461       (8.7%)       12,650       (10.1%)         3,299       (8.5%)       2,916       (7.4%)       11,792       (9.4%)         2,966       (7.6%)       2,907       (7.3%)       9,633       (7.7%)         2,397       (6.1%)       2,246       (5.7%)       6,261       (5.0%)         1,276       (3.3%)       1,437       (3.6%)       6214       (4.9%)         897       (2.3%)       856       (2.2%)       2,770       (2.2%)         37       (0.1%)       40       (0.1%)       204       (0.2%)         22,456       (57.6%)       21,860       (55.2%)       70,219       (55.8%)         16,063       (41.2%)       17,254       (43.6%)       54,878       (43.6%)         352       (0.9%)       337       (0.9%)       488       (0.4%)         133       (0.3%)       123       (0.3%)       223       (0.2%)         485       (1.2%)       460       (1.2%)       711	2,340       (6.0%)       2,320       (5.9%)       7,957       (6.3%)       5,958         5,717       (14.7%)       5,677       (14.3%)       12,739       (10.2%)       9,494         3,527       (9.0%)       3,461       (8.7%)       12,650       (10.1%)       9,409         3,299       (8.5%)       2,916       (7.4%)       11,792       (9.4%)       7,708         2,966       (7.6%)       2,907       (7.3%)       9,633       (7.7%)       7,819         2,397       (6.1%)       2,246       (5.7%)       6,261       (5.0%)       4,875         1,276       (3.3%)       1,437       (3.6%)       6214       (4.9%)       4,724         897       (2.3%)       856       (2.2%)       2,770       (2.2%)       2,369         37       (0.1%)       40       (0.1%)       204       (0.2%)       121         22,456       (57.6%)       21,860       (55.2%)       70,219       (55.8%)       52,477         16,063       (41.2%)       17,254       (43.6%)       54,878       (43.6%)       39,006         352       (0.9%)       337       (0.9%)       488       (0.4%)       404

### Web and News Services

The incoming traffic to the main University website (www.cam.ac.uk) totalled 208m requests from 216 country-level domains in 2004–05, with a daily peak of 940,000 requests, compared to 186m, 202, and 822,000 respectively in 2003–04. The tables below show various statistics for the month of May, which gives a better indication of the term-time activity of the various services involved.

Table 6 shows the load statistics during May for the main University Web Server (www.cam.ac.uk), the University Web Search Engine, and the University Web Cache. Note that because of firewalls and other local Web caches, the client system figures for use of the Web cache will be underestimates.

Table 7 shows the load statistics during May for the main University USENET news server.

Figures are for 2004–05; 2003–04 figures are in italics.

TABLE 6 - UNIVERSITY WEB SERVICES

	]	May
University Web Server (www.cam.ac.uk)		-
Total requests received	17.0m	16.1m
Total data sent	87GB	75GB
Proportion of requests from Cam, UK, world	42%, 9%, 49%	42%, 8%, 50%
University Web Search Engine		
University servers indexed	471	445
Documents indexed	384,000	339,000
Total number of searches	196,000	206,000
Volume of data sent	5.5GB	5.5GB
Proportion of requests from Cam, UK, world	40%, 8%, 52%	42%, 11%, 47%
University Web Cache		
Total requests received	668m	406m
Total volume of data	6.5TB	3.6TB
% hits (requests), % hits (data volume)	42%, 14%	48%, 17%
Client systems	17,863	15,223
Client domains	157	159
Table 7 – University News Server		
	]	May
University News Server		
Total number of connections	1.017m	449,000
Peak concurrent connections	201	155
Total number of newsgroups	15,200	15,300
Number of local newsgroups	239	239
	11000	

## **Raven Authentication Service**

Number of individual postings

Monthly volume

Table 8 shows the monthly breakdown of Raven usage during 2004–05. As Raven was only released as a fully operational service in September 2004, earlier figures for comparison are not available. The table shows the number of distinct users authenticating to Raven, and the total number of authentications served each month. The web hosts figure indicates the number of distinct web sites using Raven to authenticate access to their material each month.

11.9GB

14.0GB

6.4m

Table 8-R aven Authentication Service Use

	Users	Web Hosts	Authentications
September 2004	936	56	4,393
October	2,516	72	9,057
November	2,270	88	9,296
December	1,390	77	5,694
January 2005	2,514	90	14,252
February	2,094	88	9,850
March	2,469	99	11,592
April	2,253	105	10,955
May	2,754	138	14,715
June	2,226	144	11,910
July	2,186	134	14,623

Total Authentications 116,337

## **Public Workstation Facility**

Tables 9(a) to 9(c) show numbers of users and sessions by institution. Note that the figures for Computing Service users include temporary identifiers issued to users on training courses.

Number of individuals using the system at least once during the year Sessions Number of times logged-on during the year

Table 10 gives a list of the institutions that have a Computing Service Managed Cluster, and the platforms provided at those sites.

Table 11 gives details, extracted from Tables 9(b) and 9(c), on the use of the PWF from certain University locations while Table 12 gives similar details of the use of the PWF from those Colleges which have Managed Clusters. In these two tables, the sessions have been further categorized into those originating from PCs (Windows or Linux) and those from Macintoshes. Table 13 gives details of the number of sessions to remote PWF servers from machines that are not PWF managed workstations.

In all Tables, the figures are for 2004–05, with 2003–04 figures in italics.

TABLE 9(a) – PUBLIC WORKSTATION FACILITY USE

		U	sers			Session	IS	
Arts and Humanities	969	(5.5%)	848	(5.0%)	104,153	(7.2%)	90,431	(6.4%)
<b>Humanities and Social Sciences</b>	1,557	(8.8%)	1,481	(8.7%)	171,754	(11.9%)	174,185	(12.4%)
Physical Sciences	1,303	(7.4%)	1,318	(7.8%)	109,581	(7.6%)	107,140	(7.6%)
Technology	850	(4.8%)	782	(4.6%)	39,328	(2.7%)	41,655	(3.0%)
Biological Sciences	624	(3.5%)	609	(3.6%)	59,421	(4.1%)	56,115	(4.0%)
Clinical Medicine	533	(3.0%)	498	(2.9%)	56,370	(3.9%)	55,286	(3.9%)
Other GB Institutions	2,736	(15.5%)	2,090	(12.3%)	67,340	(4.7%)	61,047	(4.3%)
Council Institutions	77	(0.4%)	232	(1.4%)	4,951	(0.3%)	4,239	(0.3%)
Societies	9	(0.1%)	5	(0.0%)	244	(0.0%)	244	(0.0%)
Total University	8,658	(49.0%)	7,863	(46.2%)	613,142	(42.5%)	590,342	(41.9%)
Colleges	8,935	(50.5%)	9,060	(53.3%)	824,581	(57.2%)	815,019	(57.8%)
Research Councils	71	(0.4%)	71	(0.4%)	2,958	(0.2%)	3,097	(0.2%)
Other external	20	(0.1%)	11	(0.1%)	942	(0.1%)	1,004	(0.1%)
Total External	91	(0.5%)	82	(0.5%)	3,900	(0.3%)	4,101	(0.3%)
TOTAL	17,684	(100.0%)	17,005	(100.0%)	1,441,623	(100.0%)	1,409,462	(100.0%)

Table 10 – Managed Cluster Sites

Institution	Platform					
	Windows PC	Macintosh	Linux PC			
Architecture and History of Art		X				
Archaeology	X	X				
Chemistry	X	X	X			
Clinical School	X					
Computer Laboratory	X		X			
Divinity	X					
English	X					
Geography	X					
Land Economy	X					
Law	X	X				
Mathematics	X		X			
MML and Philosophy	X	X				
Moore Library	X		X			
Physics	X		X			
Social and Political Sciences	X	X				
Veterinary Medicine	X	X				
ž						
Christ's	X					
Clare	X	X	X			
Downing	X	X				
Emmanuel	X	X				
Fitzwilliam	X	X				
Gonville and Caius	X	X				
King's	X	X	X			
Lucy Cavendish	X					
New Hall	X	X				
Newnham	X	X				
Peterhouse	X	X				
Queens'	X	X	X			
Robinson	X	X				
Selwyn	X	X	X			
Sidney Sussex	X	X				
St Catharine's	X	X				
St John's	X	X				
Trinity	X	X	X			
Trinity Hall	X	X	X			
Wolfson	X					

Table 11 – University Public Workstation Facility Sessions By Location

N.B. Since users may use more than one location, user numbers are not additive between locations.

Location		Users	Sessions			
Computing Service locations			]	PC	$\mathbf{M}$	[ac
Phoenix User Area (New Museums Site)	1,387	1,580	18,587	23,382	1,365	696
Titan Teaching Room 1 (New Museums Site)	1,627	1,740	15,739	13,588		
Titan Teaching Room 2 (New Museums Site)	1,302	1,474	6,879	8,263		
Phoenix Teaching Room (New Museums Site)	967	987	9,202	10,430		
Balfour Macintosh Room (New Museums Site)	676	405			2,892	1,664
Oriental Studies Basement (Sidgwick Site)	569	593	31,032	13,690	576	403
University Centre	1,159	954	20,110	13,565	725	292
•	· .	Total Sessions	101,549	82,918	5,558	3,055
Managed Cluster locations					, in the second	
Archaeology	150	165	13,011	13,971	58	63
Architecture and History of Art	139				3,284	
Chemistry	857	810	31,423	33,278	3,896	1,569
Clinical Medicine	508	437	37,063	35,175		
Computer Laboratory	661	702	18,609	28,064		
Divinity	298	301	4,690	4,699		
English	913	582	32,997	7,611		
Geography	543	512	26,183	16,486		
Humanities and Social Sciences		52		2,108		
Land Economy	658	617	15,733	17,603		
Law	1,501	1,417	63,777	55,794		
Mathematics	968	819	31,745	18,869		
MML and Philosophy	1,155	981	38,387	26,047	360	78
Moore Library	1,151	964	28,300	27,407		
Physics	645	681	11,354	15,958		
Social and Political Sciences	497	430	12,948	7,681	4,279	2,293
Veterinary Medicine	360	329	42,681	40,201	1,431	365
	-	Total Sessions	408,901	350,952	13,308	4,368

Table 12 – Public Workstation Facility Use From Colleges

N.B. Since users may use more than one location, user numbers are not additive between locations.

Location	Users			Sessions			
Managed Cluster locations			]	PC	$\mathbf{N}$	<b>Iac</b>	
Christ's	719	604	41,394	32,532			
Clare	684	580	46,916	48,369	3,122	2,006	
Downing	919	861	35,062	41,856	159	500	
Emmanuel	754	750	54,426	53,277	258	57	
Fitzwilliam	742	696	40,813	41,020	260	66	
Gonville and Caius	1,012	1,021	64,261	61,783	182	147	
King's	714	636	46,316	41,558	600	260	
Lucy Cavendish	151	150	3,552	8,538			
New Hall	550	544	30,328	42,673	10	29	
Newnham	721	716	58,284	53,131	113	31	
Peterhouse	413	408	28,060	27,175	486	211	
Queens'	882	865	48,246	44,624	1,229	504	
Robinson	594	531	35,727	35,296	102	10	
St Catharine's	855	809	52,639	58,598	612	3,645	
St John's	1,243	1,354	94,509	101,706	4,344	3,251	
Selwyn	528	541	32,957	32,473	45	26	
Sidney Sussex	582	571	49,692	50,510	290	359	
Trinity	1,465	1,427	113,968	102,010	3,559	2,366	
Trinity Hall	566	523	33,556	25,969	726	129	
Wolfson	658	631	47,945	50,420			
	To	tal Sessions	958,651	953,518	16,097	13,597	

TABLE 13 – PUBLIC WORKSTATION FACILITY REMOTE ACCESS

N.B. Since users may use more than one location, user numbers are not additive between locations.

Location	Us	sers	Sessions		
PWF Club Locations					
Economics	0	1	0	14	
Churchill	64	93	512	682	
Clare Hall	1	1	1	1	
Magdalene	2	4	326	74	
Pembroke	10	48	21	359	
	Total	l Sessions	860	1,130	
Remote Linux Locations					
Physics	134		2,434		
Computer Laboratory	252		10,839		
•	Tota	l Sessions	13.273		

#### **Central Unix Service**

The Central Unix Service is a general user facility based on a multi-processor configuration. Usage figures are given in percentage terms only and refer to the use of the Solaris 2 operating system. Note that the figures for the Computing Service include all systems, applications and operational support activities, together with Unix-based training courses.

Tables 14(a) to 14(c) are for the Central Unix Service and show the relative use giving:

CPU CPU time consumed as a percentage of total use
Users Number of individuals making some active use of the system during the year

TABLE 14(a) CENTRAL UNIX SERVICE USE

	(	CPU			Users	
Arts and Humanities	7.5%	5.2%	145	(7.6%)	170	(7.2%)
Humanities and Social Sciences	2.4%	11.9%	205	(10.7%)	276	(11.6%)
Physical Sciences	16.1%	24.4%	446	(23.3%)	545	(22.9%)
Technology	10.9%	2.9%	106	(5.5%)	127	(5.3%)
Biological Sciences	5.2%	14.1%	270	(14.1%)	361	(15.2%)
Clinical Medicine	4.9%	6.0%	103	(5.4%)	155	(6.5%)
Other GB Institutions	43.2%	18.8%	221	(11.5%)	224	(9.4%)
Council Institutions	3.1%	3.4%	84	(4.4%)	116	(4.9%)
Societies	0.0%	0.0%	0	(0.0%)	2	(0.1%)
Total University	93.4%	86.7%	1,580	(82.4%)	1,976	(83.2%)
Colleges	6.2%	12.5%	317	(16.5%)	370	(15.6%)
Research Councils	0.1%	0.1%	11	(0.6%)	13	(0.5%)
Other external	0.3%	0.8%	9	(0.5%)	17	(0.7%)
Total External	0.4%	0.8%	20	(1.0%)	30	(1.3%)
TOTAL	100.0%	100.0%	1,917	(100.0%)	2,376	(100.0%)
		,			,	

#### **Pelican Data Archive Service**

Tables 15(a) to 15(c) show the use of the Pelican data archive service by institutions at the end of 2004–05 with end 2003–04 figures in italics.

**Stored** Amount of data stored (in MB) Number of individuals with stored data Users

TABLE 15(a) – PELICAN DATA ARCHIVE SERVICE USE

		S	tored			Users				
Arts and Humanities	24,871	(3.9%)	24,493	(3.8%)	74	(7.6%)	66	(6.7%)		
Humanities and Social Sciences	23,461	(3.6%)	18,345	(2.9%)	146	(14.9%)	151	(15.3%)		
Physical Sciences	26,887	(4.2%)	27,619	(4.3%)	177	(18.1%)	183	(18.5%)		
Technology	21,276	(3.3%)	18,392	(2.9%)	150	(15.4%)	153	(15.5%)		
Biological Sciences	11,062	(1.7%)	10,491	(1.6%)	82	(8.4%)	89	(9.0%)		
Clinical Medicine	3,048	(0.5%)	2,309	(0.4%)	30	(3.1%)	26	(2.6%)		
Other GB Institutions	515,900	(79.9%)	518,627	(81.3%)	137	(14.0%)	133	(13.5%)		
Council Institutions	3,207	(0.5%)	1,996	(0.3%)	22	(2.3%)	19	(1.9%)		
Societies	164	(0.0%)	141	(0.0%)	5	(0.5%)	3	(0.3%)		
Total University	629,876	(97.5%)	622,413	(97.6%)	823	(84.2%)	823	(83.3%)		
Colleges	15,014	(2.3%)	14,610	(2.3%)	142	(14.5%)	153	(15.5%)		
Research Councils	724	(0.1%)	517	(0.1%)	6	(0.6%)	6	(0.6%)		
Other external	314	(0.0%)	319	(0.1%)	6	(0.6%)	6	(0.6%)		
Total External	1,037	(0.2%)	836	(0.1%)	12	(1.2%)	12	(1.2%)		
TOTAL	645,927	(100.0%)	637,860	(100.0%)	977	(100.0%)	988	(100.0%)		

## **Software Sales**

Table 16 shows totals of software sales items supplied by month. Tables 17(a) to 17(c) show software sales items supplied by institution. Note that in previous years a detailed breakdown of the Clinical School was not given, so figures for 2003-04 for comparison are not available in Table 17(b). General software (excluding media) and SunSpectrum items are shown separately. Table 18 lists software and other items distributed by the Computing Service. An item may be any of a full copy of a software package, an upgrade or a maintenance contract.

Table 16 – Software Items Supplied By Month

		General SunSpectrum						1
August 2004	1,025	(6.1%)	2,000	(12.0%)	304	(92.5%)		
September	1,171	(6.9%)	1,610	(9.6%)			274	(61.6%)
October	1,077	(6.4%)	2,240	(13.4%)	3	(0.9%)	121	(27.2%)
November	818	(4.8%)	971	(5.8%)	3	(0.9%)	18	(4.0%)
December	1,085	(6.4%)	866	(5.2%)				
January 2005	987	(5.8%)	802	(4.8%)	3	(0.9%)	7	(1.6%)
February	1,096	(6.5%)	1,444	(8.6%)	8	(2.4%)		
March	2,561	(15.2%)	1,417	(8.5%)	8	(2.4%)	4	(0.9%)
April	968	(5.7%)	2,017	(12.1%)			20	(4.5%)
May	3,566	(21.1%)	1,062	(6.4%)			1	(0.2%)
June	852	(5.0%)	1,386	(8.3%)				
July	1,694	(10.0%)	906	(5.4%)				
TOTAL FOR YEAR	16,890	(100.0%)	16,721	(100.0%)	329	(100.0%)	445	(100.0%)

Table 17(a) – Software Items Supplied By Institution

	General SunSpectrum						1	
Arts and Humanities	709	(4.2%)	686	(4.1%)		•	8	(1.8%)
<b>Humanities and Social Sciences</b>	867	(5.1%)	744	(4.4%)				
Physical Sciences	3,193	(18.9%)	2,965	(17.7%)	90	(27.4%)	121	(27.2%)
Technology	1,558	(9.2%)	1,375	(8.2%)	8	(2.4%)	22	(4.9%)
Biological Sciences	1,524	(9.0%)	1,600	(9.6%)	30	(9.1%)	55	(12.4%)
Clinical Medicine	856	(5.1%)	1,430	(8.6%)	53	(16.1%)	4	(0.9%)
Other GB Institutions	1,116	(6.6%)	2,739	(16.4%)	87	(26.4%)	199	(44.7%)
Council Institutions	1,234	(7.3%)	2,462	(14.7%)	57	(17.3%)		
Societies	15	(0.1%)	17	(0.1%)				
Total University	11,072	(65.6%)	14,018	(83.8%)	325	(98.8%)	409	(91.9%)
Colleges	5,616	(33.3%)	2,428	(14.5%)	4	(1.2%)		
Research Council institutions	48	(0.3%)	47	(0.3%)				
Other external	154	(0.9%)	228	(1.4%)			36	(8.1%)
Total External	5,818	(34.4%)	275	(1.6%)	4	(1.2%)	36	(8.1%)
TOTAL	16,890	(100.0%)	16,721	(100.0%)	329	(100.0%)	455	(100.0%)

Table 18 – Software Sales by Product

	It	tems		1	Items
Assimilator			Apple Maintenance Programme	22	699
Hummingbird eXceed	158	221	Microsoft Exchange Server	445	901
JRB Utils	9	2	Microsoft SQL Server	460	116
Microsoft Services for Netware		2	MS Systems Management Server		12
Microsoft Services for Unix			Microsoft Windows 2000	10	24
NetPresenz			Microsoft Windows 2003	1,746	4,282
Novell Netware (per server)	9	16	Microsoft Windows XP	799	1,311
ZENworks	87	130	PCounter	8	8
Communications	263	371	OPERATING SYSTEMS/UTILITIES	3,490	7,353
ARCInfo/ARCView	364	38			
Bartholomew's Map Data		1			
Microsoft MapPoint			Microsoft Visual FoxPro Pro		7
PCI Geomatics			Microsoft Visual SourceSafe	2	2
			Microsoft Visual Studio	64	102
GEOGRAPHIC	364	39	Sun ScholarPAC		151
Corel Draw	938	1,127	Programming Languages	66	262
Imagine	164	14			
Microsoft PowerPoint	10	14	FileMaker Pro	231	257
Microsoft Visio	94	96	Microsoft Access	42	48
	-		Microsoft Excel	17	12
GRAPHICS AND DRAWING	1,206	1,251	Microsoft Project	103	213
Maple	89	88	Spreadsheets, Databases, And	393	530
NAg Products	670	21	PROJECT MANAGEMENT		
MATHEMATICAL/LIBRARIES	759	109	MathCAD	30	53
			Minitab	412	186
Microsoft Office	2,821	3,431	S-PLUS	236	84
			SAS	15	12
OFFICE PACKAGES	2,821	3,431	SPSS	1,337	645
			SPSS Science Products	34	21
			STATISTICS	2,121	1,029

Table 18 cont.

	I	tems		]	Items
Corel WordPerfect	43	22	Sun Hardware maintenance	211	305
EndNote	803	1,586	(Total Number of machines)		
Microsoft FrontPage	28	16	Sun Software under maintenance	118	119
Microsoft Publisher	39	40	(Licence, media and documentation	ι)	
Microsoft Word	13	34	Silicon Graphics maintenance		21
Sabon Font	138	47			
	-		SUNSPECTRUM	329	424
WORD AND DOCUMENT PROCESSING	1,064	1,745			
BBEdit	34	56	TOTAL	17,219	17,141
Dragon Naturally Speaking	44	24			
HoTMetal Pro		5			
Meeting Maker	7	8			
Microsoft Outlook	7	35			
Origin Professional	61	37			
SolidWorks	7	7			
Symantec GHOST	1,212	429			
Miscellaneous	4,343	601			
TOTAL for Software	16,890	16,721			

# Photographic and Illustration Service

Table 19 shows a breakdown of the work done by the Photographic and Illustration Service over the year.

Table 19 – Items produced or processed

		Items
Colour Transparency Service		
Film processed (rolls)	3,782	5,013
Slides from flat copy	477	707
Slide duplication	673	1,973
Digital output on film	1,056	1,080
Black and White Service		
Film processed (rolls)	266	275
Colour Print Service		
Film processed (rolls)	3,004	4,145
Prints produced	151,509	181,000
Single item scans	61,461	48,395
Photography Service		
Graduation photographs	8231	6212
Congregation commissions	1,030	1,048
Other commissions	16	10
Framing Service		
Picture/Certificate frames	2,812	1,636
Graphics and Illustration Service		
Posters (total)	1,478	1,481
Laminated posters	608	514

## **Printing and Reproduction Service**

Table 20 shows a breakdown of work done by the Printing and Reproduction Service. External work is charged for on a cost recovery basis.

Figures are for 2004–05; 2003–04 figures are in italics

Table 20 – Impressions Printed

	Monochi	Colour('000s)		
Internal Computing Service	112	179	2.3	6.2
User Documentation (charged)	34	62	0.3	0.0
User Documentation (free)	26	12	3.9	1.8
Course material	214	211	4.8	3.3
PandIS	3	1	0.3	0.0
Software Sales	24	27	4.2	0.0
TOTAL COMPUTING SERVICE	413	493	15.8	11.3
EXTERNAL WORK	1051	1,230	17.1	16.6
Total	1,465	1,723	32.9	27.8

#### **External Hardware Maintenance**

Table 21 shows the number of contract (including warranty) and non-contract repairs undertaken for different types of equipment. Tables 22(a) to 22(c) show both the number of repairs and the number of staff hours spent on contract and non-contract repairs distributed amongst institutions.

Table 21 – Equipment repaired by Type

		Noi	Non-Contract		
PCs	194	294	105	134	
Apple Macintosh	15	40	57	97	
Printers	67	74	72	96	
Monitors	17	7	5	4	
PC Laptops	1	1	278	268	
Macintosh Laptops	1	0	74	84	
Others	7	6	86	52	
TOTAL	302	422	677	735	

TABLE 22(a) – EQUIPMENT REPAIRED BY INSTITUTION

	Contract				Warranty				Non-Contract			
	Ī	No	Н	<b>lours</b>		No	Н	ours		No	Н	ours
Arts and Humanities	0	1	0	3	15	11	50	22	48	57	79	86
Humanities and Social Sciences	0	0	0	0	24	32	67	64	59	60	107	94
Physical Sciences	34	45	100	132	26	25	80	49	90	84	142	143
Technology	0	0	0	0	12	8	38	13	33	37	49	49
Biological Sciences	20	30	55	103	18	25	61	50	105	136	200	239
Clinical Medicine	0	0	0	0	6	8	35	19	22	21	48	49
Other GB Institutions	50	39	149	135	29	6	73	12	10	11	16	15
Council Institutions	4	9	13	25	14	2	57	2	22	21	33	42
Societies	0	0	0	0	0	2	0	4	3	6	7	8
TOTAL UNIVERSITY	108	124	317	398	144	119	461	235	392	433	681	725
Colleges	27	150	67	507	22	24	60	43	271	286	402	384
Research Councils	0	0	0	0	1	5	3	7	1	3	1	6
Other external	0	0	0	0	0	0	0	0	13	13	15	18
Total External	0	0	0	0	1	5	3	7	14	16	16	24
TOTAL	135	274	384	905	167	148	524	285	677	735	1,099	1,133

## Help Desk

Table 23 shows the monthly totals of calls dealt with by the Help Desk, and the proportion of them that are from IT support staff (TechLinks). Tables 24(a) to 24(c) show the number of Help Desk calls and users by institution.

Figures are for 2004–05; 2003–04 figures are in italics.

TABLE 23 – HELP DESK CALLS BY MONTH

N.B. These figures exclude calls made directly to the PC Support service (445 in 2004–05, 521 in 2003–04).

		Tota	l Calls			TechL	ink Call	S
August 2004	645	(7.8%)	944	(9.4%)	116	(18.0%)	190	(20.1%)
September	710	(8.6%)	949	(9.5%)	118	(16.6%)	193	(20.3%)
October	1,136	(13.7%)	1,413	(14.1%)	158	(13.9%)	268	(19.0%)
November	807	(9.7%)	826	(8.2%)	178	(22.1%)	170	(20.6%)
December	489	(5.9%)	614	(6.1%)	98	(20.0%)	106	(17.3%)
January 2005	739	(8.9%)	942	(9.4%)	157	(21.2%)	161	(17.1%)
February	624	(7.5%)	812	(8.1%)	172	(27.6%)	151	(18.6%)
March	614	(7.4%)	859	(8.6%)	155	(25.2%)	150	(17.5%)
April	580	(7.0%)	609	(6.1%)	134	(23.1%)	95	(15.6%)
May	650	(7.8%)	579	(5.8%)	219	(33.7%)	125	(21.6%)
June	584	(7.0%)	728	(7.3%)	111	(19.0%)	143	(19.6%)
July	726	(8.7%)	745	(7.4%)	129	(17.8%)	137	(18.4%)
TOTAL FOR YEAR	8,304	(100.0%)	10,020	(100.0%)	1,745	(21.0%)	1,889	(18.9%)

TABLE 24(a) - HELP DESK CALLS BY INSTITUTION

N.B. These figures include the calls made directly to the PC Support service (see above).

		C	alls			Users				
Arts and Humanities	777	(8.9%)	1,178	(11.2%)	411	(9.9%)	487	(10.2%)		
Humanities and Social Sciences	1,354	(15.5%)	1,759	(16.7%)	624	(15.0%)	750	(15.7%)		
Physical Sciences	829	(9.5%)	986	(9.4%)	429	(10.3%)	488	(10.2%)		
Technology	473	(5.4%)	612	(5.8%)	312	(7.5%)	373	(7.8%)		
Biological Sciences	791	(9.0%)	869	(8.2%)	373	(8.9%)	413	(8.6%)		
Clinical Medicine	510	(5.8%)	687	(6.5%)	334	(8.0%)	385	(8.0%)		
Other GB Institutions	520	(5.9%)	565	(5.4%)	241	(5.8%)	251	(5.2%)		
Council Institutions	440	(5.0%)	512	(4.9%)	223	(5.3%)	223	(4.7%)		
Societies	23	(0.3%)	20	(0.2%)	9	(0.2%)	7	(0.1%)		
Total University	5,717	(65.3%)	7,188	(68.2%)	2,956	(70.9%)	3,377	(70.5%)		
Colleges	2,551	(29.2%)	2,917	(27.7%)	1,159	(27.8%)	1,347	(28.1%)		
Research Councils	43	(0.5%)	50	(0.5%)	36	(0.9%)	34	(0.7%)		
Other external (world-wide)	438	(5.0%)	386	(3.7%)	21	(0.5%)	29	(0.6%)		
Total External	481	(5.5%)	436	(4.1%)	57	(1.4%)	63	(1.3%)		
TOTAL	8,749	(100.0%)	10,541	(100.0%)	4,172	(100.0%)	4,787	(100.0%)		

## **Training**

Table 25 lists the training courses provided by the Computing Service; in each case the figures show the number of times a course was offered and the total number of people attending. Courses involving more than one session count attendances at each separately. Tables 26(a) to 26(c) show how attendances at courses were distributed amongst institutions. Note that in previous years a detailed breakdown of the Clinical School was not given, so figures for 2003-04 for comparison are not available in Table 26(b).

Table 25 – Training Courses

	Sessions		At	Attendances	
IBM PC: basic intro to Windows	3	3	27	39	
IBM PC: Keeping your PC safe and secure	3	3	37	34	
IBM PC: Windows file handling/desktop skills	3	3	16	27	
IBM PC: Windows XP features for power users	1	1	5	9	
Inside the PC	1	1	10	10	
Macintosh: introduction	3	3 2	36	23	
Macintosh: applications				10	
Personal Computers	14	16	131	152	
Unix: introduction	6	7	254	236	
Unix: vi editor, self-paced	1		9		
Unix: further use	3	2	108	68	
Unix: introduction to Perl, part 1	1	1	80	34	
Unix: introduction to Perl, part 2	1	1	54	18	
Unix: CGI scripting	1	1	24	28	
Unix: PWF Linux	1	2	13	17	
Unix: building Linux RPMs		1		36	
Unix: building Linux RPMs for system services		1		14	
Unix: Linux system administration		1		140	
Unix	14	15	542	591	
World Wide Web: introduction	1	3	7	19	
Web page authoring: intro to HTML	9	10	270	285	
Web page authoring: beyond the basics	9	8	190	204	
Web page authoring: cascading style sheets	3	4	85	93	
Web page authoring: cascading style sheets further	3		42	28	
Web page authoring: tables	2	2 3 3 2 1	29	49	
Web page authoring: web graphics	2 2 3	3	43	47	
Web page authoring: XML	3	2	33	21	
Web page authoring: XHTML				7	
Web page authoring: Dreamweaver	3	3	69	34	
Web site management: designing a website	3	3 3 3	30	34	
Web site management: accessibility	1		5	28	
Web site management: indexing	1	1	10	11	
Web site management: simple CGI and forms	3	2	31	30	
Web site management: databases and content mngm't		2	31	29	
Web server management: Apache on Red Hat	1	,	52	1.4	
Web server management: securing access	1	1	26	14	
E-mail using Hermes Webmail: introduction		2		10	
E-mail: managing messages	2	1	20	12	
E-mail and information management using Outlook		1 2	39 3	12	
E-mail using Mulberry: introduction and further use	1		3	6	
Networking	53	56	1,001	961	

Table 25 cont.

		ssions		ndances
Microsoft Excel: introduction	4	5	70	84
Microsoft Excel: introduction, self-paced	5	5	153	213
Microsoft Excel: further use	5	5	102	95
Microsoft Excel: macros and other topics	3	3	49	53
Microsoft Excel: programming using VBA	1	1	9	6
Microsoft Access: quick start	3	3	51	56
Microsoft Access: introduction	3	5	84	166
Microsoft Access: further use	2	3	60	104
Oracle: introduction	1	2	51	81
Filemaker Pro: introduction	2	2	14	24
Filemaker Pro: further use	1	1	6	11
SQL Server: survival	1	1	9	32
	1	1		16
SQL Servier: basic administration		<i>I</i>		10
SPREADSHEETS AND DATABASES	31	37	658	941
Microsoft Word for Windows: introduction	1	2	6	18
Microsoft Word for Windows: intermediate	3	3	26	51
Microsoft Word for Windows: mail-merge	1		5	
Microsoft Word for Windows: advanced	1	3	15	48
MS Word for Windows: mastering dissertations	1		50	
MS Word for Windows: mastering reports	1		12	
MS Word for Windows: introduction, self-paced	5	5	75	103
Office 2000: exciting new features	5	1	75	10.
	4	4	91	70
Powerpoint: quick start, self-paced	3	3	55	
Powerpoint: introduction	3	3		50
Powerpoint: further use	3	3	42	20
Quark Xpress: introduction	3	2	39	27
Quark Xpress: further use	2 2		22	
LaTEX: introduction	2	2	94	90
Illustrator: basic	3	3	31	38
InDesign: getting started	3	2	26	19
Computerised Bibliographies	7	9	199	155
Photoshop: basic	8	8	178	183
Photoshop: further techniques	4	5	75	88
WORD AND DOCUMENT PROCESSING	55	55	1,041	984
Data analysis on the PWF	1	1	4	6
Simple questionnaire design and data entry	1	1	14	Ź
SPSS: basic use, part 1	5	5	116	94
SPSS: basic use, part 2	5	5	71	6.
SPSS: beyond the basics	3	3	42	3.
SPSS: further use	1	1	6	<i>J</i> .
STATISTICAL COMPUTING	16	16	253	210
Design and typography: workshop	2	2	20	2.
Simple C Programming	2	$\frac{2}{2}$	132	78
	$\frac{2}{2}$	4	132	
Teaching with VLEs: introduction	$\frac{2}{2}$	4 1	13	3.
Videoconferencing: what, why and how				4
Visual Basic: introduction	2	2	68	4
XML technology: overview	1		31	
Other Courses	11	11	276	182
TOTAL	194	208	3,902	4,021

Table 26(a) – Course Attendances

	Attendances				
Arts and Humanities	343	(8.8%)	326	(8.1%)	
Humanities and Social Sciences	498	(12.8%)	406	(10.1%)	
Physical Sciences	589	(15.1%)	586	(14.6%)	
Technology	262	(6.7%)	337	(8.4%)	
Biological Sciences	577	(14.8%)	531	(13.2%)	
Clinical Medicine	395	(10.1%)	405	(10.1%)	
Other GB Institutions	266	(6.8%)	364	(9.1%)	
Council Institutions	259	(6.6%)	308	(7.7%)	
Societies	5	(0.1%)	20	(0.5%)	
Total University	3,194	(81.9%)	3,283	(81.6%)	
Colleges	576	(14.8%)	625	(15.5%)	
Research Councils	74	(1.9%)	87	(2.2%)	
UK Universities			1	(0.0%)	
Other external	58	(1.5%)	25	(0.6%)	
Total External	132	(3.4%)	113	(2.8%)	
TOTAL	3,902	(100.0%)	4,021	(100.0%)	