

# Radio and Television Relay Services in Jersey

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## **Cable Broadcast Distribution**

### **The Early Days**

Relaying of radio broadcasts began soon after the start of commercial broadcasting by the British Broadcasting Company. In the early days, many radio receivers were still of the crystal set type, broadcasting was in its infancy and few people owned any radio receiver as the technology was still developing. During 1922 the British Broadcasting Company was set up by a consortium of leading British radio manufacturers. The BBC then took over the Marconi 2LO London station and started regular broadcasts from Marconi House in the Strand on 14th November 1922 on a wavelength of 369 metres (813 KHz). Interest in broadcasting started with electrical retailers who quickly adopted the new technology.

Although valve radio sets were available they were fickle and required a reliable power supply, which in the early 1920's was not yet readily available to the majority of households. Those with valve sets needed to send their battery accumulators for regular charging to the local garage or electrical shop. Those with crystal sets found that they were inconvenient and difficult to use, requiring frequent tuning to maintain the station. Soon, electrical suppliers around St Helier started offering radio relay services, maintaining a good quality receiver in their shop and distributing the audio output via a suitable amplifier around the houses in the immediate area for a modest weekly subscription, one such supplier was Hoddiss and Le Maitre, David Place. The supplier provided a loudspeaker housed in a wooden box for each subscriber. There were many such shops in different areas of St Helier providing this service to local housing as the popularity of radio grew and the BBC provided a reliable and good quality service.

Such providers continued to offer these services up until the Second World War, when the German occupation forces banned the use of radios by the general population. Following the cessation of hostilities, the technical advances made during the war brought cheaper and more reliable valve radios therefore there was little incentive for local shops to revive their pre-war service on the same small scale.

### **Rediffusion**

When broadcasting first began in earnest in the UK in 1922, Rediffusion, originally called "Broadcast Relay Service Ltd", was formed in 1927 and started to relay radio programmes to subscribers by negotiating an agreement to use an existing network of urban power cables belonging to city tram operator British Electric Traction (BET), which provided a number of tram services in major towns and cities around the UK. The tram network passed by many homes and it was therefore simple to distribute down streets not passed by the tram lines using private way leaves from landlords. It therefore had access to a ready-made market of potential listeners-in who wanted radio entertainment – if only it were affordable and non-technical. In 1947 BET acquired a

substantial minority shareholding in the company<sup>1</sup> and eventually assumed a majority in 1967. It provided the service for a small weekly subscription and quickly profited from the public's interest in the new medium.

Rediffusion was almost immediately profitable. The company soon branched out from simply 're-diffusing' radio broadcasts from air to wire, into the manufacture of radio sets. From there, the sale and hire of sets in the High Street followed.

As broadcasting opened up in the overseas Dominions of the British Empire, Rediffusion followed on, using the tram wires, or bespoke 'pipe radio' systems, to provide the local broadcasting stations to the cities, as well as the new BBC Empire Service (now BBC World Service Radio).

When the BBC began the first regularly scheduled high-definition television service in the world in the mid-1930s, Rediffusion was again well-placed to provide television sets for sale and rent, plus a 'pipe-TV' service to those not well-placed for broadcasts from Alexandra Palace, or reluctant to have such a gauche symbol as a VHF TV aerial on their roofs. When 405 line television was first introduced to the UK in 1936, there were many places where reception was impossible (notably Brighton on the South coast, which was shielded from the London transmitter by the local terrain). Rediffusion developed early cable TV technology to allow TV signals to be carried over twisted pair cable to subscriber's homes. Nowadays, we associate twisted pair with telephony, but it is possible to transmit a TV signal by modulating a short wave carrier at around 3.5 MHz with vestigial sideband (VSB) amplitude modulated video provided the cable pairs are well balanced. When the new channel was introduced, starting from 1956, Rediffusion simply used another twisted pair in the same bundle.

World War II interrupted television, the growth of wired distribution, and much of the peacetime activities of both BET and Rediffusion. For the duration, the company devoted its energy to the war effort using its research facilities for a number of top-secret projects. This meant its expertise in reception and rebroadcasting suddenly became of essential national importance. Even now full details of Rediffusion's activities during the war are held under the protection of the Hundred Years Rule.

Immediately post-War, the world changed dramatically. BET was included, because of its transport and electrical generation links, in the list of companies the new Labour government planned to nationalize. The tram systems started to disappear too, partially because the necessary nationalization of the electricity companies meant that the old local generators became part of the new Central Electricity Generating Board. The councils who ran the trams had to pay for the electricity, and coupled with the dilapidation of the systems during the war, it was cheaper and easier to abandon them and replace them with ordinary bus services. Within a decade of the end of the war, almost all of the tram networks had disappeared. BET, however, avoided nationalization, due largely to Labour losing the general election of 1951.

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<sup>1</sup> Competition report on proposed merger The British Electric Traction Company PLC and Initial PLC [http://www.competition-commission.org.uk/rep\\_pub/reports/1985/fulltext/184c03.pdf](http://www.competition-commission.org.uk/rep_pub/reports/1985/fulltext/184c03.pdf) (last accessed 5/8/09)

## **Rediffusion in Jersey**

BET, which bought into Rediffusion in efforts to avoid nationalization, had started to diversify and looked for other business opportunities, especially overseas. With the Dominions disappearing, it repeated previous successes by starting Overseas Rediffusion, offering wired television and radio, and later wireless broadcasting stations in some of the remaining colonies. That expansion brought Rediffusion to Jersey when on 18 June 1949, the operating company Rediffusion (Channel Islands) Limited was registered. Although registered as a CI company, Rediffusion never attempted to enter the Guernsey cable market but did eventually open a retail outlet in the 1960s. Nevertheless, a petition was placed before the Jersey States in the spring of 1950 for licenses to provide cables across public roads. The Jersey Evening Post (JEP) published a virulent editorial against the company on 9 August 1949, the eve of the States debate. The JEP asserted that the system was unnecessary as the States Telephone Department could provide the necessary cables. It also asserted that there would be no control over what the company broadcast and there would be a loss of revenue from the some 14,400 licences issued on the island. It further sought to protect local radio retailers from competition. It is clear that the editor had little understanding of the control exercised by the Telegraph Act in its extension to Jersey, nor the nature of the distribution systems for telephony and wireless relay.

Deputy E H Le Brocq of St Saviour brought the proposition before the house, declaring no personal interest in the company. He clarified the terms of the petition stating that it had originally been drafted for Malta and that the only stations rebroadcast would be those of the BBC under the terms of its GPO licence. He recommended the system as it would have little impact on the environment, being installed only in built-up areas and there would be no noise from the loudspeakers as the maximum volume was controlled from the central station. It would provide an affordable means for the average man to have access to the wireless without the normal interference and would also provide local employment. The proposal was seconded by Deputy John Le Marquand who also declared no personal connection with the company.

Deputy Hettich (chairman of the Wireless Retailers section of the Chamber of Commerce) spoke against the company but Deputy W Kruchefski noted that although the debate had been tabled for some time, no radio retailers had petitioned against it. Hettich claimed that the Chamber of Commerce had objected. Kruchefski responded that the speaker had regularly complained against everything that required a GPO licence but there was nothing that could be done about it since the States had adopted the UK law. Personally, he was in favour of the proposition.

Deputy Morrison (Telephone Committee) was against the proposition. He said that while he did not always agree with JEP editorials but on this occasion he did. He said that this proposal would merely create yet another monopoly. Deputy Avarne said that originally he was against, but as he now understood that the programmes would not be originated by the company he had changed his mind. He felt it would be a boon to the poor. Deputy Venebales agreed stating that he was in favour of private enterprise. Deputy Le Marquand suggested that crystal sets may well be cheap enough and had served well during the occupation. Senator Collas recalled that 14,000 radio sets had been confiscated by the Germans and that by now these had all been replaced and

more. He estimated about 16,000 or 17,000 on the island or one for every three persons. That, he claimed, meant everyone had access to a receiver already.

Some members complained that the new cables would be unsightly, being thicker than telephone wires. Senator Hind of the Beautés Naturelles Committee said that this was not so. The cables would be hung on shared poles (Jersey Electricity Company distribution poles) that already held thick wires.

At the end of the debate it was pointed out that as the licence to operate the relay system was in the gift of the Post Master General under the Telegraph Act, the only question was whether the States should permit the crossing of streets. There was no question of the States interfering with wires fixed to private property. Finally, Deputy Le Brocq accepting that the company could be licensed to operate by the GPO, that in order to cross streets Rediffusion would need permission from either the Main Roads Committee or the Constable of the parish. He therefore recommended that the States adopt the preamble. However, the house voted 26 to 14 against the proposition.

The company was undaunted and the bill was again placed before the States the following year at the sitting on 31 March. The ensuing debate was short and it would seem that much background work had been done to allay the fears of States' members because the preamble of the bill was adopted. A second reading was scheduled for 11 April 1950 which passed 'on the nod'. Finally, after a minor amendment proposed by the Legislation Committee in May which would allow parish Constable discretion to give permission for cable crossings, the amendment to the law<sup>2</sup> was passed at the end of June. The amended law came into effect in December.

On 27 September the JEP reported that Rediffusion engineers had established a test site at Les Platons and that two caravans with special equipment were on site testing radio reception. At this time the bill was still awaiting Royal assent, but Rediffusion engineers in company red and grey livery vans were already busy erecting private way leave cables. The JEP also reported that Rediffusion engineers were testing television reception in Alderney on the 2 February 1951 and around the middle of April the company began advertising its services. Initially adverts promoted the advantages of having radio without the need of an electricity supply or batteries.

Rediffusion established its Jersey offices in 1951 at 1 Library Place, St Helier with the telephone number Central 1156. This address was also the location of the first telegraph office in Jersey. The first General Manager of the local company was Q L Cazalet. It acquired the warehouse formerly used by merchants W Dennis and Sons at 52 Esplanade in 1953 and in 1954 it also had administration offices at Colomberie Close. Initially, the company offered the BBC wireless stations, the Light Programme, the Home Service and the Third Programme, with the addition of Radio Luxembourg, receiving the Long Wave French programme broadcast during the daytime but in the evening relaying the famous Medium Wave 208 service. By September 1951 it had connected over one thousand customers to its relay service.

In the first instance, Rediffusion only relayed radio broadcasts. Their distribution hub used high quality wireless receivers and efficient aerials to minimize interference,

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<sup>2</sup> Jersey Law 20/1950 Loi Modifiant La Loi (1914) Sur La Voirie

such facilities were usually beyond the domestic radio listeners' ability. The Rediffusion cable network was at first almost entirely supported by private way leave, with almost no cabling beneath public roads, only aerial crossings. The radio service was carried over balanced pair quad cables manufactured from PVC, a plastic developed as cable insulation during WW2. Cables were clipped in pairs, using galvanized buckle strap clips, along the fascia boards or soffits of buildings in the built-up areas and across streets suspended from catenaries using galvanized iron or piano wire bound with uninsulated soft copper. The catenaries were tensioned using fence line braces. Often, street crossings were necessary where a way leave was not obtained. These were made either from the house gutter level or by using chimney brackets in order to get sufficient clearance above the highway. As the network developed, the company used its own telegraph poles to span larger distances between buildings at the edges of built-up areas. In a few cases it used private telephone circuits provided by the States of Jersey Telephone Department for audio.



**Fig 1. Distribution box showing Baluns**



**Fig 2. Bakelite speaker cabinet**

The network was in effect a large public address system. The signal was distributed from its offices using large valve amplifiers and boosted, where necessary, with street mounted mains powered valve amplifier units. The amplifiers necessary for such a large network were substantial and thus the network had to be subdivided in order that the amplifiers could be designed to a manageable size. Consider that a network of 1,000 subscribers would need an effective input power of approximately

2kW allowing for line transmission losses, then it can be seen that using valve technology would require several amplifiers to attain that level of output. The subscriber speaker sets, which were made of wood or Bakelite, were fed in parallel from the main distribution network. The network was bridged at each subscribers premises and a balun transformer (Fig 1) fitted to the line, the feed was thus spurred off this connection while maintaining the transmission path. The connection was housed in a Bakelite or, later, plastic junction box which was fixed to the subscriber's fascia, soffit or house wall as



**Fig 3. Cable showing iron/lead clip and buckle clip**

convenient. The cable was often clipped down the wall using steel and lead cleats which was a quick method of fixing. In the customer premises the cable was terminated in a Bakelite switchbox (Fig 4) that had each channel marked with a letter and the required service was selected using a rotary switch. The volume control was also connected to the box and, for the sake of reliability, used a stepped incremental rather than continuous method for increasing the speaker volume.

The relay services were at once a success in the main built up areas. Surprisingly, even up until the 1960s, a large number of houses in St Helier still had no electricity



**Fig 4. Switchbox**

supply, many being lit by town gas. In addition, radio reception was often indifferent, amplitude modulated (AM) radio signals suffer from ‘static’ and other switching interference, most often caused by motors and other light industrial applications from workshops and garages around the town. Consequently, the relative quality of the Rediffusion relayed signals made it quite attractive to listeners. The company was also fortunate in gaining way-leave access to States social housing estates.

This gave the opportunity to low income groups to access to radio broadcasts through a relatively low weekly subscription thus avoiding the capital outlay for a wireless set of their own. The quality was further improved when FM was introduced by the BBC.

### **Television Relay**

A further advantage of the Rediffusion network was the introduction of television relay services. Rediffusion had established an experimental television receiving station at Les Platons as early as November 1951. It was able to receive AM broadcasts off-air at their receiving site first receiving signals from Crystal Palace then from the Wenvoe transmitter when it opened in August 1952 broadcasting on channel 5. This site consisted of a receiving aerial constructed from telegraph poles spliced together end to end to provide a mast of around 80 feet in height. Specialized television receivers were installed in a building close by (also two bungalows were later constructed for use of senior management). The rural location well away from any industry or housing complexes enabled comparatively interference-free reception, thus providing a quality often not available to television set users, particularly those in low lying areas such as St Helier. At this time there was much interest in television reception among the radio retail community.

In April 1953 it applied for permission from the GPO to relay BBC TV broadcasts in time for the Coronation of Queen Elizabeth II. The company quickly began to upgrade its network to include TV distribution in addition to wireless. This required the inclusion of an additional screened cable pair to carry the modulated TV signal and sound carriers, although for practical manufacturing purposes, a two-pair cable was used. Although the TV receiving site at Les Platons was well outside the planned service area of the Wenvoe transmitter, a small number of subscribers and the crowds that assembled outside its Library Place shop were able to view the coronation broadcasts. The licence application was not forthcoming in time for the coronation,

nevertheless, the PMG waived the requirement for a licence in order to allow the Jersey viewers to see the spectacle. However, almost immediately after the celebrations on 4 June 1953, the PMG demanded that the relay service be suspended until the license was approved. This placed the management of Rediffusion in an embarrassing position and it offered to refund subscriptions or hold the payments over until the service could be resumed.

Before reviewing the licence, the PMG requested that the States of Jersey should be canvassed for opinion. A debate was proposed but the local radio dealers association again began lobbying the States claiming that Rediffusion's system would damage its member's businesses. It further claimed that the relay service would be a "monopoly" and, somewhat paradoxically, that it was not in any case necessary as the BBC was proposing a Channel Islands transmitter within a couple of years. The Rediffusion management countered this claim, stating that its system would allow consumers to have television now and that local radio dealers would be able to buy sets directly from Rediffusion at competitive rates which could be used for either service.

Rediffusion had, by now, also established a manufacturing facility on the Island in a converted warehouse on the Esplanade, St Helier. This was under the name of Television Research (Jersey) Limited (TVR) and was a separate company from, though affiliated to, the relay system. The TVR board consisted of Q L Cazalet (also Managing Director of the Rediffusion (Jersey) Limited), W T Scarborough, V Vibert and the Earl of Jersey. The factory manufactured television sets on the island, even making the wooden cabinets locally, in addition to developing and manufacturing products for the parent company.

The States debate on whether Rediffusion's relay license should be extended to television as well as radio was held on 18 January 1954, and in addition the house debated the legal changes necessary for Rediffusion to have shared use of the overhead distribution network of the Jersey Electricity Company Limited (JEC) in order to bring their TV signals from Les Platons to its St Helier distribution hub (for which Rediffusion paid the JEC an annual fee). This was duly approved by the house and the arguments proposed by the radio dealers association were roundly rejected. An amendment to the JEC Law<sup>3</sup> was made and came into effect on 21 December 1954, although in practice Rediffusion and the JEC had installed the cables in ignorance of the legal requirements some time earlier. The PMG issued the extension to their relay licence on 1 April 1954.

The Rediffusion TV service began again on 1 May 1954 heralded by a full page advertisement feature in the JEP. This was followed on the 17 June by the official opening which was an elaborate affair with many important guests including Sir Wavell Wakefield MP, a member of the Rediffusion UK Board, Mr A R A Rendall, chief of designs for the BBC, the Lt Governor Sir Edward Grasset and many local dignitaries including C J Syvret the Telephone Department's Engineer Manager. The main ceremony was at the purpose-built receiving station at Les Platons where a plaque was unveiled and the many guests were able to see the special receivers and watch television broadcasts from Wenvoe. It was stated at the time that Rediffusion would perhaps offer alternative services when the French television service became

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<sup>3</sup> Jersey Law 19/1954 Electricity (Amendment) (Jersey) Law, 1954

available. The company started distributing the BBC TV channel more than a year before the BBC off-air service was available in the Channel Islands.

Having failed in their attempt to prevent Rediffusion from gaining a TV relay licence, the radio dealers turned their attention to the JEC. The relationship between the JEC and Rediffusion for sharing the JEC distribution network was extended to the JEC offering Rediffusion televisions in its salesroom. The radio dealers association again took the view that the JEC was abusing its “monopoly”, a view which was also shared by the JEP editorial and numerous letter writers. A petition was presented to the States requesting that, as a major shareholder of the JEC, it should prevent it damaging the radio dealers by instructing the company to withdraw from the television market. The petition was reviewed and rejected by the Finance Committee and subsequently talked out of the States. The animosity between the dealers and Rediffusion nevertheless continued unabated.

With access to the overhead distribution routes of the JEC, Rediffusion was now able to expand its network rapidly throughout the built-up areas of the island. By mid 1955 it had extended its reach along the south coast to St Aubin and Red Houses using a mix of JEC and its own poles along the railway walk, as well as along the roads from Les Platons to St Helier. In October 1956 the company closed its Library place offices and began trading from a new showroom at 52 Esplanade, the site of its distribution hub and TV Research Limited. At the beginning of 1957 the cable distribution network having been upgraded to distribute two TV channels, the newly opened French TV service was added to the inclusive radio and TV package available to its subscribers. During the year it also switched its radio receivers over to the new BBC VHF service which it was now receiving off-air from the UK.

However, it was not until August 1958 that it was able to offer its subscribers an ITV station. Although its parent company had been among the first to start commercial broadcasts from its London franchise in September 1955, it was unable to receive reliable off-air signals at Les Platons because of the higher Band III frequencies allocated to ITV. Therefore it set up a receiving station on Alderney to receive broadcasts from the new ITA transmitter at Rowridge which carried Southern Television and began relaying the test transmissions to its subscribers. The Alderney station was connected to the Rediffusion control room at Les Platons by a GPO provided microwave circuit, as at this time the PMG claimed

**LOUEZ**  
un *Sheerline* de 19"

C'est la manière d'a ch'i bon de r'garder vos programmes favoris sus la télévision

- Pas d'gros paiements d'argent comptant
- Les dreins modèles arrangés pour convertir aisément à r'chéver 625 lignes
- Réception VHF
- 2 programmes de vision et 3 de son

**GRATUIT**  
... Entretien gratuit  
... Installation gratuite  
... Assistance gratuite  
... "Avisols" gratuits quand nécessaires

Du 1 d'Septembre, 1962—  
Rein qu' **10/6** la semaine  
Réduction tousos l's ans  
Rein d'autre à payi

Presupposé paiement 625 (57.100 quand v' t'aus un "serret")

30321 **REDIFFUSION** 52 Esplanade

Fig 5. Rental advert in Jerriase

an absolute monopoly on the provision of telecommunications circuits. At the beginning of September it claimed to have over 4000 subscribers watching two



**Fig 6. Distribution pole and cable box**

channels. This amounted to almost half the number of issued television licences at that time, statistics up to the 1 June 1958 showed that 9,079 licences had been issued by island post offices<sup>4</sup>. A sales drive offered existing television set owners the option to convert to cable at a rental of 5/6d per week as an incentive to grow its customer base. It continued to expand the reach of its network, adding St Brelade's Bay in early 1960. Although there was now a substantial viewing audience for ITV the JEP did not provide any reliable or consistent listings in its

radio and television guide until the opening of Channel Television.

In 1960 Channel Communications Limited (Channel Television) won the ITV franchise for the Channel Islands. Plans were set in place for the building of studios and transmitter facilities and it was announced that ITV would relay the Westward Television signal locally. Consequently, in April 1961 Rediffusion switched its relay service to Westward in preparation for the change. Channel Television opened on 1 September 1962 and thereafter its Alderney relay link was closed without any redundancies.

After 1962 Rediffusion's market position changed. It was no longer the sole provider of alternative television services and now both television channels were available across most of the island. However, it still retained some advantage in areas that were 'shaded' from the BBC transmitter at Les Platons or the ITV Frémont Point transmitter by the island geography. The BBC did have a slight advantage in using a lower frequency and thus a better propagation pattern, although the ITV transmitter was somewhat higher. Helpfully for Rediffusion those areas where reception was poor coincided with its cable network coverage, notably along the south facing coasts, much of St Helier town and Gorey. In these areas it was both



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**Fig 7. Rediffusion Liveries (old at top)**

able to retain and increase its customer base, particularly given that the higher frequency channel used by ITV was the weaker of the signals. It also took advantage of the extensive housing developments at Quennevais by pre-wiring new houses along-side other utility services. Nevertheless, it began to reposition its retail arm by

<sup>4</sup> Jersey Evening Post 1 June 1958

offering aerial television options in its Esplanade shop. It also beefed up its advertising image with the introduction of 'Rediffusion Regie' a comic parrot cartoon strip. Its retail ambitions were further bolstered by a move to a town centre location in Beresford Street in October 1967. This coincided with BET's increased ownership of the group and also spawned a new company image replacing the existing red and grey vans with a fresh new yellow and white livery (Fig 7).

Meanwhile its TVR business was still growing and planning permission was granted to build a new factory and The research facility at La Pouquelaye, St Helier. The new buildings were officially opened in October 1968 despite stiff opposition from local residents during the planning stage company now took the opportunity to refurbish its network to increase the capacity of its television distribution. This was in line with the new BBC 2 colour service on 625 lines which was opened in London in July of 1967. The existing cabling was not of sufficient quality to carry the higher bandwidths required for the new service and as there was to be a changeover to the new standard for all stations a complete new system was required. New self-supporting multicore cables were installed, in some cases along side the existing cabling in order to maintain continuity of service. This cable consisted of 6 audio pairs and 3 video pairs in two sizes for subscriber drops (Fig 10) and for trunk distribution (Fig 9). A new modulation system designated TD.80 was developed to carry the additional channels were sent over the same pairs modulating a higher frequency carrier (around 8 MHz) with a vestigial sideband transmission system using the lower resulting sideband. This approach, known as "tete-beche", minimized interference between the two carriers and would eventually permit six channels to be transmitted, two on each pair of wires.

Although it experimented with colour since the beginning of the UK public trials, it was unable to receive and thus distribute a reliable signal at its Les Platons station. Had it retained a station on Alderney, the story may have been different, but effectively it had to wait until the opening of the service on the island before it could

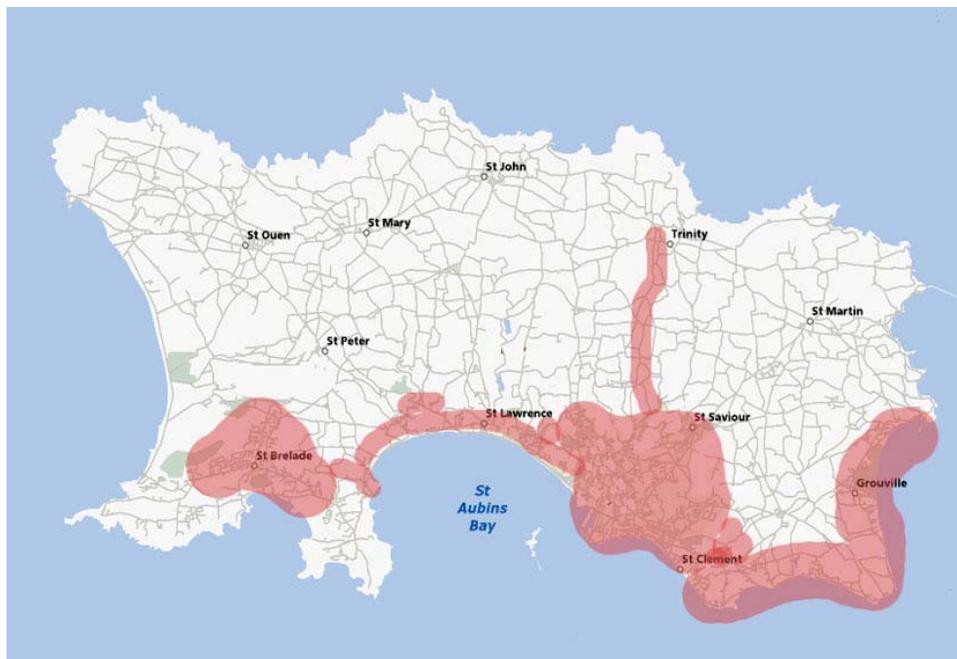
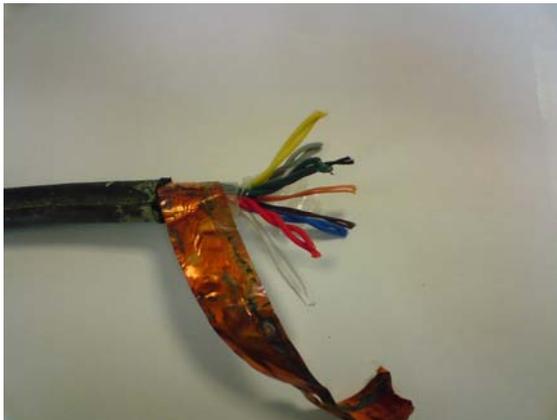


Fig 8. Rediffusion coverage area circa 1980

offer the additional feature. Nevertheless, in order to attract custom to its wired service, it offered black and white renters a “colour rebate” or future discount on an upgrade when the service became available from local broadcast transmitters.

In May 1971 the MD of the company Quentin L Cazalet died aged 65. He had been with the company since its inception and had been an active contributor to the Jersey business scene also having had interests in many local companies. The UK parent company later appointed one of its directors, Stephen W Wells, to the post.



**Fig 9. Rediffusion trunk distribution cable**

In the event colour TV did not arrive until June 1976 when the ITA opened its service, the BBC service, after some indecision, decided to share the same transmitter in time for Christmas the same year. Over the past years until this event, the company had concentrated on its retail business where it had the advantages of a large parent company on the wholesale purchase side. This made its retail business in Jersey and Guernsey highly profitable. During

this period technologies were changing and although Video Cassette Recorders (VCR) using the Philips system were then becoming available, it was not until 625 line transmissions were available that they could be sold in Jersey. Audio-visual retail, therefore, was largely in the television and stereo system market.

Following the opening of colour broadcasts the company put into place a programme to upgrade its cable subscribers to 625 line working deploying four conversion teams. More than 4000 rented cable sets needed modifying or replacement, although dual standard sets had been provided for some time there were still a few 405 line units in place.



**Fig 10. Multicore subscriber drop cable**

In 1977 Redifon computers were provided to the Jersey Electricity Company as part of an updated billing system. Redifon Computers Limited was a Crawley based subsidiary of the parent company that had developed from telecommunications equipment manufacturing into computers. It was later renamed Rediffusion Simulation Limited as it took a position in the aircraft simulation and training market. The computer was provided through Rediffusion Reditronics Limited, the new name

for TVR since the previous year. TVR and Reditronics had provided both research and development as well manufacturing for many years. Much of its output was exported to other Rediffusion group members as well as outside customers. It also supplied the local market with products such as hotel music systems using multi-track magnetic tape based machines as well as public address systems and specialist equipment for the cable network.

### New Cable Services



**Fig 11. Local distribution amplifier**

From 1972 the UK parent company had entered the community television (CATV) market, providing local content based services to several UK towns. In 1976 in Hastings it also tested the world's first optical fibre based distribution system. Later in 1980 the UK government issued licenses for a number of cable television subscription channels, of which Rediffusion was awarded 5 channels which were grouped under the name of Starview.

Initially this service was not

available outside the UK mainland because of the lack of availability (and expense) of bandwidth for distribution on submarine cables. However, in 1983 the geostationary telecommunications satellites operated by EUTELSAT (owned by a consortium of European telephone operators including BT) made channels available to broadcasters for the distribution of programming. This enabled Rediffusion Jersey to receive the UK cable channels directly via satellite communication. Consequently, the company proposed a three year experiment to introduce additional cable channels subject to a licence from the Telecommunications Board, which since the 1973 law had the exclusive rights to licence telecommunications systems including cable television systems. The company planned a three year experiment and invested £250,000 on two 3.7m satellite receiving dishes and decoding and distribution equipment at its La Pouquelaye site. Its existing network could carry up to 6 channels, meaning an additional 2 channels could be added following the start-up of Channel 4 in the previous November. At that time around 6,500 homes were passed by the cable network in St Helier and a further 5,000 elsewhere. A certain amount of additional network equipment would be required, such as local amplifier systems (Fig 11) and minor modifications to the main distribution network trunks. The experiment would first enable St Helier residents to take up the service and if successful a more ambitious investment would upgrade the entire network to up to 100 channels. This upgrade was estimated at around £10M. The monthly subscription for the two channels, one of which would mostly show films, would be an additional £8.

However, before the experiment could begin a number of official hurdles had to be negotiated. Planning permission for the dishes was granted early in 1984. In May the



Fig 12. CableVision logo

States of Jersey Broadcasting Committee gave its approval while reserving its right to vet programmes. Later that month the Telecommunications Board granted a two year licence beginning on 1 December but applied conditions that prevented the transmission of “adult” programmes and also the prohibition of local advertising, following lobbying by Channel Television. The two receiving dishes, one directed at Intelsat and the other at European Communications Satellite, were commissioned in July. Everything went according to plan and the newly named CableVision (Fig 12) service on Rediffusion cable channels 5 and 6 was launched on 1 December, with the company claiming over 400 pre-booked subscribers, connections increased to over 1,000 by the year end. At the official opening ceremony the first face seen on the new channels was that of June Allez, who had also been the first presenter on Channel Television some 22 years earlier. Also at the ceremony were members of the Rediffusion (CI) Limited board, members of the Broadcasting Committee and the Telecommunications Board.

The restriction on local advertising in the licence was challenged in February 1985 by Senator Dick Shenton. He observed that the States Policy Advisory Committee had concluded that the inclusion of the restrictive clause was wrong, provided that the advertising content was adequately monitored. The Telecommunications Board, however, refused to delete the clause saying that there was a lack of clarity of how the adverts could be monitored. There was some confusion on whose responsibility it would be and what laws applied. However, Shenton condemned this response as “high handed” and avowed to bring the matter before the States. The motion was presented in April and after a long debate the proposition which was robustly attacked by the Telecommunications Board members was passed by 22 votes to 21 and the Board was duly required to remove the restriction, replacing it with a clause that referred to the IBA code of advertising practice and the UK Cable Authority, and the discretion of the Broadcasting Committee. Cablevision replaced its Screen Sports channel with the Sky Channel on 1 May 1985 which was launched on UK cable networks prior to the launch of the satellite service. By the end of 1986 the Rediffusion retail division was also offering satellite television receivers to its customers as an alternative to its Cablevision service. An eclectic mix of a dozen English and continental channels were offered at £28.00 per month or outright purchase of equipment at £605.00. While this was not a cheap alternative it was a sign of things to come.

## Changes

By now, however, things were changing at the top of the BET organization. In this respect Rediffusion was finding the competition in the UK cable TV market increasingly stiff. Following its ability to win only one of the UK governments cable franchise licences’ (at Guildford, Surrey), Rediffusion’s parent company, BET, started restructuring its business and selling-off those parts which it did not deem as central to its activities. Its networks were now lagging the new technologies introduced by the new entrant rival cable companies and so it decided to dispose of its research and

development subsidiaries. Thus Reditronics (Jersey) Limited and its workforce of 106 was acquired by SCK Holdings Limited, a venture company headed by MEP Sir Jack Stewart-Clark, former managing director of Philips' subsidiary Pye of Cambridge. Rediffusion continued to share the La Pouquelaye site with the new owners. The takeover was not however a success. The loss of Rediffusion contracts, particularly of the pre-recorded taped background music business, as a result of the reorganization of BET's structure, saw the closure of the business by the end of 1987. However, Channel Television purchased the site for £1.8M favouring the move over upgrading its existing studios at Rouge Boullion, St Helier.

BET's interest in cable television had now virtually ceased. In March 1988 its remaining shares in the Rediffusion (Jersey) Ltd cable division were sold to a consortium of investors including Peter Funk, Deputy Derek Maltwood, the Guiton Group and CTV. The new company headed by chairman Peter Funk was renamed Jersey Cable Limited and Steve Wells remained as MD. Plans were announced to increase the cable channels on offer to more than 30 with network expansion to cover more than 85% of the island's population. At the time of the takeover the existing network passed over 7,000 homes from Gorey in the east to St Brelade in the west and served 1,450 subscribers. (At the time 7,000 homes would have represented about 20% of the population). The takeover and expansion plans came as a surprise, not least to the Telecommunications Board which was somewhat wrong-footed as the current licence only permitted 6 channels.

BET finally disengagement with the island in July 1988 when it sold its remaining businesses to Channel Television. Channel had already entered the retail and television rental market in June 1982 when it acquired the business of Regent Radio, Beresford Street, St Helier (opposite the Rediffusion retail shop) rebranding the business as Channel Rentals. Channel purchased for the sum of £5.5M the Rediffusion retail and satellite reselling businesses in Jersey, Guernsey and Alderney as well as its security company Automatic Alarms Limited totalling 135 staff. Interestingly, the original merger had been proposed by Rediffusion some time earlier but talks between the companies had resulted in stalemate. However, when BET finally decided to concentrate on its core support business, Channel was able to conduct a reverse takeover funded by a rights issue of 770,000 new shares offered at £3.90 and borrowings of £2.5M. The Rediffusion turnover for the previous year had been £4.3M of which £2.27M had been for television rentals and generating overall profit of £650k. After the acquisition the merged company had an estimated 95% share of the rental market in Jersey.

Rediffusion had been a part of island life for almost 40 years. It had sponsored many events including international golf and local football. Over the years it had also supplied the public address system for many major events around the island, including the Battle of Flowers. Many of the original shareholders and directors in the company had been local businessmen and it had enjoyed a good reputation for supplying first class training and employment to local workers in its varied activities.

## Jersey Cable



Fig 13. Jersey Cable logo

After the buyout of the Rediffusion network, Jersey Cable continued to offer the same services. Steve Wells remained as managing Director of the company, transferring from Rediffusion. CTV increased its shareholding from 2% to 11% through the purchase of Rediffusion Channel Islands Limited retail division as a wholly owned subsidiary, but overall it was business as usual. Other shareholders included the Guiton

Group, Derek Maltwood and Peter Funk, the company chairman who was also chairman of Jersey registered IVS Cable Holdings Limited. At takeover the network served approximately 5,000 subscribers of which 1,450 also took its CableVision service. The network stretched from St Brelade in the west of the island to Gorey in the east (Fig 8).

During 1988 the development of the Sky television satellite system brought more competition to the television market, although initially the cost of connecting to satellite television was high and installing a receiving dish was complicated by outdated planning regulations. But gradually the satellite companies expanded their offering, first Sky opened its Astra satellite service with four channels and in 1990 British Satellite Broadcasting would launch five channels in competition. As the UK uptake grew prices for equipment came down. It was clear that in order to retain its market share that Jersey Cable would need to expand its offer beyond the two additional channels not offered off air.



Fig 14. Jersey Cable distribution amplifier and manhole cover

In late 1989 Jersey Cable began planning an upgrade to its network to increase the number of channels on offer. Already at this time in the UK cable networks were expanding and the availability of media was growing. However, at this time CTV was busy bidding to renew its Channel Islands franchise and decided to dispose of its shareholding in the company. Nevertheless, Peter Funk, the chairman stated that while this was disappointing it would not affect the plans for network expansion. The company pressed ahead with a request to the Telecommunications Board to amend its licence to permit expansion from 6 to 30 channels. The company had continued to

operate from the Rediffusion shop in Beresford Street which also served as the Channel Rentals outlet after the takeover, but when CTV withdrew from the consortium Jersey Cable had to find new premises. For a while it operated only from the cable distribution centre at La Pouquelaye but in 1991 it opened a retail outlet at 3a Colomberie.

The company pressed ahead with a request to the Telecommunications Board to amend its licence to permit expansion from 6 to 30 channels. In order to increase the number of channels offered it would be necessary to upgrade the distribution network from twisted pair to co-axial or fibre-optic cable in order to enable the additional bandwidth required for the transmission of all the additional channels. In its early days fibre optic cable was delicate and not suitable for overhead suspension, thus it would be necessary to install at least the main trunks of this new network in underground ducts. This required considerable investment in civil works and thus would require a long-term business plan. The purchase of the Rediffusion network therefore amounted to no more than the value of its existing subscriber base.

In the spring of 1990 the Telecommunications Board still had not responded to the request. Funk was becoming frustrated with the lack of progress and so went to the press to express his dissatisfaction. The Director of Telecommunications, Tom Ayton, responded to this publicity by blaming the lack of clear regulation for cable television in Jersey. However, Enid Quenault, president of the Broadcasting Committee speaking in support of Jersey Cable, suggested a temporary licence.

The existing network served much of the social housing developments in and around St Helier, and the Housing Committee expressed a preference for cable over a proliferation of television aerials and satellite dishes. Funk also believed that the Telecommunications Board was dragging its feet because it feared that the new proposed fibre-optic system could be used in competition for telephony, but he denied that this was the intention and underlined that Jersey Cable was primarily a media supplier. Under pressure from States' members the Telecommunications Board sought advice from the Attorney General on the legalities of any potential licence as when the telecommunications law had been drafted there was no consideration of cable television systems.

In November 1990 Peter Funk was elected chairman of the UK Cable Television Association, the industry body that at that time represented more than 50 members with some 125 cable television franchises across the UK. The cable system was then at its peak serving up to 14M homes, IVS itself had around 250,000 subscribers in Andover, Oxford, Salisbury and Stafford.

The Telecommunications Board finally announced in May 1991 that it would issue a licence up to the end of 1993. This was issued on the understanding that suitable legislation for the control of cable television would be adopted when the UK Broadcasting Act came into force which, it was hoped, would be in 1991. A further stipulation for the building of the network was that it should be installed underground. This would of course greatly increase both the time and cost of deployment. However, Funk felt satisfied with the new licence and announced that work would continue the upgrade work that it had already begun to pass up to 7,500 homes to connect its existing 5,000 subscribers to the new network.

In May 1993, the Telecommunications Board proposed a new 10 year licence. This was to be tightly controlled in the absence of a specific Cable Television Law which had been expected since 1990, although other priorities had prevented the drafting of such legislation. The States approved the issuing of the licence the following month. The licence included conditions such as the need to install cable solely underground and also limiting the ability of the company to use its network for anything other than the delivery of television and associated audio.

Jersey Cable had a much lower profile than Rediffusion and did not play such an active role in island affairs. It got on quietly with the upgrade of its network adding extra channels to its service as they became available. In November 1993 Steve Wells retired as managing director and was replaced by ex-Rediffusion colleague Brian Hamilton. Hamilton had joined Rediffusion in 1976 and had transferred to Jersey Cable on takeover. He was formerly its technical director and had managed the upgrade programme. By the end of that year the company offered a choice of 22 channels in addition to the four terrestrial broadcast services.

In 1993 the separation from CTV was completed with the relocation of the Jersey Cable technical department to Springside Industrial Estate. The old transmission network was now fully shut down as the upgrade of the network was now complete. Although all its customers were now connected via the new underground fibre-optic trunk network, the old twisted pair overhead network was still largely in place and was abandoned as it stood. The original plan for the network had, however, been considerably truncated and effectively was limited to the main built-up areas around St Helier, encompassing much of the States' social housing developments and larger private estates.

While Jersey Cable relied on satellite channels for its network in the UK many cable franchises were able to share content over relatively low cost circuits leased from BT or other network operators. The cost of individual satellite systems was still relatively high and thus cable was an economic alternative for many Jersey viewers. But by the mid 1990s satellite television was beginning to have an impact on the profitability of cable television in the UK. Thus Peter Funk decided in 1995 to concentrate on Jersey Cable. The IVS business was sold to KPN of the Netherlands and the 59% of Jersey Cable shares held by IVS was sold to Carveth Limited one of the businesses in which Funk had a controlling interest.

By 1997 the number of subscribers had reduced to around 1,300 although the number of channels on offer had increased to over 50. Satellite receiver systems had reduced in price and Sky had become more aggressive in its marketing. However, when Channel 5 Television began broadcasting in the UK Jersey Cable ran a series of adverts that proclaimed that Channel 5 would only be available to cable subscribers in the island. Channel 5 would not be relayed on Jersey terrestrial television broadcasts from Frémont Point as there was no available frequency for the additional channel. The island's geographic location close to France had a limited the ability of the island to utilise the same broadcasting plan as the UK. Thus C5 would remain as a cable and, eventually, a satellite station until the introduction of digital terrestrial broadcasting scheduled for 2010. In October of that year the racing channel was added to the network channel choice in an attempt to increase subscriptions.

Finally, in November 1997 Jersey Cable was absorbed by the recently formed Newtel Holdings Limited. Newtel comprised a number of investors including the Jersey Electricity Company and Carveth Limited although a number of other smaller investors also had holdings. The newly structured company was to shift the business focus towards telecommunications, effectively relegating the cable television business to the back burner.

As part of the revamp of the business, the Jersey Cable shop on the corner of Colomberie and Snow Hill, St Helier, was fully refurbished and at the same time extended to incorporate the telecommunications business. Newtel continues to supply cable television services to a diminishing subscriber base, the majority of its customers being within social housing developments. Cable television in the UK and particularly in Jersey faces increasingly stiff competition from satellite services, both subscription and free-to-air. Newtel was licensed as a telecommunications operator in January 2003 by the Jersey Competition Regulatory Authority under the Telecommunications (Jersey) Law 2002. The business continues to provide both telecommunication and cable television services.



