

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, PC3/4
Cost Recovery: Recovered from service charges

Figures are for the financial year 2005–06 in units of £1,000.

TABLE 1 – SECTION EXPENDITURE

	Centrally Funded			Cost Recovery		Combined Total
	Staff	Equip.	Other	Staff	Equip./Other	
Directorate	161	2	3	0	0	166
Administration	80	16	33	0	0	129
Finance	62	2	3	26	0	93
Building Services	121	2	36	0	0	159
ADMINISTRATION AND FINANCE	424	22	75	26	0	547
INSTITUTION LIAISON	109	0	4	0	0	113
Information and User Administration	244	8	9	53	0	314
Sales, Reception, and Print Room	206	11	10	58	525	810
LLCC	118	1	4	0	0	123
PandIS	85	0	7	80	130	302
USER SERVICES	653	20	30	191	655	1,549
Hardware Support	190	10	9	99	27	335
Software Support	512	17	12	0	4	545
Help Desk	173	9	11	0	0	193
Training	104	2	4	5	41	156
TECHNICAL USER SUPPORT	979	38	36	104	72	1,229
GBN	9	0	1	34	75	119
Network Installation	188	1	7	0	51	247
Network Systems	234	36	9	0	251	530
Network Support	165	1	6	2	0	174
PWF Systems	140	194	61	152	19	566
Managed Clusters	200	56	9	48	8	321
Operations	191	1	8	0	0	200
NETWORK DIVISION	1,127	289	101	236	404	2,157
Web Systems	103	17	20	0	0	140
Unix Support	181	70	17	0	6	274
Electronic Mail	103	41	6	0	0	150
Central Unix Service	101	2	12	0	0	115
Database and Archiving	59	1	4	0	0	64
Software Development	63	0	2	0	0	65
eScience Support	144	1	0	12	0	157
UNIX SYSTEMS DIVISION	754	132	61	12	6	965
TOTAL COMPUTING SERVICE	4,046	501	307	569	1,137	6,560

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 1,000 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 2005–06; end of 2004–05 figures are in italics.

TABLE 2(a) – DATA NETWORK CONNECTIONS

	Slow		Fast		Gigabit	
Arts and Humanities			4	4	3	3
Humanities and Social Sciences	1	<i>1</i>	9	9	8	7
Physical Sciences	2	<i>3</i>	3	4	9	9
Technology	1	<i>1</i>	3	3	5	4
Biological Sciences	2	<i>2</i>	5	6	10	9
Clinical Medicine	0	<i>1</i>	2	3	4	4
Other GB Institutions	1	<i>1</i>	12	6	7	5
Council Institutions	5	<i>6</i>	11	14	5	2
Societies	1	<i>1</i>	1	1		
TOTAL UNIVERSITY	13	<i>16</i>	50	<i>50</i>	51	<i>43</i>
COLLEGES	2	<i>3</i>	23	<i>24</i>	11	<i>10</i>
Research Councils	1	<i>1</i>	3	3	1	1
Other external	2	<i>2</i>	1	1		
TOTAL EXTERNAL	3	<i>3</i>	4	<i>4</i>	1	<i>1</i>
TOTAL	18	<i>22</i>	77	<i>78</i>	63	<i>54</i>

TABLE 3 – IPv4-ADDRESSES

	Global		Private	
TOTAL UNIVERSITY	37,100	<i>37,700</i>	6,500	<i>3,300</i>
COLLEGES	15,700	<i>16,900</i>	5,800	<i>3,000</i>
TOTAL	52,800	<i>54,600</i>	12,300	<i>6,300</i>

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 2005–06; figures for 2004–05 are in italics.

TABLE 4(a) – JANET TRAFFIC BY INSTITUTION

	Traffic (GB)			
Arts and Humanities	5,721	(0.8%)	<i>4,698</i>	<i>(1.0%)</i>
Humanities and Social Sciences	7,744	(1.1%)	<i>5,438</i>	<i>(1.2%)</i>
Physical Sciences	122,101	(17.8%)	<i>66,556</i>	<i>(14.6%)</i>
Technology	69,974	(10.2%)	<i>52,952</i>	<i>(11.6%)</i>
Biological Sciences	28,623	(4.2%)	<i>24,997</i>	<i>(5.5%)</i>
Clinical Medicine	15,834	(2.3%)	<i>12,619</i>	<i>(2.8%)</i>
Other GB Institutions	54,947	(8.0%)	<i>30,037</i>	<i>(6.6%)</i>
Council Institutions	27,436	(4.0%)	<i>18,668</i>	<i>(4.1%)</i>
Societies	4,473	(0.7%)	<i>4,030</i>	<i>(0.9%)</i>
TOTAL UNIVERSITY	336,553	(49.1%)	<i>219,994</i>	<i>(48.4%)</i>
COLLEGES	336,173	(49.1%)	<i>226,501</i>	<i>(49.8%)</i>
Research Council institutions	9,338	(1.4%)	<i>6,566</i>	<i>(1.4%)</i>
Other external	3,065	(0.4%)	<i>1,846</i>	<i>(0.4%)</i>
TOTAL EXTERNAL	12,404	(1.8%)	<i>8,411</i>	<i>(1.8%)</i>
TOTAL	685,129	(100.0%)	<i>454,906</i>	<i>(100.0%)</i>

Wireless

Table 5 shows the weekly usage statistics for the Lapwing wireless service for June and July 2006. The service was introduced on 1 June, so no earlier data is available for comparison. Note that during this initial period Lapwing availability was limited to the West Room, University Library, and the Computing Service, New Museums Site.

Users	Total number of users using Lapwing that week
Sessions	Number of individual sessions using Lapwing that week
Total time	Total connected time, in hours, for Lapwing sessions that week

TABLE 5 – LAPWING

Week Beginning	Users	Sessions	Total Time
29 May	48	167	112
5 June	62	280	206
12 June	62	240	159
19 June	46	142	54
26 June	56	217	74
3 July	66	301	112
10 July	65	264	82
17 July	65	283	94
24 July	53	276	85

Electronic Mail

Tables 6(a) to 6(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 1:5

Figures are for 2005–06 with 2004–05 in italics.

TABLE 6(a) – HERMES

	Users				Messages (000s)			
Arts and Humanities	2,570	(6.3%)	2,340	(6.0%)	9,843	(6.2%)	7,957	(6.3%)
Humanities and Social Sciences	6,019	(14.7%)	5,717	(14.7%)	16,599	(10.5%)	12,739	(10.2%)
Physical Sciences	3,861	(9.5%)	3,527	(9.0%)	15,359	(9.7%)	12,650	(10.1%)
Technology	3,817	(9.3%)	3,299	(8.5%)	17,972	(11.4%)	11,792	(9.4%)
Biological Sciences	3,150	(7.7%)	2,966	(7.6%)	11,904	(7.5%)	9,633	(7.7%)
Clinical Medicine	2,617	(6.4%)	2,397	(6.1%)	8,152	(5.2%)	6,261	(5.0%)
Other GB Institutions	1,325	(3.2%)	1,276	(3.3%)	6,957	(4.4%)	6,214	(4.9%)
Council Institutions	1,005	(2.5%)	897	(2.3%)	3,501	(2.2%)	2,770	(2.2%)
Societies	32	(0.1%)	37	(0.1%)	215	(0.1%)	204	(0.2%)
TOTAL UNIVERSITY	24,396	(59.7%)	22,456	(57.6%)	90,501	(57.4%)	70,219	(55.8%)
COLLEGES	15,800	(38.7%)	16,063	(41.2%)	66,175	(42.0%)	54,878	(43.6%)
Research Councils	436	(1.1%)	352	(0.9%)	651	(0.4%)	488	(0.4%)
Other external	205	(0.5%)	133	(0.3%)	340	(0.2%)	223	(0.2%)
TOTAL EXTERNAL	641	(1.6%)	485	(1.2%)	991	(0.6%)	711	(0.6%)
TOTAL	40,837	(100.0%)	39,004	(100.0%)	157,668	(100.0%)	125,808	(100.0%)

Web and News Services

The incoming traffic to the main University website (www.cam.ac.uk) totalled 225m requests from 215 country-level domains in 2005–06, with a daily peak of 1,058k requests, compared to 208m, 216, and 940k respectively in 2004–05. 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 7 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 8 shows the load statistics during May for the main University USENET news server.

Figures are for 2005–06; 2004–05 figures are in italics.

TABLE 7 – UNIVERSITY WEB SERVICES

	May	
University Web Server (www.cam.ac.uk)		
Total requests received	18.7m	17.0m
Total data sent	105GB	87GB
Proportion of requests from Cam, UK, World	35%, 8%, 57%	42%, 9%, 49%
University Web Search Engine		
University servers indexed	460	471
Documents indexed	553k	384k
Total number of searches	206k	196k
Volume of data sent	5.5GB	5.5GB
Proportion of requests from Cam, UK, World	38%, 9%, 53%	40%, 8%, 52%
University Web Cache		
Total requests received	756m	668m
Total volume of data	10.4TB	6.5TB
% hits (requests), % hits (data volume)	43%, 14%	42%, 14%
Client systems	20,002	17,863
Client domains	157	157

TABLE 8 – UNIVERSITY NEWS SERVER

	May	
University News Server		
Total number of connections	826k	<i>1,017k</i>
Peak concurrent connections	143	<i>201</i>
Total number of newsgroups	15.0k	<i>15.2k</i>
Number of local newsgroups	239	<i>239</i>
Monthly volume	10.3GB	<i>11.9GB</i>
Number of individual postings	4.4m	<i>5.2m</i>

Raven Authentication Service

Table 9 shows the monthly breakdown of Raven usage during 2005–06; figures for 2004–05 are given in italics for comparison. 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 websites using Raven to authenticate access to their material each month.

TABLE 9 – RAVEN AUTHENTICATION SERVICE USE

	Users		Web Hosts		Authentications	
August	2,175		145		13,849	
September	3,484	<i>936</i>	164	<i>56</i>	15,981	<i>4,393</i>
October	14,610	<i>2,516</i>	204	<i>72</i>	89,099	<i>9,057</i>
November	13,863	<i>2,270</i>	215	<i>88</i>	113,667	<i>9,296</i>
December	11,574	<i>1,390</i>	199	<i>77</i>	72,824	<i>5,694</i>
January	12,543	<i>2,514</i>	215	<i>90</i>	79,203	<i>14,252</i>
February	11,381	<i>2,094</i>	251	<i>88</i>	74,737	<i>9,850</i>
March	14,632	<i>2,469</i>	244	<i>99</i>	121,541	<i>11,592</i>
April	12,521	<i>2,253</i>	244	<i>105</i>	79,162	<i>10,955</i>
May	14,260	<i>2,754</i>	245	<i>138</i>	104,159	<i>14,715</i>
June	16,362	<i>2,226</i>	266	<i>144</i>	97,569	<i>11,910</i>
July	11,263	<i>2,186</i>	261	<i>134</i>	97,569	<i>14,623</i>
			<i>Total Authentications</i>		1,052,398	<i>116,337</i>

University Directory Service

Table 10 shows the monthly breakdown of the usage of the University Directory Service (Lookup) during 2005–06; no figures for 2004–05 are available as the service was only introduced in September 2005. The table shows the number of connections made to the lookup service each month, and the number of distinct client machines these were made from. Note that figures for December are not available as the logs for this month were missing.

TABLE 10 – LOOKUP SERVICE USE

	Connections	Clients
August	0	0
September	19,632	177
October	89,839	796
November	55,448	669
December		
January	25,259	517
February	105,875	1,058
March	117,909	1,236
April	114,024	1,481
May	116,365	1,244
June	119,140	1,238
July	108,938	1,497

Public Workstation Facility

Tables 11(a) to 11(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.

Users	Number of individuals using the system <i>at least once</i> during the year
Sessions	Number of times logged-on during the year

Table 12 gives a list of the institutions that have a Computing Service Managed Cluster, and the platforms provided at those sites.

Table 13 gives details, extracted from Tables 11(b) and 11(c), on the use of the PWF from certain University locations while Table 14 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 15 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 2005–06, with 2004–05 figures in italics.

TABLE 11(a) – PUBLIC WORKSTATION FACILITY USE

	Users				Sessions			
Arts and Humanities	996	(5.4%)	<i>969</i>	(5.5%)	94,032	(6.7%)	<i>104,153</i>	(7.2%)
Humanities and Social Sciences	1,589	(8.7%)	<i>1,557</i>	(8.8%)	150,338	(10.8%)	<i>171,754</i>	(11.9%)
Physical Sciences	1,423	(7.8%)	<i>1,303</i>	(7.4%)	105,090	(7.5%)	<i>109,581</i>	(7.6%)
Technology	919	(5.0%)	<i>850</i>	(4.8%)	37,371	(2.7%)	<i>39,328</i>	(2.7%)
Biological Sciences	628	(3.5%)	<i>624</i>	(3.5%)	48,040	(3.4%)	<i>59,421</i>	(4.1%)
Clinical Medicine	618	(3.4%)	<i>533</i>	(3.0%)	79,652	(5.7%)	<i>56,370</i>	(3.9%)
Other GB Institutions	2,828	(15.5%)	<i>2,736</i>	(15.5%)	71,090	(5.1%)	<i>67,340</i>	(4.7%)
Council Institutions	82	(0.4%)	<i>77</i>	(0.4%)	4,410	(0.3%)	<i>4,951</i>	(0.3%)
Societies	8	(0.0%)	<i>9</i>	(0.1%)	557	(0.0%)	<i>244</i>	(0.0%)
TOTAL UNIVERSITY	9,091	(49.7%)	<i>8,658</i>	(49.0%)	590,580	(42.3%)	<i>613,142</i>	(42.5%)
COLLEGES	9,091	(49.7%)	<i>8,935</i>	(50.5%)	802,274	(57.5%)	<i>824,581</i>	(57.2%)
Research Councils	90	(0.5%)	<i>71</i>	(0.4%)	1,986	(0.1%)	<i>2,958</i>	(0.2%)
Other external	23	(0.1%)	<i>20</i>	(0.1%)	382	(0.0%)	<i>942</i>	(0.1%)
TOTAL EXTERNAL	113	(0.6%)	<i>91</i>	(0.5%)	2,368	(0.2%)	<i>3,900</i>	(0.3%)
TOTAL	18,295	(100.0%)	<i>17,684</i>	(100.0%)	1,395,222	(100.0%)	<i>1,441,623</i>	(100.0%)

TABLE 12 – 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		X
History	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	
Christ's	X		
Clare	X	X	X
Downing	X	X	
Emmanuel	X	X	
Fitzwilliam	X	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	X
Selwyn	X	X	X
Sidney Sussex	X	X	X
St Catharine's	X	X	X
St John's	X	X	
Trinity	X	X	X
Trinity Hall	X	X	X
Wolfson	X		X

* withdrew from the scheme towards the end of 2005–06

TABLE 13 – 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			
			PC		Mac	
<i>Computing Service locations</i>						
Phoenix User Area (New Museums Site)	1,174	1,387	14,709	18,587	1,510	1,365
Titan Teaching Room 1 (New Museums Site)	1,712	1,627	15,051	15,739		
Titan Teaching Room 2 (New Museums Site)	1364	1,302	5,989	6,879		
Phoenix Teaching Room (New Museums Site)	900	967	7,595	9,202		
Balfour Macintosh Room (New Museums Site)	477	676			2271	2,892
Oriental Studies Basement (Sidgwick Site)	551	569	7,930	31,032	593	576
University Centre	1,106	1,159	14,489	20,110	819	725
Disability Resource Centre	14		83		3	
		<i>Total Sessions</i>	65,846	101,549	5,196	5,558
<i>Managed Cluster locations</i>						
Archaeology	171	150	12,051	13,011	93	58
Architecture and History of Art	119	139			4,011	3,284
Chemistry	823	857	31,189	31,423	3,328	3,896
Clinical Medicine	663	508	60,163	37,063		
Computer Laboratory	492	661	13,558	18,609		
Divinity	224	298	2,376	4,690		
English	985	913	39,965	32,997		
Geography	553	543	27,593	26,183		
Land Economy	597	658	15,410	15,733		
Law	1,432	1,501	58,609	63,777		
Mathematics	970	968	34,628	31,745		
MML and Philosophy	1,148	1,155	38,686	38,387	555	360
Moore Library	992	1,151	20,261	28,300		
Physics	593	645	10,154	11,354		
Social and Political Sciences	484	497	9,884	12,948	3,563	4,279
Veterinary Medicine	406	360	34,891	42,681	725	1,431
		<i>Total Sessions</i>	418,304	408,901	12,275	13,308

TABLE 14 – 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			
			PC		Mac	
<i>Managed Cluster locations</i>						
Christ's	702	719	38,693	41,394		
Clare	719	684	51,695	46,916	1,506	3,122
Downing	876	919	28,645	35,062	449	159
Emmanuel	750	754	41,118	54,426	74	258
Fitzwilliam	718	742	33,911	40,813	230	260
Gonville and Caius	985	1,012	61,907	64,261	128	182
King's	840	714	41,402	46,316	528	600
Lucy Cavendish	130	151	1,956	3,552		
New Hall	520	550	30,265	30,328	32	10
Newnham	752	721	59,409	58,284	169	113
Peterhouse	407	413	29,735	28,060	435	486
Queens'	850	882	38,109	48,246	494	1,229
Robinson	580	594	28,155	35,727	108	102
St Catharine's	758	855	42,145	52,639	849	612
St John's	1,173	1,243	70,904	94,509	2,491	4,344
Selwyn	649	528	35,909	32,957	28	45
Sidney Sussex	601	582	52,101	49,692	135	290
Trinity	1,480	1,465	97,036	113,968	3,254	3,559
Trinity Hall	679	566	37,350	33,556	448	726
Wolfson	732	658	49,157	47,945		
		<i>Total Sessions</i>	869,602	958,651	11,358	16,097

TABLE 15 – PUBLIC WORKSTATION FACILITY REMOTE ACCESS

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

Location	Users		Sessions	
<i>PWF Club Locations</i>				
Churchill	50	64	438	512
Clare Hall		1		1
Magdalene	2	2	14	326
Pembroke	3	10	3	21
	<i>Total Sessions</i>		455	860
<i>Remote Linux Locations</i>				
Physics	114	134	1,345	2,434
Computer Laboratory	170	252	6,846	10,839
Computing Service	820	441	11,701	5,621
	<i>Total Sessions</i>		19,892	18,894
<i>Remote Storage Access</i>				
NetStorage web interface	1,310		13,313	

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 16(a) to 16(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	

Figures are for 2005–06; 2004–05 figures are in italics.

TABLE 16(a) – CENTRAL UNIX SERVICE USE

	CPU		Users			
Arts and Humanities	13.1%	7.5%	131	(7.6%)	145	(7.6%)
Humanities and Social Sciences	2.8%	2.4%	198	(11.4%)	205	(10.7%)
Physical Sciences	19.8%	16.1%	370	(21.4%)	446	(23.3%)
Technology	11.2%	10.9%	84	(4.9%)	106	(5.5%)
Biological Sciences	6.3%	5.2%	228	(13.2%)	270	(14.1%)
Clinical Medicine	0.8%	4.9%	98	(5.3%)	103	(5.4%)
Other GB Institutions	36.0%	43.2%	213	(12.3%)	221	(11.5%)
Council Institutions	2.5%	3.1%	72	(4.2%)	84	(4.4%)
Societies	0.0%	0.0%	0	(0.0%)	0	(0.0%)
TOTAL UNIVERSITY	92.5%	93.4%	1,388	(80.2%)	1,580	(82.4%)
COLLEGES	6.6%	6.2%	308	(17.8%)	317	(16.5%)
Research Councils	0.6%	0.1%	26	(1.5%)	11	(0.6%)
Other external	0.2%	0.3%	9	(0.5%)	9	(0.5%)
TOTAL EXTERNAL	0.9%	0.4%	35	(2.0%)	20	(1.0%)
TOTAL	100.0%	100.0%	1,731	(100.0%)	1,917	(100.0%)

Pelican Data Archive Service

Tables 17(a) to 17(c) show the use of the Pelican data archive service by institutions at the end of 2005–06 with end 2004–05 figures in italics.

Stored Users	Amount of data stored (in MB)		Number of individuals with stored data					
TABLE 17(a) – PELICAN DATA ARCHIVE SERVICE USE								
	Stored				Users			
Arts and Humanities	25,316	(4.0%)	<i>24,871</i>	(3.9%)	68	(7.6%)	<i>74</i>	(7.6%)
Humanities and Social Sciences	22,476	(3.6%)	<i>23,461</i>	(3.6%)	128	(14.3%)	<i>146</i>	(14.9%)
Physical Sciences	25,463	(4.1%)	<i>26,887</i>	(4.2%)	152	(16.9%)	<i>177</i>	(18.1%)
Technology	16,966	(2.7%)	<i>21,276</i>	(3.3%)	114	(12.7%)	<i>150</i>	(15.4%)
Biological Sciences	10,302	(1.6%)	<i>11,062</i>	(1.7%)	80	(8.9%)	<i>82</i>	(8.4%)
Clinical Medicine	2,976	(0.5%)	<i>3,048</i>	(0.5%)	28	(3.1%)	<i>30</i>	(3.1%)
Other GB Institutions	500,616	(79.8%)	<i>515,900</i>	(79.9%)	138	(15.4%)	<i>137</i>	(14.0%)
Council Institutions	3,442	(0.5%)	<i>3,207</i>	(0.5%)	22	(2.5%)	<i>22</i>	(2.3%)
Societies	164	(0.0%)	<i>164</i>	(0.0%)	5	(0.6%)	<i>5</i>	(0.5%)
TOTAL UNIVERSITY	607,721	(96.9%)	<i>629,876</i>	(97.5%)	735	(81.9%)	<i>823</i>	(84.2%)
COLLEGES	18,167	(2.9%)	<i>15,014</i>	(2.3%)	150	(16.7%)	<i>142</i>	(14.5%)
Research Councils	835	(0.1%)	<i>724</i>	(0.1%)	7	(0.8%)	<i>6</i>	(0.6%)
Other external	287	(0.0%)	<i>314</i>	(0.0%)	5	(0.6%)	<i>6</i>	(0.6%)
TOTAL EXTERNAL	1,122	(0.2%)	<i>1,037</i>	(0.2%)	12	(1.3%)	<i>12</i>	(1.2%)
TOTAL	627,010	(100.0%)	<i>645,927</i>	(100.0%)	897	(100.0%)	<i>977</i>	(100.0%)

Software Sales

Table 18 shows totals of software sales items supplied by month. Tables 19(a) to 19(c) show software sales items supplied, by institution. General software (excluding media) and SunSpectrum items are shown separately. Table 20 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.

Figures are for 2005–06; 2004–05 figures are in italics.

TABLE 18 – SOFTWARE ITEMS SUPPLIED BY MONTH

	General				SunSpectrum			
August	1,743	(9.4%)	<i>1,025</i>	(6.1%)	253	(89.7%)	<i>304</i>	(92.5%)
September	3,693	(20.0%)	<i>1,171</i>	(6.9%)				
October	2,327	(12.6%)	<i>1,077</i>	(6.4%)	3	(1.1%)	<i>3</i>	(0.9%)
November	1,160	(6.3%)	<i>818</i>	(4.8%)	3	(1.1%)	<i>3</i>	(0.9%)
December	590	(3.2%)	<i>1,085</i>	(6.4%)				
January	1,268	(6.9%)	<i>987</i>	(5.8%)			<i>3</i>	(0.9%)
February	3,409	(18.4%)	<i>1,096</i>	(6.5%)			<i>8</i>	(2.4%)
March	1,075	(5.8%)	<i>2,561</i>	(15.2%)	15	(5.3%)	<i>8</i>	(2.4%)
April	543	(2.9%)	<i>968</i>	(5.7%)				
May	663	(3.6%)	<i>3,566</i>	(21.1%)				
June	979	(5.3%)	<i>852</i>	(5.0%)	3	(1.1%)		
July	1,027	(5.6%)	<i>1,694</i>	(10.0%)	5	(1.7%)		
TOTAL FOR YEAR	18,477	(100.0%)	<i>16,890</i>	(100.0%)	282	(100.0%)	<i>329</i>	(100.0%)

TABLE 19(a) – SOFTWARE ITEMS SUPPLIED BY INSTITUTION

	General				SunSpectrum			
Arts and Humanities	269	(1.5%)	709	(4.2%)				
Humanities and Social Sciences	736	(4.0%)	867	(5.1%)				
Physical Sciences	1,565	(8.5%)	3,193	(18.9%)	91	(32.3%)	90	(27.4%)
Technology	1,682	(9.1%)	1,558	(9.2%)	11	(3.9%)	8	(2.4%)
Biological Sciences	1,344	(7.3%)	1,524	(9.0%)	25	(8.9%)	30	(9.1%)
Clinical Medicine	1,432	(7.8%)	856	(5.1%)	51	(18.1%)	53	(16.1%)
Other GB Institutions	1,856	(10.0%)	1,116	(6.6%)	84	(29.8%)	87	(26.4%)
Council Institutions	3,879	(21.0%)	1,234	(7.3%)	9	(3.2%)	57	(17.3%)
Societies	1	(0.0%)	15	(0.1%)				
TOTAL UNIVERSITY	12,764	(69.1%)	11,072	(65.6%)	271	(96.1%)	325	(98.8%)
COLLEGES	5,609	(30.4%)	5,616	(33.3%)	4	(1.4%)	4	(1.2%)
Research Council institutions	46	(0.2%)	48	(0.3%)	4	(1.1%)		
Other external	58	(0.3%)	154	(0.9%)	3	(1.1%)		
TOTAL EXTERNAL	5,713	(30.9%)	5,818	(34.4%)	7	(2.5%)	4	(1.2%)
TOTAL	18,477	(100.0%)	16,890	(100.0%)	282	(100.0%)	329	(100.0%)

TABLE 20 – SOFTWARE SALES BY PRODUCT

	Items			Items	
Hummingbird eXceed	79	158	Microsoft Visual FoxPro Pro	2	
JRB Utils	1	9	Microsoft Visual SourceSafe		2
Novell Netware (per server)	1	9	Microsoft Visual Studio	27	64
ZENworks	508	87			
COMMUNICATIONS	589	263	PROGRAMMING LANGUAGES	29	66
ARCInfo/ARCView	60	364	FileMaker Pro	120	231
GEOGRAPHIC	60	364	Microsoft Access	23	42
Corel Graphics Suite	695	938	Microsoft Excel	2	17
Imagine	4	164	Microsoft Project	149	103
Microsoft PowerPoint	21	10			
Microsoft Visio	197	94	SPREADSHEETS, DATABASES, AND PROJECT MANAGEMENT	294	393
GRAPHICS AND DRAWING	917	1,206	GenStat	135	57
Maple	86	89	MathCAD	35	30
NAG Products	33	670	Minitab	471	412
MATHEMATICAL/LIBRARIES	119	759	S-PLUS	127	236
Microsoft Office	3,976	2,821	SAS	7	15
OFFICE PACKAGES	3,976	2,821	SPSS	867	1,337
Apple Maintenance Programme	5	22	SPSS Science Products	70	34
KeyServer	1		STATISTICS	1,712	2,121
Microsoft Exchange Server	1,754	445	Corel WordPerfect	51	43
Microsoft SQL Server	216	460	EndNote	755	803
Microsoft Windows 2000	3	10	Microsoft FrontPage	18	28
Microsoft Windows 2003	1,545	1,746	Microsoft Publisher	24	39
Microsoft Windows XP	1,197	799	Microsoft Word	9	13
PCounter	18	8	Sabon Font	310	138
OPERATING SYSTEMS/UTILITIES	4,739	3,490	WORD AND DOCUMENT PROCESSING	1,167	1,064

TABLE 20 *cont.*

	Items			Items	
Anti-Virus College/Dept Media	4,143	<i>2,690</i>	Sun Hardware maintenance (Total Number of machines)	172	<i>211</i>
BBEdit	44	<i>34</i>	Sun Software under maintenance (Licence, media, and documentation)	110	<i>118</i>
Cisco VPDN	221	<i>281</i>	SUNSPECTRUM	282	<i>329</i>
Dragon Naturally Speaking	105	<i>44</i>	TOTAL	18,759	<i>17,219</i>
Meeting Maker	12	<i>7</i>			
Microsoft Outlook	67	<i>7</i>			
Origin Professional	22	<i>61</i>			
SolidWorks	3	<i>7</i>			
Symantec GHOST	98	<i>1,212</i>			
CD/DVD Duplication and Printing	160				
MISCELLANEOUS	4,875	<i>4,343</i>			
TOTAL for Software	18,477	<i>16,890</i>			

Photographic and Illustration Service

Table 21 shows a breakdown of the work done by the Photographic and Illustration Service over the year.

Figures are for 2005–06; 2004–05 figures are in italics.

TABLE 21 – ITEMS PRODUCED OR PROCESSED

	Items	
Colour Transparency Service		
Film processed (rolls)	1,997	<i>3,782</i>
Slides from flat copy	142	<i>477</i>
Slide duplication	157	<i>673</i>
Digital output on film	1,128	<i>1,056</i>
Black and White Service		
Film processed (rolls)	178	<i>266</i>
Colour Print Service		
Film processed (rolls)	2,816	<i>3,004</i>
Prints produced	138,984	<i>151,509</i>
Single item scans	20,920	<i>61,461</i>
Photography Service		
Graduation photographs	5,842	<i>8,231</i>
Congregation commissions	1,658	<i>1,030</i>
Other commissions	11	<i>16</i>
Framing Service		
Picture/Certificate frames	1,949	<i>1,798</i>
Graphics and Illustration Service		
Posters (total)	1,691	<i>1,478</i>
Laminated posters	739	<i>608</i>

Printing and Reproduction Service

Table 22 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 2005–06; 2004–05 figures are in italics

TABLE 22 – IMPRESSIONS PRINTED

	Monochrome (000s)		Colour (000s)	
Internal Computing Service	123	<i>112</i>	6.1	<i>2.3</i>
User Documentation (charged)	26	<i>34</i>	1.0	<i>0.3</i>
User Documentation (free)	10	<i>26</i>	4.4	<i>3.9</i>
Course material	250	<i>214</i>	20.5	<i>4.8</i>
PandIS	9	<i>3</i>	1.3	<i>0.3</i>
Software Sales	14	<i>24</i>	5.0	<i>4.2</i>
TOTAL COMPUTING SERVICE	432	<i>413</i>	38.3	<i>15.8</i>
EXTERNAL WORK	1,064	<i>1,051</i>	44.1	<i>17.1</i>
TOTAL	1,496	<i>1,465</i>	82.4	<i>32.9</i>

External Hardware Maintenance

Table 23 shows the number of contract (including warranty) and non-contract repairs undertaken for different types of equipment. Tables 24(a) to 24(c) show both the number of repairs and the number of staff hours spent on contract and non-contract repairs distributed amongst institutions.

Figures are for 2005–06; 2004–05 figures are in italics.

TABLE 23 – EQUIPMENT REPAIRED BY TYPE

	Contract		Non-Contract	
PCs	208	<i>194</i>	107	<i>105</i>
Apple Macintosh	30	<i>15</i>	50	<i>57</i>
Printers	67	<i>67</i>	89	<i>72</i>
Monitors	0	<i>17</i>	11	<i>5</i>
PC Laptops	1	<i>1</i>	356	<i>278</i>
Macintosh Laptops	1	<i>1</i>	92	<i>74</i>
Others	8	<i>7</i>	104	<i>86</i>
TOTAL	315	<i>302</i>	809	<i>677</i>

TABLE 24(a) – EQUIPMENT REPAIRED BY INSTITUTION

	Contract				Warranty				Non-Contract			
	No		Hours		No		Hours		No		Hours	
Arts and Humanities	2	<i>0</i>	4	<i>0</i>	17	<i>15</i>	53	<i>50</i>	37	<i>48</i>	90	<i>79</i>
Humanities and Social Sciences	0	<i>0</i>	0	<i>0</i>	18	<i>24</i>	57	<i>67</i>	79	<i>59</i>	148	<i>107</i>
Physical Sciences	48	<i>34</i>	138	<i>100</i>	38	<i>26</i>	129	<i>80</i>	95	<i>90</i>	167	<i>142</i>
Technology	0	<i>0</i>	0	<i>0</i>	14	<i>12</i>	41	<i>38</i>	35	<i>33</i>	41	<i>49</i>
Biological Sciences	24	<i>20</i>	73	<i>55</i>	9	<i>18</i>	27	<i>61</i>	116	<i>105</i>	166	<i>200</i>
Clinical Medicine	0	<i>0</i>	0	<i>0</i>	4	<i>6</i>	13	<i>35</i>	28	<i>22</i>	56	<i>48</i>
Other GB Institutions	36	<i>50</i>	90	<i>149</i>	44	<i>29</i>	171	<i>73</i>	16	<i>10</i>	25	<i>16</i>
Council Institutions Societies	4	<i>4</i>	15	<i>13</i>	10	<i>14</i>	29	<i>57</i>	31	<i>22</i>	45	<i>33</i>
	0	<i>0</i>	0	<i>0</i>	1	<i>0</i>	4	<i>0</i>	1	<i>3</i>	1	<i>7</i>
TOTAL UNIVERSITY	114	<i>108</i>	320	<i>317</i>	155	<i>144</i>	524	<i>461</i>	438	<i>392</i>	739	<i>681</i>
COLLEGES	21	<i>27</i>	54	<i>67</i>	24	<i>22</i>	81	<i>60</i>	351	<i>271</i>	483	<i>402</i>
Research Councils	0	<i>0</i>	0	<i>0</i>	1	<i>1</i>	4	<i>3</i>	3	<i>1</i>	5	<i>1</i>
Other external	0	<i>0</i>	0	<i>0</i>	0	<i>0</i>	0	<i>0</i>	17	<i>13</i>	39	<i>15</i>
TOTAL EXTERNAL	0	<i>0</i>	0	<i>0</i>	1	<i>1</i>	4	<i>3</i>	20	<i>14</i>	44	<i>16</i>
TOTAL	135	<i>135</i>	374	<i>384</i>	180	<i>167</i>	609	<i>524</i>	809	<i>677</i>	1,266	<i>1,099</i>

Help Desk

Table 25 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 26(a) to 26(c) show the number of Help Desk calls and users by institution.

Figures are for 2005–06; 2004–05 figures are in italics.

TABLE 25 – HELP DESK CALLS BY MONTH

N.B. These figures exclude calls made directly to the PC Support service (256 in 2005–06, 445 in 2004–05).

	Total Calls				TechLink Calls	
August	611	(7.2%)	645	(7.8%)	97	(10.2%)
September	763	(8.9%)	710	(8.6%)	149	(15.6%)
October	1,027	(12.0%)	1,136	(13.7%)	165	(11.6%)
November	729	(8.6%)	807	(9.7%)	109	(13.2%)
December	441	(5.2%)	489	(5.9%)	75	(12.5%)
January	687	(8.1%)	739	(8.9%)	101	(10.5%)
February	647	(7.6%)	624	(7.5%)	116	(14.6%)
March	782	(9.2%)	614	(7.4%)	124	(14.3%)
April	649	(7.6%)	580	(7.0%)	97	(15.6%)
May	752	(8.8%)	650	(7.8%)	106	(18.7%)
June	666	(7.8%)	584	(7.0%)	121	(16.2%)
July	772	(9.1%)	726	(8.7%)	114	(15.1%)
TOTAL FOR YEAR	8,526	(100.0%)	8,304	(100.0%)	1,374	(13.6%)
					1,745	(21.0%)

TABLE 26(a) – HELP DESK CALLS BY INSTITUTION

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

	Calls				Users	
Arts and Humanities	786	(9.0%)	777	(8.9%)	397	(9.0%)
Humanities and Social Sciences	1,388	(15.8%)	1,354	(15.5%)	644	(14.6%)
Physical Sciences	832	(9.5%)	829	(9.5%)	473	(10.7%)
Technology	542	(6.2%)	473	(5.4%)	355	(8.1%)
Biological Sciences	693	(7.9%)	791	(9.0%)	381	(8.7%)
Clinical Medicine	621	(7.1%)	510	(5.8%)	395	(9.0%)
Other GB Institutions	385	(4.4%)	520	(5.9%)	215	(4.9%)
Council Institutions	437	(5.0%)	440	(5.0%)	237	(5.4%)
Societies	30	(0.3%)	23	(0.3%)	12	(0.3%)
TOTAL UNIVERSITY	5,714	(65.1%)	5,717	(65.3%)	3,109	(70.6%)
COLLEGES	2,523	(28.7%)	2,551	(29.2%)	1,223	(27.8%)
Research Councils	47	(0.5%)	43	(0.5%)	34	(0.8%)
Other external (world-wide)	498	(5.7%)	438	(5.0%)	37	(0.8%)
TOTAL EXTERNAL	545	(6.2%)	481	(5.5%)	71	(1.6%)
TOTAL	8,782	(100.0%)	8,749	(100.0%)	4,403	(100.0%)
					4,172	(100.0%)

Training

Table 27 lists the training courses provided by the Computing Service; in each case the figures show the number of times a course was offered (sessions) and the total number of people attending. For courses given more than once, attendances at each are counted separately. Tables 28(a) to 28(c) show how attendances at courses were distributed amongst institutions.

Figures are for 2005–06; 2004–05 figures are in italics.

TABLE 27 – TRAINING COURSES

	Sessions		Attendances	
Windows: Getting the Basics Right	3	3	33	27
Windows: File Handling and Desktop Skills	3	3	22	16
Windows: Keeping your PC Safe and Secure	3	3	59	37
Windows XP features for power users		1		5
PC Hardware Basics: Getting Right Inside	3	1	18	10
Macintosh: Getting to Grips with MacOS X	3	3	26	36
PERSONAL COMPUTERS	15	14	158	131
Unix Systems: Introduction	6	6	200	254
Vi editor: Introduction	1	1	3	9
Unix Systems: Further Use	3	3	58	108
Unix: CGI scripting		1		24
PWF Linux: Introduction	2	1	14	13
UNIX	12	12	275	408
Simple C Programming	2	2	93	132
Visual Basic: Introduction	2	2	62	68
PERL: Introduction for Programmers Part 1	1	1	30	80
PERL: Introduction for Programmers Part 2	1	1	32	54
PROGRAMMING	6	6	217	334
Web Browsing and Searching Techniques	2	1	15	7
Web Authoring: Introduction to HTML	9	9	229	270
Web Authoring: Beyond the Basics	9	9	190	190
Web Authoring: Cascading Style Sheets	3	3	74	85
Web Authoring: Cascading Style Sheets Further	3	3	41	42
Web Authoring: Tables		3		49
Web Authoring: Web Graphics	3	2	25	43
Web Authoring: XML Introduction	4	3	31	33
Web Authoring: Dreamweaver Introduction	3	3	57	69
Website Management: Designing a Website		3		30
Website Management: Accessibility	3	1	14	5
Website Management: Indexing		1		10
Website Management: Simple CGI and Forms	1	3	8	31
Website Management: Databases and Content Mgm't	3	3	30	31
Web Server Management: Running Apache	1	1	38	52
Web Server Management: Securing Access	1	1	21	26
Email: Managing Your Messages and Saving Time	2	1	13	6
Outlook for Email and Information Management	3	3	30	39
Email Using Mulberry: Introduction and Further Use		1		3
NETWORKING	50	53	816	1,001
Excel 2003: Introduction	4	4	61	70
Excel 2003: for Beginners	5	5	198	153
Excel 2003: Further Use	5	5	91	102
Excel 2003: Macros and Other Topics	3	3	47	49
Excel Programming Using VBA	1	1	7	9
Access 2003: Quick Start	3	3	64	51
Access 2003: Introduction	3	3	58	84
Access 2003: Further Use	3	2	90	60
Oracle: Introduction	1	1	48	51
Filemaker Pro: Introduction	2	2	23	14
Filemaker Pro: Further Use	1	1	5	6
SQL Server: Survival		1		9
SQL Server Survival Part 2: Basic Administration	1		13	
SPREADSHEETS AND DATABASES	32	31	705	658

TABLE 27 *cont.*

Word: Getting the Basics Right	1	1	4	6
Word: Taking Control of Document Design	3	3	31	26
Word: Mail-merge		1		5
Word: Mastering Advanced Features	2	1	26	15
Word: Mastering Dissertations, Theses and Books	1	1	33	50
Word: Mastering Reports		1		12
Word 2003 for Beginners	5	5	84	75
Powerpoint 2003 for Beginners: Quick Start	3	4	60	91
Powerpoint for Professional Presentations	3	3	48	55
Powerpoint: Further Use	3	3	48	42
Quark Xpress: Introduction	2	3	22	39
Quark Xpress: Further Use	1	2	6	22
LaTEX: Introduction	2	2	142	94
Illustrator: The Basics	2	3	22	31
InDesign: Getting Started	3	3	39	26
EndNote for Computerised Bibliographies: Intro	9	7	204	199
Photoshop: Basic Techniques	7	8	162	178
Photoshop: Further Techniques	4	4	70	75
Digital Photography: iPhoto	1		3	
WORD AND DOCUMENT PROCESSING	52	55	1,004	1,041
Data analysis on the PWF: Which Software?	1	1	6	4
Simple Questionnaire Design and Data Entry	1	1	9	14
SPSS: Basic Part 1	6	5	127	116
SPSS: Basic Part 2	6	5	92	71
SPSS: Beyond the Basics	4	3	41	42
SPSS: Further Use		1		6
STATISTICAL COMPUTING	18	16	275	253
Design and Typography Workshop	1	2	11	20
Teaching with VLEs: Introduction	1	2	4	12
Videoconferencing: What, Why and How		2		13
XML Technology: Overview		1		31
Remote Access to Cambridge Resources	2		18	
Talk Don't Type! Dragon NaturallySpeaking	3		12	
GarageBand for Music and Podcasting: Intro	1		13	
OTHER COURSES	8	7	58	76
TOTAL	193	194	3,508	3,902

TABLE 28(a) – COURSE ATTENDANCES

	Attendances			
Arts and Humanities	168	(4.8%)	343	(8.8%)
Humanities and Social Sciences	413	(11.8%)	498	(12.8%)
Physical Sciences	384	(10.9%)	589	(15.1%)
Technology	348	(9.9%)	262	(6.7%)
Biological Sciences	476	(13.6%)	577	(14.8%)
Clinical Medicine	379	(10.8%)	395	(10.1%)
Other GB Institutions	182	(5.2%)	266	(6.8%)
Council Institutions	283	(8.1%)	259	(6.6%)
Societies	15	(0.4%)	5	(0.1%)
TOTAL UNIVERSITY	2,648	(75.5%)	3,194	(81.9%)
COLLEGES	765	(21.8%)	576	(14.8%)
Research Councils	67	(1.9%)	74	(1.9%)
Other external	28	(0.8%)	58	(1.5%)
TOTAL EXTERNAL	95	(2.7%)	132	(3.4%)
TOTAL	3,508	(100.0%)	3,902	(100.0%)