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CABINET.**FUTURE OF THE IRON AND STEEL INDUSTRY.**

MEMORANDUM BY THE MINISTER OF SUPPLY.

IT will be remembered that in the announcement made in the House of Commons on the 19th November, 1945, about the Socialisation of Industries, it was stated that the Government had decided to defer a decision about the Iron and Steel Industry until the Report by the British Iron and Steel Federation containing the Industry's plans for future development had been received and considered. This Report was received in December last but a corresponding report dealing with Iron Foundries has only just been submitted by that section of the industry, although a short interim report was submitted in February concerning the production of foundry pig iron which is the raw material of iron castings and wrought iron.

Description of Industry.

2. The term "iron and steel industry" is generally used to describe the operations involved in converting iron ore or scrap into iron or steel shapes to be used by other industries. There are in effect a number of industries with varying degrees of relationship both in the physical and commercial fields. The following are the very broad divisions :—

- (a) Mining ore.
- (b) Production in blast furnaces, from ore and coke, of the different types and qualities of *pig-iron* required by the steel industry, and the iron foundry and wrought iron industries.
- (c) Production from pig-iron and/or scrap of *steel ingots* for further manipulation as in (d) below and of *steel castings* for engineering industries.
- (d) The manipulation of *steel ingots* through different stages into shapes by rolling into plates, sheets, strip, rails, sections, bars, rods, by drawing into tubes and by forging into wheels, axles, engineering parts, &c.
- (e) Production from pig iron and scrap of *iron castings* for engineering and building industries and heavy pipes. Many engineering and other works have their own foundries.
- (f) Production from pig iron and scrap of *wrought iron*, and its manipulation into bars, &c. This is a diminishing section.
- (g) Production of *alloy steels, high speed and tool steels*. These are special steels mainly produced in the Sheffield area. Special pig iron and scrap is used and alloyed with nickel, chrome, molybdenum, tungsten, vanadium, &c. Ingots are produced in small furnaces, many electrical, and then cast, forged or rolled into special shapes.

3. The operations of individual companies vary greatly. In general, heavy steel products such as plates, rails, joists, sections and tubes are produced in continuous operations at one works, starting from iron ore and scrap. There are about 50 steel ingots makers who Roll Steel and in addition 25 firms who purchase steel for heavy Rolling. At Ebbw Vale, South Wales, the works of Messrs. Richard Thomas Baldwin start with iron ore and finish up with sheet and tinplate. A few other sheet and tinplate works make their own steel but some 40 other works start with the sheet and tinplate bars purchased from steel-makers. While most of the heavy steel-makers go on to produce light sections

and bars, there are about 100 independent re-rollers who only roll billets and sheet bars into the final required shapes. In the case of wire, about half the production is by 8 firms which produce the wire rods, but there are about 80 independent wire-drawers who have to purchase rods. Iron and steel castings and forgings are produced, not only by iron- and steel-making firms and independent foundries, but by engineering and other firms. There are about 1,750 iron foundries of varying sizes in the country.

A considerable number of steel-making firms make finished products such as bolts, nuts, screws, rivets, washers, wire goods of various kinds, springs, &c. Some engage in structural engineering both at home and abroad. In addition, there are a number of ancillary productions, such as tar and tar by-products, fertilisers, &c.

4. Because (a) the finishing end of the industry, particularly in rolled products, has not been balanced with the primary steel producing processes, and (b) the past policy has been to meet variations in demand by imports, there has always been a substantial importation of iron and steel, varying from 970,000 tons in 1933 to 2 million tons in 1937, mainly in semi-finished form. The target for 1946 is about 1,500,000 tons. In addition, 6 million to 7 million tons per annum of iron ore have to be imported as well as manganese ore, scrap and ferro-alloys.

There is a varied export trade to all parts of the world which before the war was running at the rate of about 2½ million tons per annum. The principal exports were special pig iron, steel bars, plates and sheets, galvanised sheets, tinplates, tubes, pipes and fittings, rails and railway material, wire and wire products.

Report by British Iron and Steel Federation.

5. The report, not reproduced with this paper, from the British Iron and Steel Federation, setting out in detail the proposals for the development and modernisation of the industry, is attached to L.P. (46) 52. The report is essentially the industry's own report built up from schemes submitted by individual firms. It has been examined by my Department and a detailed memorandum is at Appendix B of L.P. (46) 52. The plan as set out in the report provides for modernisation and new development and for substantial rationalisation of production. It is clearly well thought out and meets the technical needs of the industry, which largely owing to cessation of normal development during the war has accumulated heavy arrears in maintenance and construction of plant.

6. The Federation's plan represents five to seven years work to the full capacity of the plant and building industry sections concerned and is estimated to cost the industry in this period about £168 million. It includes provision for the import, mainly from the United States, of specialised plant costing about £12 million. It covers primarily the ore treatment, pig iron and heavy steel sections which are the base of the whole industry and the closely integrated later stage products of which the chief are sheets, tinplates, pipes and tubes.

7. The Federation have given assurances that if the plan is approved by the Government the industry will carry it out energetically in all respects. They refer, however, to certain factors which are outside their control and in particular to the possible effect of fluctuations in imports. They therefore ask for an assurance in general terms that the Government recognise that some form of regulation of imports will be needed to maintain as far as practicable full production by the United Kingdom industry.

Sections of the industry not covered by the Federation's Report.

8. Foundry and forge pig iron, wrought iron, the iron and steel foundry and drop forgings industries are not constituent parts of the Iron and Steel Federation and are not covered by their report. The interim Report from the Joint Iron Council covering Foundry and Forge Pig Iron estimates future demand at between 1,700,000 tons and 2 million tons per annum. It puts forward no separate plan for development pending a clearer view of the future of iron foundry practice which will affect both the quantity and type of pig-iron required but as an immediate measure proposes modernisation of certain blast furnaces in Scotland in co-operation with part of the Federation plan.

Wrought iron is made by an older process than steel requiring much heavy and unpleasant manual labour. Relative to steel its costs have been rising and its market dwindling for many years and although still valued for certain

purposes, *e.g.*, chain cables, it is now largely a luxury industry. The Drop Forging industry is on the border between the steel and engineering industry and has links with both.

Possible Courses of Action.

9. It has seemed to me that there are three broad courses which fall to be considered for the future. In choosing between them the main consideration must be to secure with the minimum of delay a thorough modernisation of plant and technique and rationalisation of production. The industry is vital to the economic development of the country and upon its efficiency depends to a large extent the prospects of many other industries, including engineering, to which we are looking for a large-scale expansion in our export trade.

The three possible courses are:—

- A. The continuance and development of the pre-war policy of allowing the industry to organise itself and carry out its own development plans in close liaison with the Government, whose main functions were to supervise the price structure of the various sections of the industry, to influence (without specific sanctions) the general development plans and to regulate imports.
- B. To proceed as in A but with the creation of a special Government body armed with statutory powers to supervise and if necessary coerce the industry to secure development and rationalisation, and the planning of production in the national interest. Such powers, in addition to control of prices, would include powers to compel amalgamations where needed and to direct production.
- C. Nationalisation of the industry.

10. The adoption of either A or B involves a major decision by the Government not to nationalise the industry at least during the life of the present Parliament. Such a decision would be necessary to provide the assurance to induce the firms to embark energetically on their various projects, and to enable them to secure the necessary finance.

In my judgment, with such an announcement the industry would carry out a large part of the necessary modernisation and development and would accept the need for continued Government supervision and control. Under A general machinery for such control already exists, partly under the Supplies and Services (Transitional Powers) Act; which is, however, likely to remain in operation for the greater part of the period. Under B such powers could be enlarged and strengthened specifically for this industry. Either course would, it is thought, enable the Government to secure the co-operation of virtually the whole industry and so have the advantage of securing that the urgent projects of modernisation and development in the industry's plan would proceed at once.

On the other hand, the success of course A depends on the continued co-operation of the industry's central organisation and its power effectively to influence the action of individual firms. The general powers of the Government are largely negative, and I do not feel that sufficiently positive and effective action could be taken to deal speedily with any failure on the part of the Federation or individual firms to follow the best course in the national interest. The industry with its inter-locking associations has attained a quasi-monopolistic position and might well be tempted should differences arise to pit its strength against the Government at least to the point of forcing a compromise involving some deviation from the maximum national interest. Course B theoretically would avoid these dangers, but this I feel involves an unsatisfactory division of responsibility between the Government and the units of private enterprise. Moreover, while the powers might be used if necessary to overcome inertia on the part of a firm it is questionable to what extent they would yield satisfactory results. There might be a danger of delaying tactics by unwilling firms which it would be difficult to frustrate, particularly if there were any considerable body of opinion in the industry supporting the recalcitrant. Moreover, it is in my view fundamentally unsound to divorce control from ownership.

11. There remains C, the public ownership of the industry. It must be recognised that we are dealing with a complex industry presenting problems differing materially from those of other industries earmarked for socialisation. Individual undertakings extend from the mining of ore, to the production of a wide range of semi-manufactured and finished goods, including not only finished

steel but engineering products, chemicals and fertilisers, and branch into structural engineering. Any line of demarcation will create difficult problems as to the assets to be taken over and those to be left in private ownership, and State acquisition, at all events in the first place, of much outside the steel industry might be unavoidable. Whatever plan of acquisition and valuation is adopted there is bound to be for a period uncertainty as to the units of plant finally to be taken over and those to remain with private enterprise, and this involves a risk of delay in the commencement of the urgent modernisation and development of the industry, and a loss of energy in carrying it out.

On the other hand, on the longer view, this course alone can make certain that the necessary programme of development will be carried through and ensure that the production policy of the industry will be based solely on the national interest.

12. While course A is attractive in that it places the task of reorganisation on the shoulders of the industry and, for an initial period would probably yield rapid progress with the industry's plan, its weakness lies in the doubt whether over a longer period sufficient authority would exist in the central organisation of the industry, the Iron and Steel Federation, to enforce rationalisation both of plant, loading, and location against the interests of particular firms. The national interest would require the Government increasingly to interfere in the policies of the industry without responsibility or powers of compulsion. Course B, on the other hand, while it provides powers, has the fatal defect of a division of responsibility which can be continually attacked on the ground that the requirements of the Controlling Authority conflict with the duty of Boards of Directors to their own shareholders. This might well in the long run lead to a breakdown.

After the most careful consideration I have reached the conclusion that Courses A and B should be rejected and that notwithstanding the magnitude of the task the industry should be brought under public ownership. It is only by such action that the Government can be satisfied that the necessary development and reorganisation of the industry will be achieved. This conclusion was endorsed by the Committee on the Socialisation of Industries at its 4th Meeting held on the 14th March, 1946.

Action to the Taken.

Definition of the Nationalised Industry.

13. If this view is accepted a number of matters will need urgent consideration before legislation can be drafted. It will be necessary to define broadly in any announcement the area to be included, and thereafter to undertake at once the detailed examination, in discussion with the industry, required to elaborate this precisely. As some half of the production is based on home iron ore, it will clearly be necessary to take over the *mining of ore*, and it would appear axiomatic in that case that we should bring all *native iron ore* into public ownership by *expropriation of the mineral rights*. At the same time we should take over the specialised iron ore handling plants at the ports. Beyond this I suggest that we should aim at simplifying the problem by taking over the main structure of the industry, but exclude, as far as practicable, those marginal sections in which there are a relatively large number of smaller firms, and where the intermingling with the engineering and consumer goods industries mainly occurs.

On this basis the following indicates how, in my view, the line could be drawn:—

Pig-Iron.—The whole *Blast Furnace industry* should be included. There are three main sections: basic pig-iron used wholly by the steel-makers; foundry and forge pig-iron used by the iron founders and wrought-iron makers; and hematite pig-iron used by all three. While some blast furnace firms specialise, others make all three types. *The coke ovens associated with the iron and steel industry*, deliberately excluded from the Coal Industry Nationalisation Bill, should also be included, together with at least the early stages of the *associated bye-products industries* (tar and tar products, fertilisers, &c.). *Steel Melting and Heavy Steel Rolling must be included.*

Further processing.

Sheets and tinplates manufactured in continuous strip mills integrated with steel production should be included, and for various reasons it may be impossible to exclude the older type sheet and tinplate plants, many of which purchase steel in semi-finished form.

Other "re-rolling" plants associated with steel-making, making the lighter bars and sections, wire rods and strip should be included, but not the numerous separate re-rolling firms making a range of products from bedstead angles to razor blade strip. It may be desirable to include the large independent re-rollers with mass-production plants comparable with those of the steel-maker re-rollers.

Tubes.—The mass-production tube section making ordinary commercial tubes and largely integrated with steel-making should be included, but not that making high quality precision tubes from purchased steel.

Steel Castings, Forgings and Drop Forgings, which are individual products demanding close association with the consumer industries and frequently made by them, should be excluded except where an integral part of a steel-making organisation.

Wire drawing.—About half of the wire is made by steelmakers or wholly-owned subsidiaries, but there are over 80 independent wire drawers frequently extending to the wire product field, purchasing wire rods in some cases from independent re-rollers. At this stage I contemplate the exclusion of wire drawing.

Alloy and Special Steels.—These are predominantly Sheffield industries. They should be included both because a substantial part of the production of most firms concerned is Carbon steel and because they include armour and the special armament steels. But there will be serious technical difficulty in drawing a line excluding any of their processing activities and the industry includes, in addition to the few large firms, a large number of very small firms. Only detailed discussion with the industry will enable a practicable line to be drawn.

Iron Castings.—Iron foundries should at this stage be excluded, despite their importance to housing and engineering, with the exception of the *Heavy Cast-iron Pipes* the manufacture of which is completely integrated with that of foundry pig-iron.

Wrought Iron should also be excluded in view of its limited importance.

The foregoing can only be taken as a provisional broad analysis of the division, which will have to be checked and elaborated in more detail in discussion with the industry. It will be seen by reference to the description of the industry in para. 2 that even on the basis of limiting the field for immediate socialisation as narrowly as is practicable it will be necessary to include the whole of (a) to (e) and (g). (apart from steel castings not made in integrated steelworks) and the greater part of (d). In addition it will be necessary to include such ancillary and by-product activities as form an integral part of the big composite undertakings.

Method of Acquisition and Basis of Compensation.

14. The next important step is to determine the method of acquisition and basis of and machinery for compensation, to be adopted. On the former the acquisition at an early stage of the whole of the shares of the main undertakings within the field to be covered is attractive. It could be done quickly, and once completed the management of the firms could be given directions on the important developments needed, leaving for more deliberate consideration the problems of splitting the assets and managements and disposing of those assets not necessary to the nationalised undertaking, as well as further acquisitions which might ultimately be needed to round off ragged edges. But the Report of the Official Committee on Socialisation of Industries (S.I. (O) (46) 12) draws attention to the serious difficulties inherent in this course, and in the light of their objections, all of which would apply in the case of the steel industry, I feel I must reject this course in favour of acquisition of assets.

The initial acquisition need not, however, be limited to those assets finally to be retained by the public undertaking. It will be simpler in many cases, but not all, to take over the whole assets of an individual company and later to dispose of those parts of the undertaking not essential to the socialised area. The decision on the actual assets to be acquired will require detailed consideration firm by firm in the light of the physical, technical, and financial considerations. As in the case of the coal industry, in addition to assets specifically transferred, it will be necessary to provide for other classes of assets to be taken over at the instance of either the national undertaking or the present owners, either with or without a right of appeal to arbitration by either party opposing the transfer.

15. With regard to the determination of compensation, I agree with the recommendation of the Official Report already quoted, in favour of net maintainable revenue capitalised at so many years' purchase, but there is not, as in

the case of the coal industry, any global valuation accepted by all parties which can be taken as a starting point. Valuation on this basis of a large number of undertakings differing in size, efficiency and scope, will involve difficulties and take too long; detailed study of the possibility of a compromise formula to simplify the work will be needed.

16. The expropriation of iron ore would presumably follow the lines adopted for coal in the Coal Act, 1938, suitably modified to take account of the fact that it is proceeding simultaneously with the socialisation of iron-ore mining.

The Form of Public Ownership.

17. The other important matter which will require consideration is the nature of the body which is to run the socialised industry, its constitution, functions and powers, and its relation with the Government. I advocate the setting up of a National Board in which the assets to be taken over will be vested and which will be armed with the necessary powers to operate the industry.

Urgent Development Schemes.

18. There is much urgent work waiting to be started and it is important that this should not be delayed. In particular, a new steel works and continuous strip mill in South Wales with associated finishing plants, a new Dorman Long works on Tees Side and the modernisation of one of Colvilles Steel plants at Motherwell, all in Development areas, are ready to start and are now being held up. I cannot get these going until the Government policy in regard to the industry has been announced. On the announcement of nationalisation immediate steps must be taken to secure that these and certain other urgent projects are proceeded with forthwith. This will involve securing the co-operation of the present managements, and agreement that approved capital expenditure incurred by the firms would be compensated in full in cash at the time of vesting and deducted from the value of the undertaking.

The new National Board for the industry should clearly have an opportunity to review the later stages of the industry's plan before schemes, the commencement of which is not immediately practicable, are finally approved.

Coking Coal.

19. I annex a note by the Minister of Fuel and Power on the question raised at the meeting of the Committee on the Socialisation of Industries in regard to future supplies of Coking Coal.

Recommendations.

20. I submit the following for approval:—

- (1) That the Government should decide to proceed with the nationalisation of the Iron and Steel Industry and introduce a Bill for this purpose in the next Session.
- (2) That an early announcement to this effect should be made in the House of Commons. This should also state that the proposal covers the taking into public ownership of all mineral rights in iron ore, the sole working of such rights to be in the hands of the Government; the part of the iron and steel industry to be taken over will include pig-iron production of all kinds, steelmaking and heavy steel rolling, together with certain further processes the precise range of which will have to be determined in the light of detailed examination.
- (3) That immediately following the announcement discussions should be initiated with the Industry with a view to the settlement of Financial and other arrangements under which an immediate start can be made with a number of schemes for further development.

J. W.

*Ministry of Supply, W.C. 2,
28th March, 1946.*

RESERVES OF COKING COAL.

NOTE BY MINISTER OF FUEL AND POWER.

THE reference to the possibility of our having to import coking coal concerns the short rather than the long-term position. There have been difficulties in meeting the needs of the Iron and Steel Industry in respect of coke for blast furnaces at various dates during the past two years, and it has been necessary to restrict the throughput of coke ovens because of the shortage of coking coal.

On the present level of output these difficulties will continue and a substantial increase in output will be required if there is any rise in the demands from Iron and Steel. It is rather much to expect that the National Coal Board will get an immediate sharp increase in output and it would be wiser to expect some coking coal supply difficulties for probably the next two years. If therefore, a heavy increase in Iron and Steel output is programmed (and this may be expected if an effort is made to maintain the position in international trade) we may be faced with the question of importing coking coal.

Regarding the long-term aspect, our resources of coking coals are deteriorating in quality but at the present level of consumption the good coking coals may suffice for some 50 years. It may also be expected that research would bring to light improved methods of carbonisation and thus bring a wider field of coals into consideration for this market.

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