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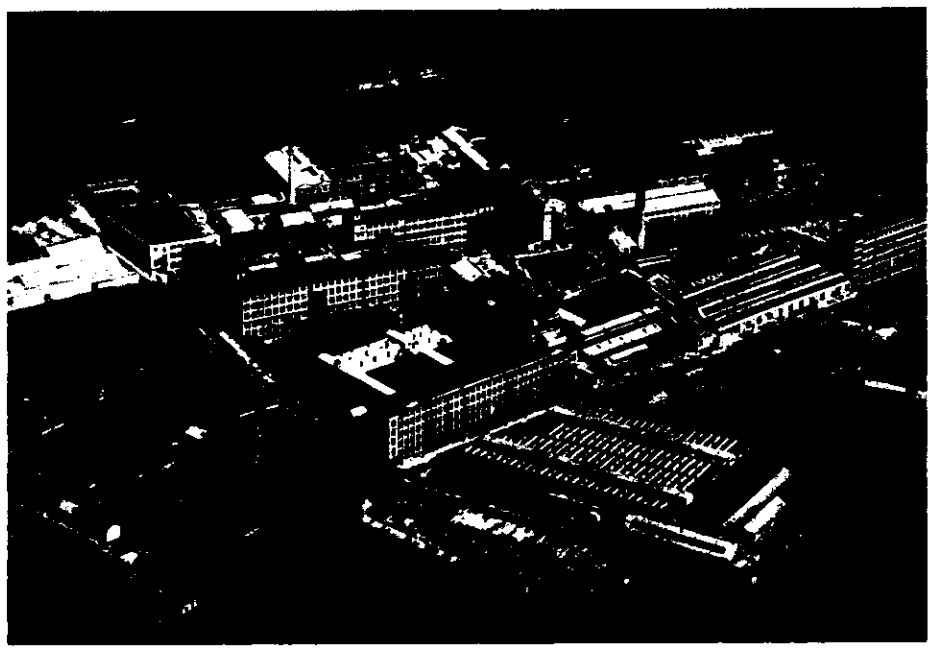
The GEC takeover of AEI

Richard Truscott



AEI Factory at Woolwich from Centennial booklet 1958

My father worked as a draughtsman for Associated Electrical Industries (AEI) at their Woolwich Telecommunications factory in South East London. I had returned to secondary school for an extra 6th year because, quite frankly, neither I nor my parents could decide what career I should follow. Many of my class mates had left school, aged 15. and were working or in apprenticeships. Because the school leaving age had recently (1964) been raised to sixteen, but not implemented, I could stay on an extra year. The school leaving age was not compulsorily raised until 1972. One thing I was clear on, I didn't want to follow my father's profession and for others I'd looked at I didn't have the qualifications. So, another year at secondary school to take extra exams seemed like a good idea. I had only just started sixth form when my father came home from work one day and said that AEI hadn't been able to fill all their apprenticeship places and so that was decided. I'd leave school and start at AEI. I don't remember much discussion about it, or even being asked my opinion. I must have thought it a good idea because I agreed, and the next day I handed in my 'resignation' to the Head Master.

It was a good apprenticeship on the 'sandwich' principle of doing City and Guilds syllabus 49 full time at technical college, with the vacation time working in various AEI telecommunication departments. A lot faster than the Post Office equivalent because the PO course was day release and took three years to reach the C&G intermediate exams. The AEI course got you to the G&G final in 2 ½ years. You specialised after the intermediate exam – I did advanced telephony. To a certain extent AEI used apprentices as 'cannon fodder' you had to be really academically good with high pass marks to get into the design laboratories. Most of us ended up in exchange construction or production floor jobs. However, I never did finish the apprenticeship because General Electric Company (GEC) took over AEI in 1967, and everybody at Woolwich and the other telecommunications plants (some 6,100 people) were made redundant by the new owners. I was 19 years old my father 49, we both went on to have careers with Post Office Telecommunications, but as they say, that's another story. This is the story of that takeover.

Company histories

This article describes the takeover of AEI by GEC. I have not attempted to outline the history of either of the two organizations in much detail.

AEI

AEI's roots in telecommunications in the UK start with Siemens Brothers. However Siemens did not join AEI until the 1950s when they bought out the shares owned by the 'Custodian of Enemy Property'. Siemens were, of course, a German company and their assets were appropriated after WWI by the British Government as war reparations. They had the same fate in WWII. Siemens Halske started in the UK in 1858 and became Siemens Brothers in 1864. AEI was already a big company making generating equipment and high voltage equipment and cables, electric motors and controls, electric domestic appliances, radio valves (tubes) and light bulbs which they had gained through a large number of acquisitions of other companies.

AEI was initially set up to merge two already big companies, British Westinghouse and Metropolitan Vickers (MetroVick) in the late 1920s. AEI also acquired British Thompson Houston (BTH) itself a conglomerate of electrical manufactures such as Furguson & Pailin, Edison Swan and Hotpoint.

GEC

I must make it clear that this is the British company, not the USA company (normally called GE for General Electric). However, the confusion over names doesn't end there because GEC and GE were involved with one another at various times and owned some of the constituent companies that made up AEI. The UK company can claim the rights to the name because GEC (previously the General Electric Apparatus Company) was formed as a limited

Sir Hugo Hirst, about 1930 [PD]

company in 1889 (A) predating GE of America's 1892.

GEC's history is simpler than AEI's. Formed in the late Victorian period by a German émigré it came under the control of another émigré who had risen from the ranks and changed his name from Hugo Hirsch (later to become Lord Hugo Hirst). Starting off making small items such as switches, they moved into light bulbs (OSRAM), expanding in WW1 to making electricity generating and distribution equipment including the turbines by taking over Fraser & Chalmers. They also moved into telephones, by incorporating the Peel Connor works, arc lights, cables and instruments. Hirst died in 1943. The telecommunications part of GEC made exchanges and radio and

Sir Michael Sobell

transmission equipment at its works in Coventry.

Michael Sobell (1892-1993) was a successful maker of domestic radio sets which he had recently sold to Electrical and Musical Industries (EMI). His daughter had recently married and her new husband Arnold Weinstock seemed to be an able business man with a head for figures. Sobell then did something unexpected and a little odd, he bought back his old business for what he had been paid for it. He started in business again having retired on the sale to EMI. He worked with Arnold Weinstock to develop the new business called Radio & Allied Industries; set up from amalgamating with McMichael Radio Ltd., and went straight back into making radio sets. The Sobell brand name could not be used because it belonged to EMI, however he did buy it back and paid a royalty to EMI for its use. Arnold Weinstock set about managing the costs of the business and was soon undercutting its competitors and upsetting them by selling through furniture shops and by ignoring the usual launch of new models at the annual Radio Show. To use the modern term, he was a 'disrupter'. The Weinstock way proved successful and lead to high profits and flotation of the company on the stock market in 1958. Weinstock and Sobel were looking for a way out of making radios because the market was stop go and subject to changeability of Government rules on consumer credit. They made several unsuccessful attempts to take over other companies, and a merger with GEC was suggested by one of the bankers involved. A deal was struck and the two companies merged with Sobel and Weinstock both being on the company board. At the time GEC were losing money on their TVs and radios and wanted Weinstock's talents to make them profitable. So Weinstock came along with the merger to manage their radio and TV and domestic appliances department.

Senior managers soon recognized Weinstock's management style as being the same as Hirst's, very analytical and orientated on cutting waste and reducing costs. Moreover, his chairman, Arnold Lindley (later Sir) recognized that Weinstock's management methods would be useful to GEC. Weinstock could be ruthless. His kind of 'macho' management became the house style and extended to the takeover of AEI by GEC.

He also didn't waste time with board meetings and committees, but relied on figures to tell him what was going on (or going wrong). Weinstock applied a 'three strikes and you're out' approach with managers who he thought were not performing. They'd get letters outlining where they had gone wrong and if there was no change, they would have to go. Many senior managers were sacked by letter and a short interview and left

Lord Weinstock [unknown]

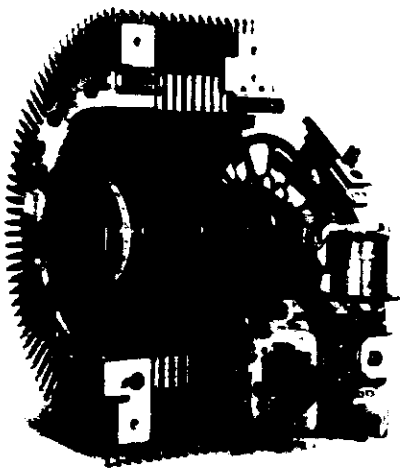
the company that day. He rarely visited the company's factory floors and for a MD had a low profile.

Cartels

Much of the development of the electricity generation/distribution, telecommunications, light bulbs, radio/tv components such as valves (tubes) was governed by cartels set up amongst the producers to control retail prices. These arrangements were called 'retail price maintenance' (RPM) in the UK and 'resale price maintenance' in the USA. To modern eyes this seems like a bad business practice, where makers agree amongst themselves how much they will charge for a product. Retailers were bound to by the agreement to not sell below a floor price or not above a ceiling price, if sellers disobeyed, the manufacturer would stop supplying them. Retail price maintenance ended in the UK in 1964. The only room for manoeuvre on selling

price was for the retailer to adjust their profit margin. It effectively removes any competition because whether it's a telephone exchange or a light bulb the customer pays a similar price whoever they buy it from. For the customer, they make their choice on factors other than price – things such as availability, their perceptions of quality and reliability, but less so on price. For the makers, they get a good profit, and are relieved of worrying too much about the cost of making and distributing their product. Retailers large and small were bound to make a profit.

Such a cartel operated in telecommunications supplied to the GPO and later Post Office Telecommunications called the Telephone Apparatus Manufacturers Association (TAMA); also know at the 'ring'. Under the TAMAs terms 90% of the Post Office Telecommunications (PO) requirements for equipment, in the form of contracts, were supplied from eight manufacturers. The PO put up a list of its contracts and the TAMA asked the manufacturers if they wanted to take up the contracts. If none of the TAMA members took up the contract, the PO could go elsewhere to a non TAMA company. Very often, if say AEI had equipped an exchange when it was new, they would take up a contract for the extension. One of the main caveats of the 'ring' was that the equipment supplied had to be to the GPOs specification. Often GPO specified systems could not be exported because they did not meet purchasers' requirements or in many cases a manufacturer had a non-GPO system it sold for export (often better or different to GPO types). Some individual items of equipment did end up in GPO systems such as the motor uniselector from the Siemens No. 17 system.



Motor uniselector [Siemens]

There was at the time nothing illegal about the 'ring', in fact the Government in the past had encouraged the practice. Post war Governments were less keen on cartels, but all they did was make it a legal requirement to register their existence under the 'restrictive trade practices act' of 1956. In any case because the GPO/PO was a Crown (Government) organisation the cartel was exempt from registration. Cases for not registering were brought and a few did get to Court, but were often undefended and thereafter the cartels just went 'underground' by operating in secret.

IRC

The Industrial Reorganization Commission (IRC) was an idea of Harold Wilson's first government in 1966. Its purpose was to facilitate mergers between major firms to make them more competitive. Many company owners were suspicious of the IRC because they thought it was a backdoor method of nationalization. It did however bring about the GEC/AEI takeover and the creation of British Motor Corporation. The IRC ceased to operate in 1970.

The IRC had proposed a merger between GEC and AEI particularly on the power generation and distribution side. Since nationalization in 1947/8 of electricity supply the process was nearly complete by the time of the takeover and work for the home electricity market was about to diminish, resulting in production overcapacity. However, nothing had come of the merger leaving the way clear for GEC to mount a takeover of AEI, with the financial support of the IRC. It was a takeover battle with claim and counter claim for and against the takeover.

The seeds of a takeover

Under the chairmanship of Lord Chandos, AEI expanded by acquiring companies, mainly to meet the expected demand in electricity generation and distribution with the expansion of electricity supply under the nationalization of the industry. However, each of the main components (BTH, Metrovic, Ediswan/Hotpoint and AEI still operated as separate companies, with rivalries between them. The company had over-expanded and overspent, resulting in poor financial returns. Various internal reorganizations in the early 1960s were implemented and profits began to improve, with good figures forecast for the late 1960's. However, things started to go wrong because demand did not come up to expectations and profits began to fall again. Telecommunications was one factor in this fall in profits because GPO demand was not as high as forecast. In a period of financial difficulty, the government reduced its capital expenditure which meant that the GPO had less money to spend on buying equipment and in turn this resulted in a fall in demand. On the power generation/distribution side it meant that orders from the Central Electricity Generating Board were levelling off. In addition, the end of restrictive practices such as RPM made profits fall and at the same time AEIs management structure did not help either, with each part operating as a separate company and, with the Managing Directors having an engineering rather than commercial background, the culture of the business was on technical excellence rather than profitability. This left AEI in a poor position and unlikely to prosper on its own, and it may even have failed by being bankrupt, but it also left it open to a predatory take over.

The GEC culture under Arnold Weinstock was very different; it focused on profitability and cost cutting. This culture had made GEC a highly profitable company and it had got out of industries such as electricity generation and distribution that were suffering a downturn.

Nothing had come of the IRCs plans to amalgamate AEI and GEC, but GEC still had the backing of the IRC when it came to them making a bid to takeover AEI. All this had made GEC and Weinstock the 'whiz kid' of British Management and the 'blue eyed boy' of Government bodies like the IRC.

The takeover was about GEC acquiring AEI shares on the stock market and in particular getting the institutional investors to think that the

takeover was a good idea. The takeover would improve GECs market share, its management methods would ensure good profits. Offers were made and rejected. Forecasts made and refuted. Assets sold to acquire cash. In the end the majority of shareholders agreed to the takeover. It was also convenient that the Board of Trade overlooked any accusations that it had created the monopolistic situation, because GEC had 40% of the telecommunications market with the GPO, leaving 40% with Plessey and 20% with Standard Telephones and Cables. The timing of events, taking only 43 days, is shown in the table.

Timeline of events

Date in 1967	What happened
Jan	Joseph Latham (Deputy MD of WIE) proposed structural changes to AEI. Gov't Dept. of Economic affairs paper on rationalizing heavy industry.
Mar	Board of trade and Economic affairs hand over organisation of heavy industry to IRC.
Apr May	IRC draws up plan for AEI and GEC merger.
12 June	IRC proposed AEI/GEC merger planned at Institute of Directors dinner.
27 Sep	Rumours of bid by General Electric Co. of America. Shares start to rise in value
28 Sep	GEC tell AEI of intention to bid.
13 Oct	GEC make formal offer. Five GEC shares* plus £4.00 for every eight ordinary AEI shares. Making the offer £2.60/share. AEI shares rise to £2.17. Closing date 03 Nov. * 'B' shares earning 15.5% dividend.
20 Oct	AEI reject offer. AEI believes that organizational changes made in '67 will restore profitability and increase share price above the GEC offer. New better profit forecasts for company released. Bankers and accountants engaged to fight bid.
30 Oct	GEC increase offer. Offer raised to five shares for eight AEI shares plus £8.00 for eight shares. Makes each share worth £3.47.
01 Nov	AEI reject offer. Offer rejected because it was unfair to AEI shareholders (who would now have GEC shares) because they would not get the same dividend as the original GEC stockholders. AEI said their reorganization plans were better than a merger.
02 Nov	GEC increase second offer. Shares offer remains the same but £10 offered for every eight shares. Making each share worth £3.63. Closing date 08 Nov.
04 Nov	AEI reject increased second offer. No new arguments offered against the merger.
08 Nov	Closing date of Final offer. Shares being bought by GEC and AEI supporters but with 40% going to GEC and more acceptance of the offer in the pipeline it looks like GEC have won.
09 Nov	Majority of AEI shareholders accept final offer. The takeover is over.

Impact on UK telecommunications

AEI had firmly committed itself to electronic exchanges – those with software central control and space (reed) switches. Other manufacturers had gone for crossbar exchanges, mainly by importing technology from outside the UK and manufacturing it in the UK. At the time there was a split in thought about the path the Post Office Telecommunications should take to replace its ageing Strowger network;

- One path was for the Post Office to go digital (digital control and PCM/TDM switching). After all Highgate Wood experiment had worked. It just needed further development.
- Another thought was an interim solution of using crossbar. All the rest of Europe was going that way and the UK industry was losing out on exports because it did not have a crossbar product.
- The third camp went for electronic exchanges.

In the meantime, the GPO prevaricated, unable to decide about where it would go on electronic/digital exchanges in the future. The view of the industry was that the GPO should go for an interim of Crossbar and finally in 1967/8 the manufacturers got what they wanted, a decision by the GPO to have Crossbar. One argument often put forward was that most telecommunications administrations wanted to use crossbar, and UK manufacturers wanted to make a crossbar system so that they could export it. They could not export an electronic or digital system, because if they were asked, 'does the GPO buy it?' they had to answer, 'no'. By this time AEI had committed to Electronic exchanges, Plessey and GEC to Crossbar and AEI had been taken over by GEC. More over the MP Tam Dalyel, writing in New Scientist said

"The ring was responsible for encouraging AEI to develop electronic exchanges, ahead even of Ericsson from Sweden. The tragedy for Britain was that GEC closed the productive Woolwich research facilities."

The inevitable resulted, GEC killed TXE1 and TXE3 Electronic exchanges. A brand-new production line set up at the Woolwich factory along with its research arm at Blackheath were dismantled with indecent haste literally and physically put in the bin along with all the staff. Also lost at this time were research jobs at Harlow and manufacturing jobs at Woolwich and Hartlepool, involving, all told, some 6,100 people (5,500 at Woolwich. 400 at Sydenham, 200 at Blackheath/Harlow). As Sir Joseph Latham comments

"The GEC/AEI merger brought large scale redundancies to AEI Woolwich more quickly and sharply than would have happened if AEI and retained control. Employees at AEI HQ and the Central Research Laboratory suffered severely."

Latham also comments that the course and nature of the aggressive takeover bid by GEC helped frame later legislation about how takeovers should be conducted, with new powers going to government to use legislation to ensure the public benefit of any takeover. The Stock Exchange also changed its rules and offered guidance on the conduct of takeovers.

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Sanford Telephone exchange history

Keith Hlavacs

Until the early 1940s, the Sanford Telephone Company was owned by Charlie Keyworth, who was also the Jerome Township Supervisor. His service vehicle was a 1939 or 1940 Pontiac Coupé with ladder racks on top and a pay-off reel for wire mounted in the trunk.

The telephone exchange was located in a two story white house which stills stands today. A photo of the house damaged by the dam break of 2020 appears on P18. The house is located about one block west of the present central office next to the alley. This house was divided into two parts, with the owner living in the north apartment and the operator and her family living in the south apartment.

The switchboard at this time was a small single position Western Electric. During the late 1940s, Johnny Bacon bought the Sanford Telephone Company. During the time that Keyworth and Bacon owned the company, Mrs. Carrier Getwood and her daughters ran the switchboard. Her son, Al Getwood, worked for many years for Wolverine Telephone Company in Munger and Sanford. Sadly, he passed away some years ago.

In the early 1950s the telephone company was bought by three men named, Dick Biggers, Williams, and Hart. Williams and Biggers were Michigan Bell employees and Hart was a lawyer from Saginaw. They