

## STATISTICS :

# Interrogation of Dr. ROLF WAGENFÜHR Statistical Section of the Planungsamt, SPEER Armaments Ministry.

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BRITISH INTELLIGENCE OBJECTIVES  
SUB-COMMITTEE

STATISTICS :  
INTERROGATION OF DR. ROLF WAGENFUHR<sup>n</sup>  
STATISTICAL SECTION OF THE  
PLANUNGSAMT, SPEER ARMAMENTS  
MINISTRY

Reported by  
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TABLE OF CONTENTS

<u>Subject</u>	<u>Page Number</u>
I Introduction	1
II Statistical Series	1
III Raw Material Planning	6
IV Occupied Territories	9
V Manpower Utilisation	11
VI Consumer Goods	16
VII Miscellaneous Questions	18

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INTERROGATION OF DR. ROLF WAGENFUHR BY

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I. INTRODUCTION

Dr. Rolf Wagenfuhr was head of the Statistical Section of the Planungsamt in the Speer Armaments Ministry, from 1943 onwards. Previously he was a leading member of the Reichs Institut für Konjunkturforschung in Berlin where he still continues to work.

Dr. Wagenfuhr had already been interrogated by USSBS and as far as possible an attempt was made to cover new ground.

It is important to bear in mind that, with rare exceptions, Wagenfuhr did not handle raw statistical material. Further, the use to which his figures were put by Kehrl was not strictly his province. As a result much of the following represents the opinions of a pertinacious and enquiring mind, rather than a statement based on actual handling of the subject under discussion.

II. STATISTICAL SERIES

Wagenfuhr distinguished the following series of statistics :

- (a) The statistics of the Wirtschaftsgruppen and the Reichsgruppe Industrie.
  - (b) The statistics of the Ausschüsse and Ringe.
  - (c) The statistics of the Maschinelles Berichtswesen.
  - (d) The statistics of the Statistisches Reichsamt.
  - (e) The armament statistics of the Planungsamt (Dr. Dahms).
- (a) Wirtschaftsgruppen

The statistics of the Industrial Groups existed before 1933 as collected by the Trade Associations (Verbänden). Thereafter, though membership of the Wirtschaftsgruppen became compulsory, each Industrial Group continued to decide the form of return made by its members.

The statistical section of the Reichsgruppe Industrie (Abteilung 8) consolidated the returns of the Wirtschaftsgruppen but its main effort was the processing of the Industriebericht, a monthly return, common to all firms, the

results being issued as the *Industriieberichterstattung*. Wagenführ was not able to say when the *Industriiebericht* was first introduced but thought it existed as far back as 1939.

The main defect of the *Industriiebericht* statistics was caused by the introduction, in 1939, of an "organisational stop" which prevented firms changing their membership from one group to another.

This meant that factories converted to armament production remained under their old Industrial Groups. (For example, the manufacture of munition packing cases in plants of the piano industry appears under the heading, as before, of the Trade Group for the Piano Industry, the manufacture of munitions in a chocolate factory, as before, under the Trade Group for Chocolate and Confectionery Goods Industry, etc.).

To overcome this defect a supplementary census (*Zusatzerhebung*) was taken in the Autumn of 1943 distinguishing for the first time between the production for the firm's parent Industrial Group and production for other Industrial Groups. The census also showed the inter-relation between production by Industrial Groups and by Committees and Rings.

A second defect lay in that figures of production could not be related to specific articles. An attempt was made to classify production through the media of 'Reich commodity numbers' (*Reichswarenummer*). (Hoerber of the *Rüstungsamt* was responsible for this work). This system of numbering was unsatisfactory, as any article used both by the army and industry was given two numbers. This system was first applied in the middle of 1944 in an investigation into sub-contracting of a large number of works.

An improved system of commodity numbering represented by the 'War commodity numbering system' (*Kriegswarenummerung*) was evolved by the *Kraehe* Committee (see below) in the second half of 1944. Wagenführ considered that the application of this system to the *Beschäftigtenmeldung* and *Industriiebericht* would have provided the *Planungsamt* for the first time with the necessary data with which to link the activity of factories with the production of specific products and hence furnish a basis of studying labour utilisation (see later). The system also had the advantage of being neutral to the existence of overlapping and competing controls as it would furnish data simultaneously to the *Ausschüsse* (controlling specific products) and the *Wirtschaftsgruppen* (controlling trades). Unfortunately the scheme was not introduced.

(b) Ausschüsse and Ringe

The Committees and Rings mostly had no statistical departments. Their work in connection with statistics was good as a rule only in so far as they were linked up in an organizational sense with the Industrial Groups (e.g. Feinmechanik und Optik; Maschinenbau; Elektrotechnik).

When the Committees and Rings were first set up each Leiter tried to secure information on every conceivable aspect of his sphere but the statistics were unsystematic. A section at the Zentralamt (under a colleague of Dr. Clahes) attempted to coordinate the statistics but only dealt with the problem in a formal fashion. From the middle of 1943, the Planungsamt tried to carry out this systematising. To this end extensive preliminary work was undertaken which was only concluded about the middle of 1944. Then a Committee was formed under Dr. Kraehe (Ruhr Coal Syndicate, Essen) which drew up a basic questionnaire (Rahmenfragebogen) for every Group (production, employment, deliveries, etc.). Bound up with this, was the work done in connection with so-called 'war commodity numbering', which has already been referred to.

(c) Statistics of the Maschinelles Berichtswesen.

The most important return was the Beschäftigtenmeldung which differed for three groups of factories: Group A - works sponsored by Armaments Inspectorates; Group B - works owned by the Services such as munition filling; Group C - works sponsored by the Landeswirtschaftsämter (principally production of raw material and consumption goods). The Industriebericht and the Beschäftigtenmeldung were issued together. Of importance in the Beschäftigtenmeldung returns was the division of those engaged in production among so-called requirement groups (Bedarfsgruppe). In a number of cases this enabled conclusions to be drawn with regard to production, but there were also requirement groups where this was not possible (for example Reichs Ministry for Enlightenment and Propaganda, Deutsche Gemeindetag, etc.).

An accurate survey of the workers engaged in the manufacture of individual products was rendered difficult by the complicated conditions in regard to returns made of deliveries of component production (Zulieferungs). These included :

- (a) Primary deliveries equivalent to deliveries of raw materials, e.g. parts rough-machined by steel producers.
- (b) Firm's own sub-contracts where the product is only usable for certain specific end products.

- (c) Deliveries for general purposes - not immediately discernible for what type of production the goods are earmarked, e.g. screws.
- (d) Deliveries to the Reich of components (for example, aircraft engines) which are placed at the disposal of the assembly firms as free issues.

By a system of numbering, deliveries as under (a), (b) and (d) can be allocated, those under (c) on the other hand, cannot. A further complication was that a firm under (d) was not in a position to know whether its product was destined for new production or replacements in the field (not included in returns).

Altogether, the statistics of the Beschäftigtenmeldung are difficult to interpret over a period of time, because the number of A-Works changed constantly. Wagenführ stated that he was no Hollerith expert. He thought that the mechanical preparation of statistics was, however, advisable to cover:

- (1) The question of part production (Zulieferungs)
- (2) The Beschäftigtenmeldung
- (3) Notification of men liable to be called up (Wehrpflichtenmeldung).

In the case of (1) and (2) the value of returns suffered owing to the absence of a system of numbering which would link the activity of firms to actual products. For (1) to (3) a good preliminary check on original returns was essential. This control had often been absent in mechanical reporting. Lt. Col. Passow was too formal. The quality of the final sorting depended on the work done in the divisional offices. This varied with the calibre of the staff - the best was at Breslau.

(d) Statistics of the Statistisches Reichsamt

The Statistisches Reichsamt carried out the main census; otherwise its direct contact with industry was confined to inquiries. The Board was, however, a central collecting office especially the Main Centre for Statistics used by the Planungsamt.

(e) Armament Statistics of the Planungsamt (Dr. Dahms)

The monthly tables of deliveries of armaments and the resultant graphs of production, wastage and stocks published by the Planungsamt were the work of Dr. Dahms. Wagenführ was consulted on the statistical methods employed. On the last day of every month Saur received by telephone or teleprint production

figures from the heads of the Commissions and Rings. These figures were used as a basis for immediate decisions but are NOT those in the Schnellbericht.

On the eighth of the following month a meeting would take place between Dr. Dahms and representatives of the Service Abnahmestellen where any disparities between the reports from Industry and the numbers accepted by the Services were investigated. The corrected figures were issued on the 10th of the month as the Schnellbericht statistics. Wagenführ accepted these figures as the most reliable of all German armament statistics. In practice, however, the Saur figures received such a wide circulation before the corrected ones were issued that it was often impossible to secure amendments of official documents in which they appeared.

Dahm's statistics covered in all about 300 items of war production (guns, tanks, U-boats, etc.,) of which 60 were for the Luftwaffe. Wagenführ estimated that they represented in all about 95% (value terms) of all direct armament production. Alternatively including figures of general equipment (Allgemeines Gerät), uniforms etc., the total coverage was equal to about 3/4th of all war production (Kriegsmaterialendfertigung) i.e. 35 Milliarden RM of the 50 Milliarden RM total war production for 1944.

After lengthy discussions it was decided to use value and price (Werte und Preise) as the common measure of all production statistics. The difficulties in evolving "Man-hour" coefficients proved insuperable, owing to the variations in sub-contracting between firms in the same industry. Wagenführ instanced Opel and Ford. Opel manufactured almost the complete truck in its own works; Ford was mainly an assembly plant. The output of lorries per man-month derived from a coefficient multiplied by the number of persons employed during the month in both works would yield an answer twice as large in the case of Ford as Opel. Locomotive production methods were common throughout the industry - weapons (waffen) showed great disparities between firms. For tanks, the Böhmisches-Mährische plant, making the 38-ton tank, had been taken as a model on the ground that it made more of a complete tank than other firms. A discussion took place later on the general use of man-hour statistics (see page 15).

It had not been easy to obtain prices of finished armaments. The price control had been maintained on production of components and it was necessary to work out a price for the complete job. The existence of "free issues" was an added complication. Dr. Grottian (Berlin) calculated that 70% of the final value of a



tank was covered by articles manufactured on government account and issued to the assembly firms. The best study to determine the value of armament production was provided by the 'Zusatzerhebung' taken in autumn 1943 already referred to (see page 2).

The calculations of operational stocks of weapons (Bestand) published by the Planungsamt were completely misleading. They were produced by Abt. IV. of the M.B. by adding the receipts of the Abnahmestellen to the previous month's stock, less the losses reported by the Waffenamt. Actual stocktaking was carried out only at lengthy intervals and disclosed serious differences. Thus the calculated stock of light and heavy artillery at September 1944 was 490 million RM., stocktaking turned out to be only 350 million RM. <sup>1)</sup>

The main reasons for the unreliability of estimates of stock were :

- i) the figures of losses were incomplete. In the case of large scale retreats there was a complete break-down of reporting.
- ii) the role played by repairs was unclear. It was possible that e.g. aircraft requiring repairs were not booked out to industry and thereafter may have appeared as new production.

### III. RAW MATERIAL PLANNING

Wagenführer gave the following outline of the methods used to plan the allocation of raw material :

- i) The Services informed the Hauptausschüsse of their requirements.
- ii) The Main Committees reviewed these requirements in terms of the capacity of member firms; agreed a programme with the Services; translated production into raw material required; forwarded both the programme and the estimated raw material need to the Planungsamt.
- iii) The Wirtschaftsgruppen forwarded their requirements for non-service production.
- iv) The Oeffentliche Bedarfsträger (Public Quota Holders e.g. Ministries, Reichsbahn, Building, Services for materials used in their own workshops etc. ) similarly produced their demands.

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<sup>1)</sup> Examples of these discrepancies can be seen in Charts 13-21 in a book of Planestatistik issued by Heddon House as FD 3487/45. On these charts

the position at stocktaking ("erhobene Bestände") usually differs considerably from the corresponding interpolated monthly point ("fortgeschrieben").

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- v) The Planungsamt received demands ii) - iv); examined them for reliability; related them to previous production and allocation; examined the raw material production and stock position; made proposals to the Zentraleplanung.
- vi) The Zentraleplanung together with representatives of affected parties and of the Reichsstelle responsible for the material under consideration, decided on the final allocations. Zentraleplanung did not attempt to coordinate the planning of raw materials. As a rule only one question was dealt with at a time ("today coal, tomorrow iron, the day after tomorrow U-Boats")
- vii) Though separate plans were made for all strategic materials, the Planungsamt regarded the control over steel allocations as the lynch pin of the planning edifice.

Wagenführer disagreed with the view that the Planungsamt in the main, was concerned only with creating and controlling an allocatable margin of raw materials i.e. that the control over the greater part of allocations was a formality in that the bulk of materials went to produce the same assortment of goods as had been produced in the previous quarter ('bread-and-butter lines'). He stressed the detailed scrutiny which the entire demand underwent - not only was it compared with previous allocations and resultant production but the actual quota weights (i.e. the standard amounts laid down for the production of specific articles) were constantly being revised in a downward direction. Further the Planungsamt concerned itself with investigating the size of stocks held in industry and amounts held in the production pipe line. As far as the Main Committees were concerned, the entire requirement was planned; each had to furnish every quarter a detailed statement of the quota weight per product, the previous quarter's production, the planned production, the planned production rate (Durchlaufzeit), and the planned rate of intake of materials (Einsatzzeit des Materials).

The control over the demands of the Wirtschaftsgruppen and Öffentliche Bedarfsträger were more sketchy.

As the Main Committees received about a half of the total iron allocated, Wagenführer considered the amount subject to exact scrutiny, to be a satisfactory part of the total, taking into consideration the large proportion used in defence works, (Atlantic Wall, East Wall, Norway, etc)

Control over the disposition of reserves of iron was in the hands of the Amtsguppe Eisen und Stahl<sup>2)</sup> (Schliecker in Berlin and Schäfer in Hamburg). Wagenführer believed that the purpose of these reserves was to

provide for repairs to bomb damage rather than to maintain a surplus which could be used to meet the demands of Führerprogramme. The normal methods of securing production for these emergency orders was by means of a revision within the programme of the appropriate Main Committee. 3)

Although each Main Committee planned its requirements independently of the others it was the duty of Schlieker as head of the Auftragssteuerungsstelle (order steering section) of the Amtsgruppe to investigate the relationships between the demands e.g. more U-boats, less steel for tanks, etc.

The control over steel production was simplified by the existence of the general policy which was to produce as much as possible. A similar policy was in force for aluminium but here decisions involving other departments had to be taken to expand productive capacity. Ultimately the plan was dependent on the supply of bauxite and availability of power.

Detailed plans, on which quotas were issued, were for periods of three months only. Arrangements could be made to earmark supplies over a longer period (the system of 'Vormerkung') but no deliveries could be made until new quota permits had been issued. The example of aircraft showed time and again that the long term plans were far too ambitious. Dr. Warmbier of the Luftwaffe Planungsamt would be able to supply details on raw material planning in the aircraft industry.

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- 2) The Amtsgruppe Eisen u. Stahl which controlled the Reichsvereinigung Eisen, and Hauptringe Eisenerzeugung, Guss, Schmiedestücke etc. was originally part of the Rüstungslieferungsamt not as with non-ferrous metals the Rohstoffamt. After the changeover in November 1944, the functions of Amtsgruppe were taken over by the Planungsamt with the exception of control over production which was placed under the Technisches Amt. The firm 'top-control', maintained throughout, is a reflection of Kehrl's dictum that the basis of planning and control was iron and steel allocation, other production factors being taken care of as bottlenecks arose.
- 3) There is a large measure of difference between Wagenführ and Kehrl on these points. Kehrl's evidence, as the man in charge, is probably more reliable. He agrees that the Planungsamt was concerned with cutting down allocations seeing that there had been gross over-allocations in the past - an investigation in 1944 showed that industry held a year's output of steel in stocks or in the pipeline. But his main concern was to keep a margin of steel, over and above the satisfaction of the normal service requirements, which was allocated to the best advantage e.g. for the Führerprogramme. From the Speer-Hitler conferences (see FD 3353 issued by Heddon House) it would appear that the iron reserves were kept strictly under control and used to increase output sharply to meet emergency requirements, of which post raid measures doubtless played an increasingly significant role.

Asked how far they were able to coordinate the planning of articles in joint demand, Wagenführ said that the practice varied. Sometimes the work could be done within a department, sometimes by the establishment of a joint committee, often by unofficial contacts between sections.

The most important example of coordination within a department (Amtsgruppe Chemie) was powder and explosives.<sup>4)</sup> The starting point was the munition programme for the period. The coordinated statistics had to answer the following questions:

- i) What quantities of powder, explosives and dilutants (Streckmittel) were required for the munitions programme.
- ii) What quantities of intermediate chemicals would be required to make (i).
- iii) What quantities of basic chemicals were required to make (ii) What percentage of the total demand for each of these chemicals did these quantities represent.

The only statistical link between powder and munition manufacture appeared in the Armament Index (Rüstungs-index). This showed that from 1943 onwards the production of powder failed to keep up with the output of munitions.

An example of inter-departmental coordination was the linking of motor vehicles with tyres through a joint session of the Reichstelle Kautschuk and Hauptausschuss Kraftfahrzeuge. A similar committee existed for electrodes and electric steel. On the other hand production of guns and optical equipment was kept in step by unofficial contact between the Committees.

#### IV. OCCUPIED TERRITORIES

The place of the occupied territories in the planning of German armament requirements was discussed under the heading of raw materials, part production, and finished products.

##### Raw Materials

Uniformity of control of raw material production and allocation both within Germany and occupied territories was effected by the presence of representatives of the Reichstellen outside Germany. The statistics of production and requirements of the occupied territories were included in the 'Raw Material Balance Sheets' (Rohstoffbilanzen) which were drawn up every quarter as follows :

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4) The example in question for the 1st half-year 1944 is reproduced in a book of Planstatistik issued by Heddou House (FD 3487/45) as Chart 33.

"Militarische Pulver u. Sprengstoffe Produktionsplan: Koordinationsstatistik".

Intake	Utilised for
1) Home production	1) Home consumption a) for the Services (Wehrmacht) b) for industry (Wirtschaft)
2) Imports from occupied territory	2) Exports to occupied territory
2a) Auftragsverlagerungen 5)	
3) Imports from allied and neutral countries	3) Exports to allied and neutral countries
1)-3) Current intake	1)-3) Current outgoings
4) Taken from stocks	4) Allocated to stocks
1)-4) Total intake	1)-4) Total utilisation

The most important raw material balance sheets were published in a volume "Rohstoffbilanzen 1942-1944" issued by the Statistische Leitstelle (of the Statistisches Reichsamt ) in March 1945.

### Part Production (Zulieferungs)

From an organisational angle the production of Zulieferungs was mainly controlled by German firms entering into contracts with their own sponsored French firms (S-Betriebe). The volume of this 'de-centralised' (verlagerte) production was statistically covered by most of the Rings.

There are two statistical series showing, by value, the volume of Zulieferungs (and finished products), produced in occupied territory, viz: those of the "ZAST" (Zentralauftragsstelle - Central Order Office) and Maschinelles Berichtswesen. The figures differ considerably; probably due to the fact that one of the series excludes cancellations (Stornierungen), the other does not. Dr. Lauersen of the M.B. should be able to throw light on these figures.

### Finished Armaments

There was a complete statistical blackout regarding both the amounts of finished armaments produced in occupied territories and the raw material used in their production. All statistics of finished armaments show production for Germany, not production in Germany, i.e. no distinction is drawn between home and foreign production. Wagenführ did not know how the amounts of raw materials used in occupied territory for finished armaments were accounted for: he could only suggest that they came out of some (unspecified) reserve. The fact that the armament production of occupied territory could not be separated out from that of the Reich was of little consequence as it was calculated that, for the first half of 1944, the share only amounted to 5% of the total.

5) Probably amounts of raw material used in occupied territory to fulfil German orders.

Only in the case of motor vehicles was it considerably higher. It should be noted that while the General Government was considered as occupied territory, the Protectorate, Alsace Lorraine and Luxembourg were included in the Reich.

Wagenführ did not know how the demands of Germany's Allies (Italy, Finland, Hungary, etc.) were integrated into the Armament Programmes.

#### V. MANPOWER UTILISATION (ARBEITSEINSATZ)

Labour statistics were discussed under four headings :

- (a) Wagenführ's opinion on manpower utilisation statistics,
- (b) a comparison between the planning of allocation of labour and the allocation of raw materials,
- (c) specific planning of manpower utilisation to fit in with production programmes,
- (d) Man-hour statistics

#### (a) Arbeitseinsatz Statistics

There are three groups of labour statistics :

That of the Reichs Labour Ministry,  
The so-called Manpower Balance (Kräftebilanz)  
The Beschäftigtenmeldung and Industrierichter

The statistics of the Labour Ministry derived from the number of holders of labour books were used for practical allocations. They had the following shortcomings:

- i) the demarcation line in regard to territory varied from year to year;
- ii) the classes of persons included increased, as compulsory labour book holding was gradually extended to business men in 'free' professions (freier Berufe) and to artisans (Handwerker);
- iii) they are in the main, on a professional basis and only with difficulty can these figures be related to industry e.g. engineers' may refer to workers employed in paper mills etc.

The Manpower-Balance was prepared by the Statistisches Reichsamt who drew, in the main, on reports from organisations. It was, therefore, unreliable in the estimates of numbers of persons engaged in commerce, administration, and the professions (i.e. through duplication or incomplete inclusion).

These defents were particularly noticeable when making a comparison with the 1939 manpower census (Berufszählung). When the "Manpower Balance" of 1944 was constructed the figures for the previous years were amended. The reasons for this were unknown to Wagenführ who suggested that Dr. Bramstedt, (Berlin), might be able to give information on this point. The 'Manpower Balance' was roughly classified according to the large census groups in the Berufszählung. No attempt was made to incorporate the 'Manpower Balance' into a general review of manpower potential. (Population, Classification according to age groups, etc.)<sup>6)</sup> The Beschäftigtenmeldung statistics have already been discussed (see page 3). Wagenführ thought that their greatest value lay in the returns for the A Group (armament firms) which could be compared with the statistics of the iron and metal processing industries derived from the Industriebericht.

On the general question of the validity of the Beschäftigtenmeldung labour figures he made two points. First, that answers to the questions asking the factory to state its labour requirements were normally exaggerated. Second, the figures of new additions to staff differed from those in the statistics of the Labour Ministry. The differences could be explained partly by the high rate of labour turnover in Germany.<sup>7)</sup> The Labour Ministry returns showed allocations to firms, the firms reported arrivals. Between these two there were big differences due to escapes of foreign workers, sickness, rejection for unsuitability etc.

Wagenführ had attempted to resolve these differences by drawing up a model scheme wherein allocations, arrivals and departures were separately noted. Practical examples of its use were published in the Wochenbericht of the Planungsamt.

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6) But see "Bosch's Notebooks" (issued as FD 3644/45) where an attempt has been made and also for examples of the Kräftebilanz.

7) Concerning the general question of labour turnover in Germany, Wagenführ mentioned two interesting studies:

"Denkschrift des Braunschweigischen Instituts für Wirtschaftsforschung über die Arbeiterfluktuation in den Hermann-Göring Werken;

Denkschrift des Arbeitswissenschaftlichen Instituts über Arbeiterfluktuation in einem Bezirk" (believed to be Potsdam).

(b) Planning of Labour Allocation

The problems of Labour Allocation were discussed under the following headings :

Overall planning

The Rot-Zettel scheme for Armaments works  
Consumer goods industries.

Wagenführ had no direct handling of these problems, and generally referred to Bosch as the main authority.

Zentrale Planung was responsible for the overall allocation of manpower to the main Bedarfsgruppen - armaments, transport, agriculture etc. Originally discussions were confined to ways and means of satisfying the programmes of the OKH, OKM and OKL. These requirements were based on the demands voiced by armament manufacturers under the Rot-Zettel ('Red Slip') scheme.

Firms in the A group requiring extra labour filled in the 'Red Slips' which were checked and approved by the Rüstungsinspektion and forwarded to the Amtsgruppe Arbeitseinsatz in the Rüstungsamt in Berlin. The totality of these demands was then placed before the Zentraleplanungs.<sup>8)</sup>

The main defects of the Rot-Zettel were :

- i) The examination by the local Inspectorates was, as a rule, only a formality, so that firms sometimes applied for workmen whom they really required for non-essential work by instancing important contracts. This readily arose in large firms handling many contracts for different services. In an attempt to relate output to labour supply, firms were asked to produce a 'Betriebsbelungsplan' (factory lay out plan) wherein labour utilisation could be assessed. Examples mentioned were those of Henschel & Daimler Benz.
- ii) The procedure was too slow. By the time the local labour office had received the necessary priority for allocating labour, the need had often passed. In practice firms did better by maintaining cordial relationships with the local Labour Office.

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8) Bosch in a previous interrogation explained that his function was to endeavour to satisfy the requirements of sections of the Speer Ministry by means of a re-allocation within the labour pool employed under its direction. Only in cases where the net demand exceeded resources or to meet the demands of outside users (agriculture, transport) was the matter submitted to the Zentraleplanungs where Sauckel and the interested parties thrashed the matter out.



The main interest in Consumer Goods Industries lay in the replacement of skilled by unskilled labour. These comb outs were generally arranged to fulfil quotas imposed on the Wirtschaftsgruppen. Wagenführ instanced the Wisemann-Aktion but could furnish no particulars. He added, however, that it had enjoyed a bad reputation in industrial circles.

The fundamental differences between the methods of allocating labour and raw material were:

- i) The demands for labour could not be checked against production programmes in a manner parallel with the balance sheets of raw material use kept for each Main Commission, Ring, Public Body, etc.
- ii) Whereas raw materials were issued as quotas with strict regard to supply possibilities, labour was directed through the media of priorities. There could be no guarantee that such labour would be available where it was required (workers would be released by the spinning industry in the South East when the demand was coming from firms in the North West).
- iii) The absence of reliable labour statistics prevented a check being made as to whether the demand had been met.
- iv) The final word on labour lay with Sauckel who was independent of Speer. 9) There was no common statistical basis between the Labour Ministry and the Planungsamt to discuss whether labour was being fully utilised.

A fair summation would be that the Planungsamt concentrated on controlling materials and left it to hard bargaining to see that the labour was there to fulfil the programmes

(c) Specific Planning of Labour Utilisation

It was obviously desirable to evolve methods of linking production programmes to labour requirements. The main bar to such work lay in that the existing statistical classifications did not permit a knowledge of where labour for part production (Zulieferungs) would be required by groups other than the one receiving a programme. The main exception was in the aircraft industry where a detailed investigation by Ing. Schmidt enabled both the total labour and the industries in which they were working to be calculated. A similar study

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9) Sauckel even claimed independence from the decisions of the Zentrale-planungs, see Speer examination on "Labour Supply and Allocation Policy" issued by FIAT - Intelligence Report No. EF/IN/2 20.8.45.

had been made for that part of tank production performed by the tank industry and it was assumed that this represented a half of the total man-power on tanks. Here the absence of data as to where the extra-tank industry labour was employed meant that no allocations could be made to cover them.

The solution lay in the introduction of the numbering system which was evolved at the end of 1944 (see page 2), and unfortunately never introduced.

(d) Man-Hours Statistics

Wagenführer first dealt with the figures of loss of man hours through air raids which were returned on the Beschäftigtenmeldung. Only A firms were required to make this return so that the losses of vital industries such as chemicals and steel production were not known. No reliance could be placed on the statistics. The firms suffering the greatest damage failed to make returns, and their previous months' cards were run through the machines. Other firms were loth to specify the true position as they were afraid of losing their workers.

It has already been noted (page 5) that attempts to measure output in man hours were largely defeated by the different position between firms as to the extent to which they relied on sub contractors. No attempt was made, therefore, to relate the firm's output in value terms to the man hours worked.

Although the Beschäftigtenmeldung form divided workers into categories of skill (skilled, semi-skilled, learners etc.) only gross man-hours figures were used.

It was, therefore, admitted that man-hour productivity statistics over a period of time were not strictly comparable owing to shifts in the proportions of skill. The definition of 'skilled' worker had been laid down by Dr. Bickert in a book on the Beschäftigtenmeldung. Wagenführer considered it was possible that, during the war, workers had been advanced to the skilled categories as a concealed means of raising wages; further that the standards of examinations for skilled grades had been eased.

A considerable interest had been taken by some of the Ausschüsse in man-hour productivities especially where they cooperated with "RMFA", (Reichsausschuss für Arbeitsstudien - Reich Committee for Investigating Working Hours). The most fruitful of their studies were published in the 'Reifabuch' which he suggested should be secured.

## VI. CONSUMER GOODS

The planning of consumer goods production was originally the work of the Reichstellen, later the Lenkungsbereich. In the autumn of 1943 the Speer Ministry took over control of production, distribution remained with Funk.

Wagenführer took as an example the manufacture of shoes, with which he was personally conversant, to illustrate the various aspects of consumer good control.

### Calculation of Demand

Any attempt to estimate the demand of shoes on a per capita basis would inevitably produce an inflated figure e.g. a large part of the population wore wooden shoes which were seldom replaced. The control was, therefore, thrown back on taking the demand as equivalent to the sales in the previous year, which was then scaled down by a given percentage. Details of the shoe estimates can be found in the 'Shoe Manual' ('Grundbuch Schuhe') Edited by Herr Nieschlag, Singen.

Although the requirements were always calculated as constituting a minimum, it was often necessary later on to reduce the figure still further.

### Production Planning

It was difficult to plan production in terms of output and factory capacity. They were faced with a non-rationalised consumer goods industry making a great diversity of types. Planning had, therefore, to be confined, at first, to controlling the allocation of raw material and allowing manufacturers to produce as much as they could from their quota. Real production planning started with the introduction of the "War Production Plan" (Kriegsauflagenprogramm) in 1943. This programme gave a general prohibition to the manufacture of consumer goods with the exception of a small selection of articles. The production stop on non-essential goods (Dutch tiles, toys) was never quite effective as they could be disposed of among the considerable stocks on the market secured from occupied and neutral countries.

With the transfer of production control to the Armaments Ministry in 1943, a certain measure of rationalisation was introduced under Seebauer, the results of which should not be overestimated.

The requirement estimates were arranged regionally, depending on figures of population derived from the number of food ration books reported by the Wirtschaftsämter.

### Raw Material Planning

The key to consumption goods planning lay in linking the allocation

of raw materials with production planning of the finished products. The quantity of goods to be produced was derived from the estimated demand. The production programme was then translated into raw material requirement by using standard quota weights (called 'Supply Keys' - Einsatzschlüssel) as with Armament production planning (see Page 7).

On the other hand, shoe planning had to be coordinated with the planning of all raw materials entering into shoes. Until 1942 shoe manufacturers had to apply separately to different Reichsstelle for nails, dyes, glues, fabrics, whose decisions in turn were taken on the basis of their own supply and demand position. This anarchy of control was brought to an end by the formation of the Lenkungsbereich which was granted global quotas of auxiliary materials, based on the shoe production plan. These materials were made available to the firms manufacturing under their control.

### Other Factors of Production

#### 1) Coal and Power

Allocations of coal were made regionally by the Landwirtschaftsämter. With few exceptions, the needs of consumer good industries played only a minor role in coal consumption. Large consumers were given 'maximum quantity vouchers' (Höchstmengenbescheid) which were issued centrally.

The distribution of power was also controlled regionally by the Bezirklastverteiler. There were no central statistics of coal or power consumption by trades with the exception of an annual analysis of consumption of electricity from firm's own plants.

#### ii) Labour

The supply of labour was similarly controlled regionally through the Labour Offices. The problem here was not allocations but withdrawals. Workers with industrial experience were drafted into armament production and their place taken by housewives and unskilled foreign labour. Thus the productive capacity of the industries fell, although employment figures fell only to a small degree.

### Level of Consumption

There was a certain tension between the Armaments Ministry and the Ministry of Economics after Speer took over the production of consumer goods. Speer tried to prove that his reorganisation had not adversely affected consumer good production; Funk took the opposite view. The figures of Consumer good output in the Schnellbericht, quoted by Speer, were correct but they showed only the course of production of those articles manufactured under the Kriegsauflegeprogramm.

As to the general problem of estimating changes in German consumption during the war, Wagenführ was of the opinion that calculations based on value were useless as there was no reliable cost of living index to which they could be applied. The assortment of goods entering into the cost of living index, as with the British Ministry of Labour, did not take into account changes in consumption habits. The same objection applied to Dr. Grünig's 'balance' calculations (Bilanzberechnungen). Nor could retail trade statistics (Einzelhandelsstatistik) be relied on as they were derived from returns from a small sample of firms; if a firm was bombed out or closed down, its turnover (nil) was omitted, so that the resultant picture was always more favourable than in reality.

These objections also applied to the sales statistics of the Reichsgruppe Industrie. They were certainly complete (i.e. not based on sampling) but following the organisational stop (see page 2) they did not show what goods were being produced by each trade group nor did they disclose what percentage of output went to consumer use.

Wagenführ suggested that a reliable index could be constructed on a volume basis, by taking the allocations of raw materials to consumer goods industries for civilian consumption. The proportions of military and civilian use could be further checked from the returns of Wehrmacht deliveries in the Industriebericht. The results would be conservative as they would exclude increases in output from the same weight of raw material through the adoption of 'utility' designs and the exclusion of fripperies.

Finally they had never adopted the attitude of fixing an irreducible minimum of consumer good production leaving the rest of German economy free from war production. For a time the balance was the other way. In 1944 they went to the opposite extreme. Textiles were made available only to victims of air raids and the clothing cards became invalid for the rest of the population.

## VII. MISCELLANEOUS QUESTIONS

- Q. Can the Armaments Index (Rüstungsindex) be discussed in greater detail?
- A. I have covered all important points with Mr. MacNally of USBS.
- Q. How were aircraft repairs represented in the Schnellbericht?
- A. A distinction must be made between three gradations. First, repairs in workshops in the field (large and small repairs), were not covered by statistics. Secondly, repairs by industry where the repair time was less than 1000 hours, were only included in the statistics up to 1943. In regard to the third group - repairs over a 1000 hours - statistics were regularly kept.

In 1944 repairs were often given priority. They preferred to repair 3 old weapons than to produce one new one, as the expenditure on material was smaller.

Q. Were obsolete stores returned to industry ?

A. I am unaware of this, it can hardly have been done on a large scale.

Q. Did the increase in armaments production in 1943/44 result from long-term planning in 1939/41 ?

A. No. In 1939, production was still on a very small scale (the monthly production of tanks in the first months of the war was about 60). In 1940/41 it was thought that there would be too little steel (the effect of exaggerated quotas). In addition production was too bureaucratically organized. After the campaign in France, production was in part cut down and this was repeated in the second half of 1941, when Russia was thought to be already defeated. The possibility of a long war was entertained only from 1942. Industrial experts were called in. Speer first organized the production of tanks, followed in the second half of 1942 by a drive to increase Zulieferungs. The next stage was the conversion of all armaments to mass production methods which was achieved in 1943, and led to considerable increases during the first six months of 1944. In the middle of 1944 came the breakdown. At that time the reserves of raw material were very largely exhausted. By then no great savings were possible in consumption per item, and in addition few possibilities remained of economising in consumption outside the sphere of armaments.

Q. Why were the hours worked in Germany so few ?

A. I believe the statistics are faulty. They do not include the most important armaments concerns. Generally speaking work was done in several shifts only in cases of obvious bottlenecks, such as ball bearings, electro-steel, etc.

Q. Was there a shortage of factory space ?

A. No. In Czecho-Slovakia alone there must have been an increase of at least 15%.

Q. Was the supply of machinery a bottleneck ?

A. I do not think so. Naturally the machinery available became out of date.

- Q. Were there general investigations into the utilisation of capacity ?
- A. Yes, in the Census of 1936, but without applying any uniform standard. Each later census related only to individual industries.
- Q. Were any attempts made to effect a major comb out of skilled labour for armament production, especially from the machinery industry ?
- A. Yes, Saur tried this, but only in the latter half of 1944, when it was too late.
- Q. Are the Planungsamt statistics of armaments production likely to be correct ?
- A. I think they are, where they are based on acceptance figures. If you think figures of aircraft production are too high, you must remember the high monthly losses. Dr. Passauer, of Berlin, can give more details of this.
- Q. What was the decisive bottleneck in German war economy?
- A. The bottleneck varied in the course of years. In 1939/40 it was thought that there was too little iron, in addition the control of the armaments industry by the military authorities was an organisational bottleneck. In 1942/43 there were bottlenecks in shortage of skilled workers and in Zulieferungs. In 1944, transport, supplies of coal, energy and iron constituted the bottleneck. In addition, of course, there were always smaller bottlenecks.