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CONSULTATIVE ASSEMBLY

COMMITTEE ON REGIONAL PLANNING AND
LOCAL AUTHORITIES



The use of computers in local government

Computers in the local administration
of the United Kingdom

- (a) Aims and structure of the Local Authorities Management and Computer Committee (LAMSAC)

Address given by the Secretary of LAMSAC, Mr. A.C. Hetherington before the joint meeting of the Standing Committee of the European Conference of Local Authorities and the Committee on Regional Planning and Local Authorities - 28 February 1969 - Paris

- (b) Table of computers installed or in order in local government in the United Kingdom.

(a) Aims and structure of the Local Authorities Management and Computer Committee (LAMSAC)

I have been asked to say a few words about the Local Authorities Management Services and Computer Committee (LAMSAC) and in particular about the use of computers in local government /in the United Kingdom/. There has been for some time considerable use of management service techniques and equipment in the United Kingdom as there has been in the other parts of Europe. LAMSAC is concerned with the application of all these techniques in the local government of the United Kingdom, and in particular with the use of organisation and methods, of work study, computers and office machinery, operational research, critical path analysis, job evaluation techniques and cost benefits analysis.

The very diversity and complexity of these techniques caused the need for co-ordination and this is now provided by LAMSAC, which is a joint committee of elected members and officers, representative of local authority associations of England and Wales, and of Scotland. The purposes of LAMSAC are:

(a) to initiate and guide the direction of research into and development of management services and computer uses likely to be of benefit to local government and to stimulate and co-ordinate co-operative enterprise in these fields;

(b) to plan, organise and co-ordinate training courses, study groups and conferences in the use of all management services and computers in collaboration with the Local Government Training Board;

(c) to maintain contact with government departments, universities and other bodies concerned with such services;

(d) to advise the constituent bodies on major matters of policy affecting management services; and

(e) to collect and disseminate information.

Although LAMSAC was not established until October 1967, to cover all management services, it had been preceded by a similar joint committee called the Local Government Computer Committee which concentrated on computer co-ordination. This Computer Committee was set up in 1965 because of the urgent and pressing need to concentrate on the general co-ordination in the field

of computers, although it was then anticipated that before long it would extend its activities, as indeed happened in 1967. It has always been considered in the United Kingdom that management services should be looked at as a whole, and that computers should not be considered in isolation from other management service techniques, or indeed, from management generally.

LAMSAC is assisted by a Technical Advisory Sub-Committee of officers, and by two specialist Technical Panels of officers -

- (1) for organisation and management (O & M) and work study;
- (2) for computer use;

and in addition by a special Sub-Committee on Training.

The panels work through specialist working parties; the Computer Panel has 15 of these working at present.

LAMSAC, of which I am Secretary, has a headquarters staff; these operate under the direction of a Chief Advisory (Management Services) Officer (Mr. S.R. Barnes) and include specialists in computer, O & M, work study and management services training. In addition twelve local advisory (technical) officers who will be located in various parts of the country, are to be appointed within the next few months.

The general aim of LAMSAC is to advise and encourage local authorities in the use of management services, including computers, so that as soon as possible all will have these services available by one means or another. Thus, a complete management services unit may be provided independently by a single large authority or jointly by a group of authorities or by a smaller authority having an arrangement with a neighbouring large authority or joint authorities operating their own unit; in addition, at times the skills of management consultants can properly be used.

LAMSAC does not provide a consultancy service to undertake actual projects; its purpose is to advise authorities how best to help themselves obtain management services and to encourage co-operation generally, and at the same time it represents virtually all local government in these matters.

I should here perhaps mention the National Computing Centre (NCC) which was set up by the central government two years ago. The NCC is a nation-wide centre for information, research and education about data processing topics, that is for commerce, industry and the public service generally. LAMSAC keeps a close working liaison with the Centre. Indeed, a representative of LAMSAC has been appointed by the government to the small council of the NCC; and in addition another of its members has been elected to that council.

Computers have been in use in the United Kingdom in local government since 1957, and by 1964, some forty local authorities were operating them. In the following five years, however, the numbers increased more quickly so that today about 180 computers are installed or will be in operation shortly. (It was during this period of activity that the IGC and then LAMSAC were set up). Computers varying considerably in size with capital values of from £50,000 to well over £1 million, are in use by most county councils and county boroughs in England and Wales and the largest authorities in Scotland - these are mostly authorities with populations over 100,000; indeed most county councils and a number of county boroughs have populations over 200,000, and some over 1 million; the mean of county councils being some 400,000. In addition, a comparatively small number of computers are used in the largest of the group of smaller local authorities, non-county boroughs, urban districts and rural districts; most of these have populations under 100,000. There are a number of joint arrangements between authorities for the use of computers (as there are for other management services) but the great majority of local authorities with computers have installed them on a solo basis.

In Greater London there are three examples of computer joint working arrangements - the London Boroughs Joint Computer Committee (four London boroughs); the North East London Computer Services (three London boroughs) and the Westminster and Kensington and Chelsea Joint Committee. There are other examples in the country such as East Suffolk County Council and Ipswich County Borough Council; Norfolk County Council and Norwich County Borough Council (the first authority to operate a computer) and no doubt there will be more in the future. There are also many arrangements whereby computer time is made available to neighbouring authorities or work is done for them on an agency basis. In addition, the great potential arising from the remote use by one authority of another authority's computer is being developed and such an

arrangement is now in operation in west Sussex, where the county council's computer is used by the Sussex Police Authority - whose headquarters are forty miles away - and by the neighbouring Chichester Rural District Council. The use made of computers is widening fast; accounting, rent and tax collection, road design, health and social planning and the preparation of quantities are a few examples.

LAMSAC and its predecessor, the Local Government Computer Committee, have always encouraged the interchange of experience on a nation-wide basis and to this end the standardisation of common systems is being encouraged. An index of computer applications is maintained for local authorities and a similar index of work study and organisation and methods experience is being prepared. Any local authority whose association is in membership may use any of the programmes listed or other information available without charge - that is apart from their association subscription.

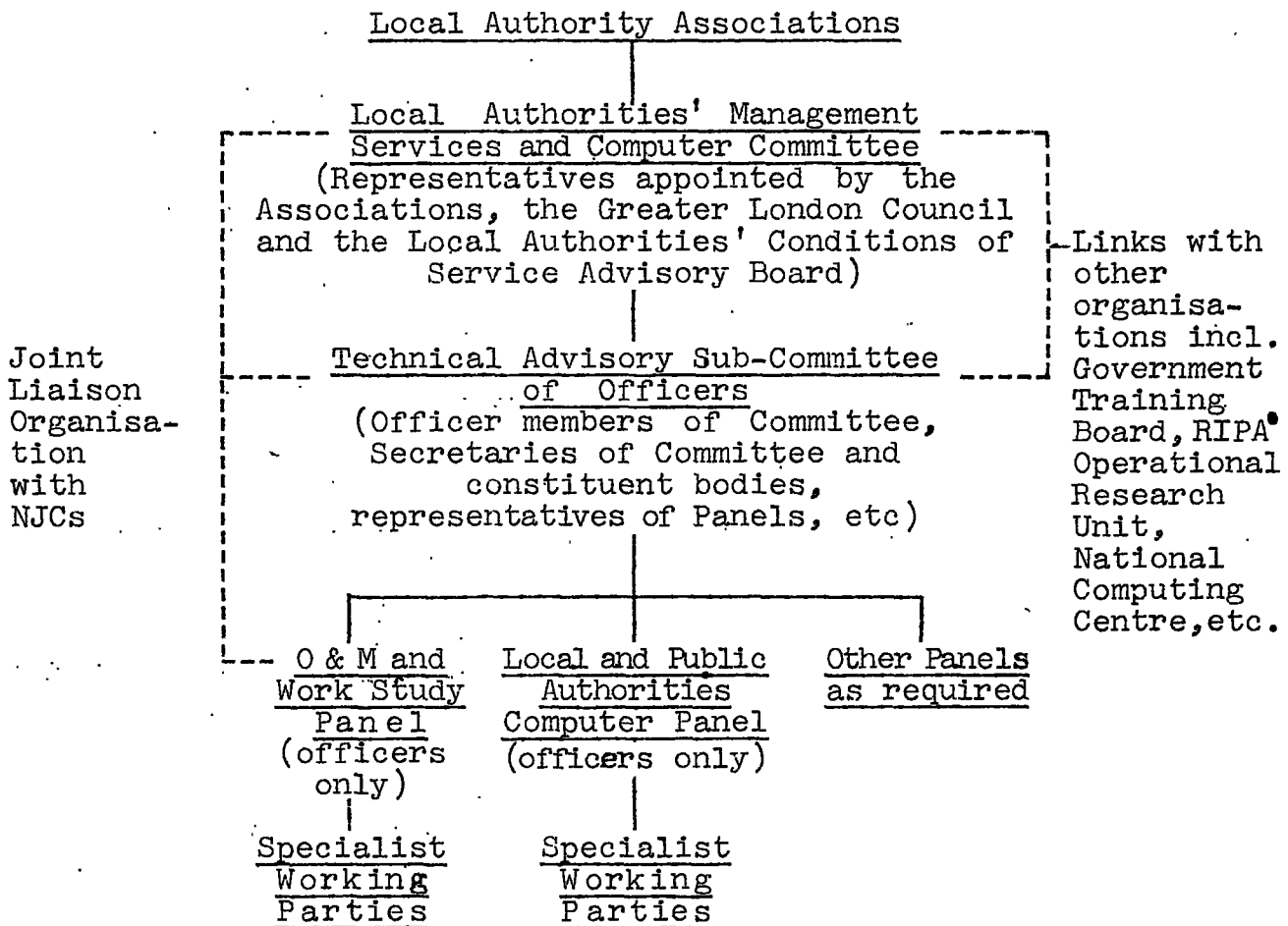
It has always been realised, however, that to achieve progress in this complex field, the leaders and managers of local government must appreciate what computers and other management services can do for them. Accordingly, a series of computer appreciation courses of one or two days' duration and designed for councillors and senior officers have been held during the past two years at various centres throughout the United Kingdom and they are continuing in 1969. Similar courses are being provided for organisation and methods and work study and techniques. LAMSAC is also directing and supporting research, including computer use. An example of this is a joint research effort "the health applications group" which is designing a forward looking computer-based health record system. This is being conducted jointly by the Ministry of Health on behalf of the central government, the National Computing Centre and LAMSAC who are sharing the cost between them.

In these kinds of activities, LAMSAC is helped enormously by the voluntary support of local authorities and their officers. The actual cost of operating LAMSAC is met by the local authority associations in membership supported by a central government grant of 50 per cent towards expenditure relating to central activities and the cost of the local advisory officers; grant is not paid towards the cost of more local or individual items.

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It is not, of course, possible in a short time to give more than a thumb-nail sketch and brief summary of what is already an established effort of considerable size and one that is developing very rapidly, and I have had no time even to mention the many problems met and overcome or still to be surmounted. In closing, however, I would emphasise that LAMSAC's purpose is to help local authorities to help themselves; to act centrally on behalf of all local authorities where this is required, for example, in dealings with central government or in the collecting and indexing of information; and that whilst the important part of the computer is acknowledged fully, it is accepted that there is a complete interdependence of management services and management, even though the computer may become the greatest unifier of all these in the future.

ORGANISATION CHART



(b) COMPUTERS INSTALLED OR ON ORDER IN LOCAL GOVERNMENT (April 1968)

Authority	Computer	Date of installation	Future developments (to 1972)
<u>Counties</u>			
Bedford	H 120	Jan. 68	
Berkshire	Gamma 10	Feb. 65	Possible replacement in 1969
Buckingham	ICT 1903	Mar. 66	
Caernarvon	ICT 1902	Sept. 67	Possible use by other P.A.s
Carmarthen	ICT 1902	Aug. 66	
Cheshire	IBM 360/30	June 66	Replacement by 360/40 and /20 as described below.
	IBM 360/40	June 68	Probable data-transmission experiments, and multiprogramming.
	IBM 360/20	Aug. 68	
Cornwall	ICT 1902	Mar. 66	Extension of data-transmission facilities.
Cumberland	ICT 1300	Aug. 64	Replacement by 1901 as under.
	ICT 1901	Jan. 69	Other L.A. users expected to increase from present 4 to 10.
Denbigh	IBM 360/30	Mar. 67	Rate billing for districts 1968-69
Derbyshire	IBM 360/30	Jan. 66	Possible addition of 2MT and a data plotter.
Devon	IBM 360/30	June 67	Service to districts envisaged using off-line data transmission
Dorset	ICT 1902	Feb. 67	Possible addition of extra EDS.
			Also possible replacement of 1902 by 1904 with on-line data transmission
Durham	IBM 360/30	Apr. 66	Extra 48 Kb store and 3EDS ordered for April 69. Now considering DTE.
Essex	H 2200	Apr. 67	Likely extension of main store addition of random access devices, and possibly, paper tape equipment and data links.
Flint	IBM 1440	Mar. 66	
	IBM 360/30	Oct. 67	

Authority	Computer	Date of installation	Future developments (to 1972)
<u>Counties</u>			
Glamorgan	ICT 1903	Oct. 66	Enhancements envisaged but not determined
Gloucester	ICT 1301	Apr. 64	Gloucester C.B.C. to share use. Possible addition of fixed disc and DTE.
	ICT 1904E	Jan. 69	
Hampshire	NCR 315	Jan. 64	
Hereford	ICT 1901	Dec. 68	
Hertford	NCR 315	June 63	Study of possible extensions to start this year
Huntingdon and Peterborough	ICT 1901	July 67	
Isle of Wight	Gamma 10	June 65	Change may be considered 1970-71
Kent	ICT 1903	Apr. 66	
Lancashire	ICT 1904	June 66	
Leicester	ICT 1902	Aug. 67	Rate billing for some districts from April 1968
Lincs (Lindsey)	ICT 1902	Jan. 67	Probable extension of service arrangements 1968-69
Monmouth	IBM 1440	July 65	Possible replacement 1968-69
Norfolk and Norwich	EE 4/30	Apr. 68	Additional storage; data transmission equipment.
Northampton	N/E 803B	July 62	
	ICT 1902	Nov. 67	
Northumberland	IBM 360/20	Apr. 66	
	IBM 360/30	Oct. 67	
Nottingham	ICT 1301	Jan. 64	Study to begin soon for replacement by early 1970
Oxford	2x Monrobot XI	Dec. 64	Plan to use Oxford City 1902
Pembroke	ICT 1901	Dec. 67	Service work envisaged for 5 or more district councils

Authority	Computer	Date of installation	Future developments (to 1972)
<u>Counties</u>			
Salop	IBM 360/30	Mar. 66	Faster printer by Dec. 67: more service work; possible increased storage
Somerset	ICT 1902	Dec. 66	Preliminary study of enhancements
Stafford	IBM 360/30	July 67	
Suffolk (East) and Ipswich CBC	EE 4/30	Jan./Feb. 68	
Suffolk (West)	ICT 1901	Feb. 67	Possible extra 8K.
Surrey	ICT 1903	Sept. 66	Possible expansion
Sussex (East)	ICT 1902	Nov. 67	
Sussex (West)	IBM 360/40	Apr. 67	Additional 128 Kbytes, 1 Data Cell, 1 VDU and light pen, 9 typewriter terminals (all ordered)
Warwick	IBM 360/30	Apr. 67	
Wiltshire	NCR 315	July 64	Replacement towards 1972
Worcester	ICT 1901	Aug. 67	
Yorks (E.R.)	ICT 1901	Aug. 67	Possible extra 8 K
Yorks (N.R.)	ICT 1901	Nov. 67	
Yorks (W.R.)	H 400	May 65	Replacement 1969
<u>County Boroughs</u>			
Bath	N/E 803B	Apr. 65	Anelex LP ordered
Birmingham	ICT 1904	June 65	Document reader 1969; possible discs, data transmission, extra core store
Blackburn	ICT 1901	Sept. 67	
Blackpool	H 120	Dec. 66	
Bolton	ICT 1901	Jan. 67	Possible increase in size and speed of core
Bootle	ICT 1901	Oct. 66	
Bournemouth	H 400	Jan. 63	Possible replacement - 1970
Bradford	ICT 1904	Dec. 67	

Authority	Computer	Date of installation	Future developments (to 1972)
<u>County Boroughs</u>			
Brighton	ICT 1500	Jan. 65	1969, 30Kch/s MT to replace present 10 Kch/s
Bristol	ICT 1500	Nov. 63	Replacement being considered
Burnley	H 120	Dec. 67	
Burton upon Trent	H 120	Oct. 67	
Cardiff	ICT 1902	Feb. 67	Possible upgrading to 1904 in 1969-70
Chester	ICT 1901	Mar. 67	
Coventry	EE LEO III	Mar. 65	Possible replacement 1970-71
Derby	ICT 1902	Sept. 67	
Dewsbury	N/E 803B	Feb. 65	
Doncaster	ICT 1902	Sept. 66	Possible enhancements - 1969, including extra 8K, 3EDS, interrogating typewriter, faster LP (600 lp, instead of 300 lpm)
Gloucester	To share use of Gloucester County machine (qv)		
Gt. Yarmouth	Univac 9300	Oct. 68	
Grimsby joint with Scunthorpe	ICT 1902	Jan. 69	
Halifax	ICT 1901	Sept. 66	
Hastings	NCR 4120	Feb. 68	
Huddersfield	ICT 1902	Jan. 68	Extra 2MT and LTR
Ipswich	Joint scheme with East Suffolk (qv)		
Kingston upon Hull	ICT 1301	June 65	Probable replacement 1970
Leeds	ICT 1904	Jan. 66	Possible addition of direct and remote access facilities
Leicester	EE 4/30	Dec. 67	Either add 2EDS and extra LP, or replace with 4/50
Liverpool	ICT 1904	Feb. 67	Possible experiments with remote access to mass store

Authority	Computer	Date of installation	Future developments (to 1972)
<u>County Boroughs</u>			
Luton	ICT 1902/ 1004 link	Feb. 67	
Manchester	EE LEO III	June 64	Possible replacement by 1972
Merthyr Tydfil	ICT 1901	Feb. 67	
Newcastle upon Tyne	ICT 1903	Apr. 66	
Newport	ICT 1901	Feb. 67	
Northampton	ICT 1902	Apr. 68	
Norwich	N/E 405	57	Replacement in 1968 by joint computer with Norfolk
Nottingham	ICT 1903	Apr. 66	May 1968, additional 16Kwds, 2MT and LP
Oldham	N/E 4120	Dec. 67	
Oxford	ICT 1902	July 67	
Plymouth	IBM 360/30	Feb. 66	
Portsmouth	IBM 1401	Dec. 62	Replacement 1970
Reading	ICT 1902	Jan. 68	
Rotherham	ICT 1902	Sept. 67	Possible addition of (a) 2MTs or Disc, (b) Document reader
St. Helens	ICT 1901	Nov. 67	
Salford	Boroughs B283	Nov. 64	
Solihull	ICT 1901	Mid 68	
Southampton	NCR 315	July 65	Possible extra 10K store/printer
Southend-on-Sea	ICT 1901	Jan. 67	
South Shields	ICT 1901	Oct. 68	Provisional order only
Stockport	ICT 1901	Jan. 68	
Stoke-on-Trent	IBM 360/30	Feb. 66	
Sunderland	IBM 360/20	Oct. 66	Possible addition of 2EDS

Authority	Computer	Date of installation	Future developments (to 1972)
<u>County Boroughs</u>			
Swansea	ICT 1902	Feb. 66	
Teeside	IBM 1440	Jan. 65	
Torbay	IBM 360/20 IBM 360/30	Jan 66 Feb. 68	To be replaced by model 30 below. Probably extra disc drive later
Wallasey	ICT 1300	Oct. 67	
West Bromwich	IBM 360/30	Sept. 66	
Wigan	ICT 1902	Feb. 66	
Wolverhampton	IBM 360/30	Feb. 66	
Worcester	ICT 1901	Nov. 67	
York	IBM 1401	July 66	Probable extra 4K store and disc storage
<u>Inner London</u>			
Camden	ICT 1903	Apr. 66	
Greenwich	See London Boroughs Joint Computer Committee		
Hackney	See North East London Computer Service		
Hammersmith	H 200	Aug. 67	
Islington	ICT 1902	Jan. 66	
Kensington & Chelsea	See Westminster and Kensington and Chelsea Joint Computer Committee		
Lewisham	IBM 1401	Feb. 63	Decision on replacement soon
Southwark	See London Boroughs Joint Computer Committee		
Tower Hamlets	See North East London Computer Service		
Wandsworth	ICT 1903	June 67	Possible addition of EDS, TR and extra MT
Westminster and Kensington and Chelsea Joint Computer Committee	EE 4/30	Apr. 68	

Authority	Computer	Date of installation	Future developments (to 1972)
<u>Outer London</u>			
Barking	IBM 360/20	May 68	
Barnet	ICT 1903	Jan. 67	
Bexley	See London Boroughs Joint Computer Committee		
Bromley	ICT 1903	Dec. 66	
Croydon	ICT 1902	Jan. 67	
Ealing	IBM 360/30	Aug. 66	Possible additional 16 Kbytes
Enfield	H 200	Nov. 67	
Haringey	See North East London Computer Service		Studying advanced project
Harrow	EE KDF 6	Jan. 65	
Hounslow	IBM 360/30	Oct. 67	
Kingston upon Thames and Sutton (Jt.)	EE 4/30	Feb. 69	
Newham	ICT 1300	Jan. 65	
Redbridge	N/E 803B	Oct. 64	Replacement envisaged 1969-70
Sutton	Joint scheme with Kingston upon Thames (qv)		
Waltham Forest	ICT 1300	Feb. 64	
Greater London Council	IBM 360/30	Dec. 66	
	IBM 360/50	Jan. 68	
	EE 4/50	Nov. 68	
<u>City of London</u>	ICT 1903	Jan. 68	
London Boroughs Joint Computer Committee (Bexley, Greenwich, Lewisham (Rating) and Southwark)	EE LEO III	Feb. 63	Planning begun for replacement in 1971-72

Authority	Computer	Date of installation	Future developments (to 1972)
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N.E. London EE LEO III Dec. 66
Computer Service
(Hackney, Tower
Hamlets, Haringey)

Boroughs

Aylesbury NCR 500
Basingstoke ICT 1901 Dec. 67
Bedford IBM 360/20 Dec. 66
Cambridge Univac 1050 Feb. 66
Chelmsford Univac 9300 Oct. 68
Chesterfield N/E 803B Jan. 65
Colchester ICT 1901 Jan. 69
Gillingham IBM 360/20 Aug. 66
Keighley ICT 1300 June 65
Morecambe and Heysham NCR 500
Morley ICT 1300 Apr. 68
Newcastle-under-Lyne ICT 1902 Mar. 66
Nuneaton ICT 1901 July 68
Pontefract ICT 1300
Port Talbot ICT 1901 Jan. 68
Scarborough ICT 1300 Jan. 68
Scunthorpe Joint scheme with Grimsby C.B.C. (qv)
Slough ICT 1901 Dec. 67
Swindon N/E 4120 Nov. 66
Widnes ICT 1300 Dec. 67
Whitley Bay NCR 500
Worthing ICT 1902 Jan. 69

Addition of MT, or replacement
by Univac 9300 with MT.

Authority	Computer	Date of installation	Future developments (to 1972)
<u>Urban Districts</u>			
Aldridge Brownhills	ICT 1901	Dec. 67	
Basildon	IBM 360/20	Aug. 66	Possibly discs and/or more core
Brentwood	Monrobot XI	Aug. 66	
Carlton	NCR 500	Oct. 67	
Chigwell	Monrobot XI	Sept. 65	
Havant and Waterloo	H 120	Oct. 68	
Hinckley	Univac 9200	Jan. 69	
Ilkley	ICT 1300	Sept. 67	
Shipley	NCR 500	Mar. 68	Possible addition of CR, CP, LP and fast TR
Thurrock	IBM 360/20	Feb. 67	Possible discs, more core, faster LP
Woking	ICT 1901	June 67	
<u>Rural Districts</u>			
Axbridge	NCR 500	Feb. 67	
Blaby	IBM 360/20	Jan. 67	
Caistor	NCR 500	Oct. 67	Addition of TR and TP
Chanctonbury	NCR 500		
Doncaster	ICT 1901	Jan. 68	
Malling	NCR 500	Jan. 68	
New Forest	NCR 500		
Rotherham	NCR 500	Nov. 67	
Wrexham	ICT 1901A	Apr. 69	
<u>Scottish Counties</u>			
Aberdeen	ICT 1301	Oct. 64	
Ayr	H 200	Apr. 67	Possible extra MP and 4Kchs store

Authority	Computer	Date of installation	Future developments (to 1972)
<u>Scottish Counties</u>			
Dumfries	NCR 500		
Fife	ICT 1300	July 65	To be replaced by 1901 below
	ICT 1901	Dec. 68	
Lanark	IBM 360/30	Aug. 67	
Midlothian	IBM 360/20	Aug. 67	Possible replacement by 360/30 by 1972
Stirling	Gamma 10	Sept. 66	Possible addition of Tape/disc
<u>Scottish Cities and Burghs</u>			
Aberdeen	ICT 1301	Nov. 65	
Dundee	ICT 1300	Aug. 66	Replacement being considered
Edinburgh	EE 4/50	Dec. 67	On-line document reader; large disc; on-line terminals
Glasgow	IBM 360/30	Nov. 66	