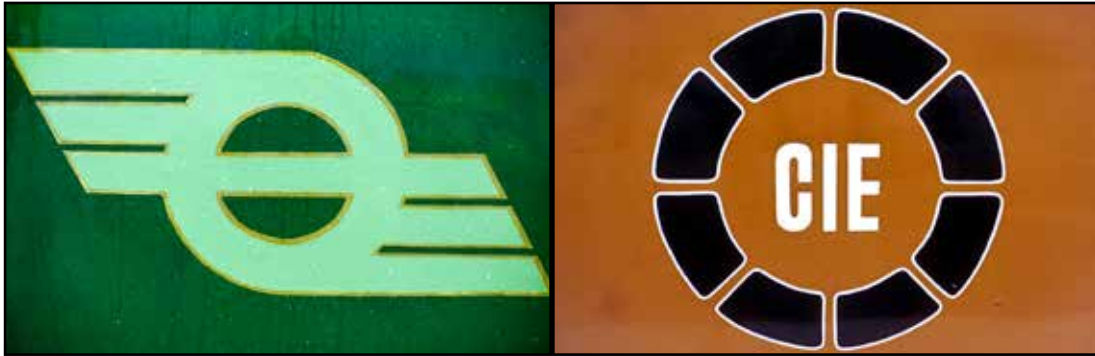




Irish Railway Factsheet: C6́oras Iompair 6́ireann



CIE emblem and logo (1946 / 1966)

At **C6́oras Iompair 6́ireann's (CIE)** first Annual General Meeting, held in the Gresham Hotel on 14th March, 1946, the Chairman outlined the company's plans for the future of the railways. Rates and fares were to be cut by up to 20%, there would be a progressive conversion to diesel traction, main line stopping services would be withdrawn and branch lines closed. Engines and electrical equipment for five diesel shunters to be built at Inchicore Works had been already ordered.

During the remainder of 1946 services were gradually improved as fuel supplies improved and it appeared as if the railways were heading for better times. However the winter of 1946/47 proved to be the worst since records began. By the end of February all passenger services, with the exception of four night mails, had ceased to operate. Goods services continued to operate, but only on three days a week. To counteract problems with fuel supplies, CIE converted 97 steam locomotives to burn oil, without which CIE's rail services would have been virtually non-existent during this period. Relief came to CIE in March 1947 with the arrival of coal from America. However it was June before supplies had built up sufficiently to allow normal services to be resumed. The first of the diesel shunters referred to at the 1946 AGM entered service in 1947, with the remainder following the next year. By this time CIE's finances were deteriorating rapidly and the small profit of 1945 had by 1947 turned into a deficit of £1 million.

On 1st July, 1948 the Government asked Sir James Milne, last General Manager of the Great Western Railway, to investigate the state of internal transport in Ireland. His report, published before the end of the year, suggested that the use of large main line diesel locomotives in Ireland was unwarranted and that their introduction would not be the answer to CIE's problems. Milne considered that the present train service, both passenger and freight, was inadequate to meet the needs of the community. He suggested that speeds should be brought up to pre-war levels as soon as possible and that a more frequent passenger service, operated by lighter trains would be more suitable to meet needs. To this end, he recommended that a small number of railcars, similar to those being ordered by the GNR(I), be acquired. The report also noted that branch lines '.... are part of the national system of highways' and recommended that they should not be closed '.... if their retention is necessary or desirable in the public interest'.

Examining the current rolling stock situation, Milne noted that the average of the locomotive fleet

was 51 years and that 25% of the fleet was out of service at any one time awaiting repairs. The carriage stock had an average age of 47 years, with again more than a quarter awaiting repair. Goods stock was in a better position, the average age being 32 years and only 7% out of service. He recommended that the size of the locomotive fleet be reduced by 100 and that by judicious selection of locomotives for scrapping the number of classes in the fleet could be substantially reduced. He also recommended that fifty new steam locomotives be built over a five year period.

Following the publication of the Milne Report the Government announced that all public transport services operating entirely within the state were to be amalgamated into a single nationalised undertaking. Before this happened, the last CIÉ trams had run in Dublin, the termination of services on the No. 8 route to Dalkey on 3rd July, 1949 marking the closure of the system. The new company, which retained the title CIÉ, came into being on 1st June 1950 and was charged with providing an efficient, economical, convenient and fully integrated transport system.

CIÉ was faced with the problem of upgrading its rail services as a matter of urgency. The first of the two main line diesel locomotives built at Inchicore Works entered service in April 1950, following completion of trials. An order was placed with A.E.C. of Southall towards the end of the year for sixty diesel railcars of a similar design to those already supplied to the GNR(I). These were delivered between 1952 and 1954. Meanwhile CIÉ had decided, contrary to Milne's recommendations, to embark on the complete dieselisation of its railway system. The Board felt that the elimination of steam traction, the building of new rolling stock and the modernisation of passenger and goods facilities would result in substantial economies which gave every hope of the company's finances being put on a sound footing once and for all. Accordingly, CIÉ placed orders for over 100 diesel locomotives and parts for a further nineteen which were to be built at Inchicore Works. The bulk of the order, 94 locomotives, was placed with a consortium of four English companies, representing at that time a British record order for diesel-electric locomotives. This was for sixty 1,200 h.p. Co-Co locomotives and thirty-four 550 h.p. Bo-Bo locomotives, CIÉ classes A and C respectively. The first A Class was delivered to Inchicore Works in July 1954, with the first C Class arriving in February 1957. Deliveries continued until 1958.

At the same time as the company was ordering and taking delivery of its diesel locomotives, CIÉ was engaged in a major construction programme to upgrade its passenger and goods rolling stock. This was to see almost 500 new coaching stock vehicles entered service over a fourteen year period from 1950. The bulk of these vehicles were constructed in the traditional manner, i.e. having a steel-clad wooden framed body mounted on a steel underframe. There were a number of exceptions in the method of construction; the first of these was two series of coaches supplied by Park Royal in 1955/56, in which the timber framing of the body was replaced by a metal frame, and secondly the two series of Cravens coaches supplied in 1963/64 in which the body and underframe were integrally constructed. The forty Cravens can be considered to be CIÉ's first truly modern passenger vehicles. A third series of Cravens was introduced in 1966.

The Government had also authorised CIÉ to develop a prototype steam locomotive capable of burning either turf or oil. Trials were undertaken with a converted 2-6-0 locomotive, No. 356, following which work began on the construction of the prototype turf burner. The result was a double bogie locomotive of the 0-6-6-0 type, 60 feet long, with two cabs and weighing an estimated 118 tons fully fuelled. The firebox and boiler were centrally mounted on the frame between the two cabs. At each end of the locomotive there was a six ton capacity fuel bunker and a 1,350 gallon capacity water tank. Trial running commenced in August 1957 but the development of the 'Turf Burner' was overtaken by the changeover to diesel traction and it only worked a small number of transfer goods trains between North Wall and Kingsbridge and was never used on a passenger train. The locomotive was scrapped in 1965.

It initially appeared that the Board's forecast of the railways financial situation would hold true. Losses incurred on the railway working account fell from £1.6 million in 1951/52 to £724,000 in 1954/55. However, in the following year this figure rose to £1.2 million, which led the Government to establish another inquiry into the affairs of CIÉ. Headed by Dr. James Beddy, a Dublin economist, the committee's report, which was published in May 1957, expressed the view that the country's railway system had been built, equipped and staffed to meet needs which no longer existed. While the committee was not prepared to recommend the complete abandonment of the railways, it did recommend that more than half the system and approximately three-quarters of the stations and halts be closed and that there be a much greater degree of co-ordination between road and rail services. Also in 1957, at the end of September, the GNRB was dissolved and its assets in the Republic and approximately half the locomotive and rolling stock fleets passed to CIÉ.

The Transport Act 1958 required CIÉ to operate within an annual subvention of £1¾ million for each of the five years up to 31st March, 1964. A further Act, passed in 1964 extended this period to the end of March 1969 and increased the subvention to £2 million for the second five year period. Between them, the two Acts led to widespread closures of lines between 1959 and 1967, including the Hill of Howth Tramway, all the remaining narrow gauge lines, the entire west Cork system, Clonmel to Thurles, Mallow to Waterford, Portlaoise to Kilkenny, Harcourt Street to Shangannagh Junction and many more. The total route mileage fell from 2,149 miles in 1959 to 1,334 miles in 1967.

By the beginning of 1958 CIÉ had almost eliminated steam traction from its system. However, with the acquisition of half the GNRB's assets CIÉ received an additional 83 steam locomotives, along with 1 diesel locomotive and 24 railcars of varying types. By this time CIÉ was encountering problems with the A Class, problems with the Crossley engines leading to low-availability and unreliability in service. When the Board decided to finally end the use of steam locomotives in the early 1960s two batches of locomotives were ordered from General Motors. The first batch, the B121 Class, which was delivered in 1961, were basically modified 950 h.p. switching (shunting) locomotives with a single cab. The fifteen locomotives proved an instant success, the only drawback being the single cab, which necessitated the locomotive being turned at the end of each journey. The second batch of thirty-seven locomotives (B141 Class), delivered in 1962, were fitted with a cab at each end to overcome this problem. As a result of these deliveries, regular steam working ceased in April 1963. A third batch of GM locomotives (B181 Class) were delivered in 1966. These were basically similar to the B141 Class, but were equipped with a 1,100 h.p. engine.

In 1966, CIÉ renamed its fifteen principal railway stations in honour of the executed leaders of the 1916 Easter Rising: Heuston (formerly Kingsbridge), Connolly (Amiens Street), Pearse (Westland Row), Ceannt (Galway), Colbert (Limerick), Casement (Tralee), Kent (Cork), Clarke (Dundalk), MacBride (Drogheda), MacDiarmada (Sligo), McDonagh (Kilkenny), Plunkett (Waterford), O'Hanrahan (Wexford), Daly (Bray) and Malin (Dún Laoghaire).

To improve freight services the company initiated a modernisation programme aimed at reducing costs. Industrial sidings were laid to cater for specialised traffics such as fertiliser, mineral ores and oil, which saw carrying of bulk traffics rise from ¼ million tons in 1964 to over 1 million tons by 1969. Liner trains, operating between special terminals in Dublin, Cork and Limerick began running in 1969.

By the second half of the 1960s CIÉ was experiencing serious difficulties with its Crossley engined locomotives, the A and C classes. The A Class were not capable of handling the work given to them with the reliability expected, while the C Class, purchased primarily for branch line work, had been displaced from these duties by the large scale line closures and were unsuited to other work because of their low power. In 1964 a decision was taken to try and improve the availability of the

C Class by fitting them with higher powered engines. At that time General Motors were only selling complete locomotives and would not supply engines on their own and, as a result, two of the C Class were fitted with Maybach 980 h.p. engines in 1964/65. While these proved successful in traffic, it was CIÉ's intention that the remainder of the class and the entire A Class would be fitted with GM engines. After negotiations, GM finally agreed to supply two engines in 1967, to serve as prototypes for the re-engining of the A Class. Trials in 1968 proved the conversions to be a total success and over the following four years the remaining ninety Crossley engined locomotives received replacement GM engines. The re-engining programme resulted in a large increase in the number of locomotives available for service on a regular basis.

Despite these cutbacks and changes in operating practices, the net deficit on the railway's working account had exceeded £3 million by 1969. The Government, in response, commissioned yet another report into the activities of CIÉ, the 1970 McKinsey Report. This concluded that it would be more expensive to the nation to close the railway than to make selective modifications and improvements. The report then went on to recommend that the closure of under-utilised passenger stations and freight depots, together with a reduction in route mileage and staff numbers should be implemented. The remaining lines and services should receive further capital investment.

Following the publication of the McKinsey report in July 1971, CIÉ prepared proposals for changes to passenger, wagon-load freight and sundries operations. New mark IId, air-conditioned coaches had been delivered from British Rail Engineering in late 1972 and early 1973 before changes to the operation of passenger services were implemented with the introduction of the 1973 timetable. These included the operation of a more frequent service at higher speeds, using shorter trains. This allowed for improved utilisation of resources and the withdrawal of older rolling stock. These changes, together with an intensive marketing campaign and the introduction of new ticket types, boosted passenger traffic by 10%.

Freight traffic had traditionally been handled in trains of loose-coupled wagons, running at a maximum speed of 35 m.p.h. This led to a poor utilisation of the wagon fleet and track capacity. The plan involved the complete changeover to vacuum braked rolling stock, allowing speeds to be raised to 50 m.p.h., with sundries traffic being carried in containers. The number of locations handling wagon-load traffic was reduced to 56 and for sundries traffic this figure came down to 38. Mechanised handling methods were introduced at those depots which remained. The carriage of livestock was discontinued in 1975. All told, these changes resulted in a 66% reduction in the size of the wagon fleet.

Further line closures took place during the 1970s; Claremorris to Collooney, Tralee to Listowel and the Loughrea, Ardee and Castleisland branches. On a more positive note, CIÉ commissioned the CTC system on the main lines out of Heuston, bringing Inchicore to Ballybrophy, Cherryville Junction to Athy and Portarlinton to Tullamore, a total of approximately 95 route miles, under the control of a new power signal cabin at Connolly station. Eighteen new locomotives, again from General Motors, were introduced in 1977. Visually resembling a stretched 141/181 Class, the new locomotives had a Co-Co wheel arrangement and were of significantly higher power, 2,450 h.p.

The 1970s were marred by three serious accidents: Gormanston, Gorey and Dalkey. The first of these occurred on 21st October, 1974 when a run-away empty push-pull train collided with an empty railcar as the trains approached Gormanston station. The force of the collision derailed the railcar and caused it to collide with an Up suburban train which was standing in the station at the time, killing two passengers. On the last day of December 1975, five people died when an underbridge near Gorey was dislodged by an overheight road vehicle as the morning Rosslare to Dublin service approached at speed. The locomotive derailed as it crossed the bridge and ended up

on its side, while five carriages were totally destroyed. The decade was nearly at an end when, on 15th November, 1979, another serious accident occurred on the Dublin suburban system. An early morning commuter train was halted at Dalkey tunnel by a faulty signal and was hit from the rear by the following train. Both trains were crowded, many of the passengers being school-children, but, fortunately this time, there were no fatalities.

All through the 1970s, the deficit continued to rise reaching £39.8 million in 1979 and leading to the Government once again calling in McKinsey to examine CIÉ. The recommendation from the consultants this time centred on the reorganisation of CIÉ's structure and the division of the company into three new operating companies; railway services, provincial road passenger services and Dublin bus services. In so far as the railways were concerned. McKinsey concluded that: no strategy for increasing railway volumes could be justified; a reduction in the size of the railway network would offer no significant economic advantages; and the cost to the State over 25 years of either keeping or closing the mainline network would be broadly similar. If the network was to be retained, then the report recommended that steps be immediately undertaken to improve its operational effectiveness and that a fresh division of policy making and executive responsibility between the Government and the railway's management was needed.

Even as McKinsey was undertaking the examination of CIÉ's activities, the company's worst rail accident occurred. On 1st August, 1980 the Friday of the Bank Holiday weekend, the 10.00 hours express from Dublin to Cork was derailed as it passed through the closed station of Buttevant, resulting in the deaths of eighteen people. A notable feature of the accident was the almost total destruction of some of the carriages in the train, while others were virtually unscathed. Those which were destroyed had been built to the traditional design, with a timber framed body mounted on a steel underframe, while those which survived were of the more modern, integrally constructed Cravens type.

Studies carried out in the early 1970s had recommended the construction of a rapid transit system for the Dublin area, with electrified lines from Howth to Tallaght and Bray to Blanchardstown, including underground sections in the city centre. As a first stage of the completion of the rapid transit system, the Board of CIÉ approved the electrification of the Howth to Bray line in 1977. However, Government approval for the scheme was not forthcoming. Meanwhile the condition of the rolling stock and signalling systems continued to worsen. Rolling stock had to be withdrawn as it became unfit for service, break-downs were becoming common-place and the signalling system was prone to failure. A large, but decreasing, part of the service was provided by de-engined A.E.C. railcars operating in as push-pull, powered by re-engined C Class locomotives. The cost of maintaining worn out equipment was escalating. By 1978 the Board was forecasting the complete collapse of the system within three to four years. Finally, on 31st May, 1979, in the midst of the country's first election for members of the European Parliament, the Government announced that the Howth-Bray electrification project was approved.

The project's main points included: the installation of a computer based signalling system covering the 36 kms of electrified line and 15 kms of approach lines; the renewal of the permanent way; electrification of the line; the modernisation of 23 stations and the construction of two new ones; and the provision of new rolling stock. Tenders for the supply of rolling stock and the supply of equipment and services were invited at the end of 1979. In February 1983 the Howth Junction to Howth section of overhead line was energised. In the same month the first of the forty electric multiple units was delivered to Dublin. Each unit consists of a semi-permanently coupled power car and trailer, both having a full width cab at one end. The two-car unit is 42 metres long and has a crush load capacity of 500 passengers. Trial running of the emus began in March 1983 on the Howth branch, being extended to cover the full route by December of that year. Public services commenced operating

on 23rd July 1984 and the system was officially inaugurated by the Taoiseach on 22nd October of the same year. The new system, DART - Dublin Area Rapid Transit, was an instant success. The response from the public and media was one of immediate and sustained enthusiasm, passenger journeys rising from 5 million per annum in 1983, to nearly 12 million in 1985.

CIÉ had been pressing the Government for some time for authority to introduce new main line passenger rolling stock, but a proposed joint-venture with Linke Hoffman Busch, which would have seen a carriage building plant set up at Inchicore Works, had been rejected. In the aftermath of the Buttevant crash and the publication of the McKinsey report, the Government, on 24th April announced the approval of a project to assemble of 124 main line carriages at Inchicore. The new stock was based on the British Rail Mk III design, but fitted with power operated external doors. Severe technical problems were to be experienced with these doors, leading to the expenditure of considerable time and effort in rectifying the problems and the generation of much adverse publicity for the company. All told, 100 of the Mark IIIs were built for main line service, the first entering service in 1984. The remaining 24 vehicles were constructed as suburban coaches by Iarnród Éireann, after the formation of that company.

However, before the first of the MkIIIs could enter service, another serious accident occurred on the CIÉ network. On 21st August, 1983, the Up evening service from Tralee failed near Cherryville Junction and was run into from the rear by the following service from Galway. Seven passengers died in the crash and, once again, there was severe damage to rolling stock of the older design.

The October 1984 report 'Building on Reality 1985-1987, set out the Government's views on the future development of transport services in Ireland. Dealing with CIÉ, the report recorded the Government's decisions with regard to the McKinsey recommendations: the three operating companies (rail, Dublin Bus services and provincial bus) were to be established, but with CIÉ as a holding company; DART interest payments would be taken over by the State; rail sundries and road freight services would be discontinued unless they became profitable; a Dublin Transportation Authority would be established; and a package of retrenchment measures would be implemented on the rail passenger business with no new substantial investment in the railways after the completion of the mainline carriage replacement programme. This last point was the most serious in terms of the future of the railway. It was to result in a directive from the Government to CIÉ to reduce, in real terms, operating expenditure by 20% by 1989. The clear intention of the Government was that the railways would have to survive on a 'mend and do' basis in future. There would be no further replacement of life expired assets or developments to the system.

Following on from the publication of Building on Reality, the design of the structures of the three operating subsidiary companies and the holding company was undertaken and, in December 1986 the Transport (Re-organisation of Córas Iompair Éireann) Act 1986 was passed. This led to the setting up of the three major operating subsidiaries: Iarnród Éireann/Irish Rail, Bus Éireann/Irish Bus and Bus Átha Cliath/Dublin Bus, all of which were incorporated on 20th January, 1987.



Mixed CIÉ passenger and goods train at Limerick Junction, hauled by locomotive No. 304, circa 1955. (Photo © Brian K Green - IRRS Archive)



CIÉ turf burning locomotive CC1, Inchicore Works, 20 September 1959. (Photo © Tom Davitt - IRRS Archive)



1962 built CIÉ diesel B148, Inchicore Works, 20 July 1963. (Photo © Norman McAdams - IRRS Archive)



DART set 8302 entering Dalkey Tunnel, Co. Dublin, 14 August 1986. (Photo © Seamus Lattimer - IRRS Archive)