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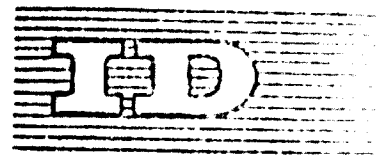
**SEMINAR
ON THE
ESTABLISHMENT
AND DEVELOPMENT
OF AUTOMOTIVE
INDUSTRIES
IN DEVELOPING
COUNTRIES**

KARLOVY VARY, CZECHOSLOVAKIA

24 February - 14 March 1969

Accompanied by *INF.I/Add.1*
List of changes to the programme.

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.



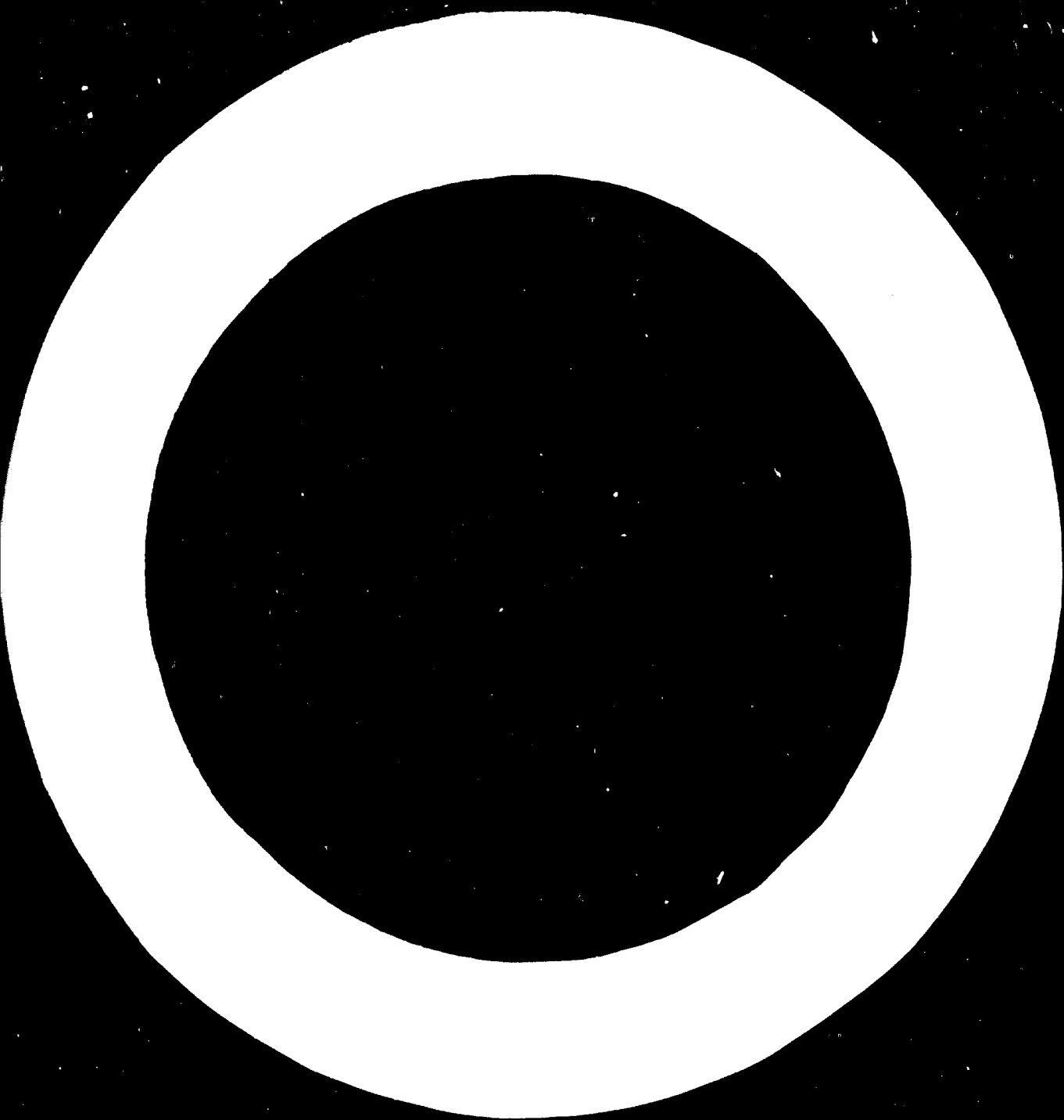
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Seminar on the Establishment and Development of the
Automotive Industry in Developing Countries

Prague, Czechoslovakia, 24 February - 14 March 1969

LIST OF CHANGES TO THE PROGRAMME



LIST OF CHANGES TO THE PROGRAMME

- Page 4 - Paragraph one should be deleted. Authors and designated introducers of papers and discussion leaders will be directly contacted by the Seminar Secretariat.
- Page 9 - The welcome address was given by Mr. A. BARČAK and not BRČAK as uncorrectly written in the programme. The message to the Seminar was given by M. O.V. Soskutý, Director of the Seminar, on behalf of Mr. I.H. Abdel-Rahman, Executive Director of UNIDO.
- Page 10 - Session I - The paper prepared by Mr. W. Ricart is introduced by Mr. E. Teruel (Spain).
- The paper prepared by Mr. V. Pobedonostsev is introduced by Mr. I. Komarov (USSR).
- Page 11 - Session II - The discussion leader is Mr. Z. Kejval (ČSSR) instead of Mr. J. Landgráf.
- The paper prepared by Mr. W. Eaton is introduced by Mr. O. Gonzalez-Hernandez (UNIDO)
- The paper prepared by Mr. M. Alth is introduced by Mr. F. Mackerle (U.S.A.)
- Page 12 - Session III - The paper prepared by Mr. A.G. Nowicki of the IBRD and not of the F.R. of Germany as uncorrectly written, is introduced by Mr. S. El Darwish
- Page 13 - Session IV - The papers prepared by Messrs. S. El Darwish and J. Baranson are introduced by Mr. S. El Darwish (IFC) in this session and not in session XIII as given in the programme.
Session V - The paper prepared by Mr. F. Hocven is introduced by Mr. E. Gibian (U.S.A.)

An additional paper "Some questions concerning the planning of buses with chassis" will be introduced by his author Mr. P. Michelberger (Hungary) in this session.

Page 14 - Session VII - The paper prepared by the Reliant Motor Co. will be introduced by Mr. D.J. Page (U.K.). Due to the lateness of the submission of this paper it was not possible to reproduce it for distribution among the participants during the Seminar.

Page 16 - Session IX - The paper prepared by Mr. K. Merchant is introduced by Mr. N. Gopala Iyengar (India)

- An additional paper "The latest development in Japanese Automobile Industry and some suggestions for developing countries" will be introduced by its author Mr. S. Yamamoto (Japan). Due to the lateness of the submission of this paper it was not possible to reproduce it for distribution among the participants during the Seminar

Page 17 - Session X - Mr. H Wodeci (FRG) is the discussion leader and the designated introducer of the paper to be submitted in this session.

Session XI - Mr. J. Beckel (ECLA) will be the discussion leader of this session, instead of Mr. V. Jansa.

- Mr. S. Yamamoto (Japan) is introducing the paper prepared by Mr. T. Yoshiki.

Page 18 - Session XIII - The discussion leader for this session is Mr. V. Jansa (USSR) instead of Mr. A.S. El Darwish.

- The two papers included in this session are introduced in Session IV.

Page 20 - Session XIV - We accept written contributions in the appropriate forms on the item to be discussed in this section.

ID/WG.13/INF.1

S E C R E T A R I A T

UNIDO

ČSSR

Director:

Mr. O. V. SOSKUTY

Mr. V. KEPPERT

Technical Secretary:

Mr. O. GONZALEZ-HERNANDEZ

Mr. J. LANDGRÁF

Administrative Officer:

Mr. F. W. HEROLD

Location of the Seminar

**Grand Hotel Pupp
Karlovy Vary, ČSSR**



SEMINAR INFORMATION

Admission

Only persons designated by UNIDO and the Government of the Czechoslovak Socialist Republic can be accepted as participants. So far as the premises and available seating accommodation allow, the public may be admitted but will not be entitled to take part in discussions or receive documents.

Registration

Participants should report on arrival to the registration desk.

Badges

Participants are requested to wear the name badges distributed to them upon registration; in case of loss, the registration desk should be informed.

Distribution of Documents

Most of the papers and their summaries were distributed among participants in advance. Papers that will be received afterwards will be distributed at the beginning of the Seminar.

Seating

There are no formal seating arrangements but it is desirable that, during each session, the authors or designated introducers, whose papers are to be discussed sit in the first row.

Languages and Interpretation

Speakers must use English, French or Spanish. Simultaneous interpretation into the other two languages will be provided.

Presentation of Papers

The Administrative Officer should be informed on any services required, and drawings and slides, etc., should be submitted in good time before each session.

Participants introducing papers are asked to attend a briefing in the office of the Secretariat half an hour before the session at which the paper is to be discussed.

Participants should speak slowly and distinctly in order to facilitate interpretation, and the time allowed for each paper should be respected.

Discussion

Speakers should not start until they have been invited to do so by the Discussion Leader; name and country should be announced each time.

Immediately after speaking, participants are asked to be good enough to summarize their remarks in writing on the forms distributed for this purpose. These forms, which help to guarantee the accuracy of the records, should be addressed to the Administrative Officer.

Participants introducing papers should in the same way, provide summaries of their answers to questions raised on the papers.

Final Corrections

In order to speed up publication of the report, the Technical Secretary and the Rapporteur of the Seminar will be present, and any corrections, additions, figures or notes which may be desirable to introduce in the final version of the papers should be submitted to them; authors are in return asked to reply as soon as possible to any points they may wish to clear up in connexion with their papers. The co-sponsors cannot undertake to make changes which are requested after the meetings have ended.

FINAL REPORT

Publication

The final report will be published by UNIDO about six months after the Seminar.

Publicity

United Nations publications are given a very wide publicity. They are reviewed and advertised in scientific and technical journals, abstracted in abstracting journals, listed in national bibliographies, deposited for public reading in libraries and displayed at book fairs and scientific conferences. Catalogues and advance notices of United Nations publications are distributed widely and may be obtained free on request.



GENERAL PROGRAMME

Monday,	24 February 1969	
	8.30 - 10.00	Registration of participants
	9.00 - 10.00	Joint meeting of discussion leaders, experts, authors of papers and the staff
	10.00 - 12.00	Opening Session
	13.30 - 17.00	First Session, Item 1
Tuesday,	25 February 1969	
	8.30 - 12.00	Second Session, Item 2
	13.30 - 17.00	Third Session, Item 3
Wednesday,	26 February 1969	
	8.30 - 12.00	Fourth Session, Item 3
	13.30 - 17.00	Fifth Session, Item 4
Thursday,	27 February 1969	
	8.30 - 12.00	Sixth Session, Item 4
	13.30 - 17.00	Seventh Session, Item 5
Friday,	28 February 1969	
	8.30 - 12.00	Eighth Session, Item 6
	13.30 - 17.00	Ninth Session, Item 7
Saturday,	1 March 1969	
		Reserved time
Sunday,	2 March 1969	
		No official business
Monday,	3 March 1969	
	8.30 - 12.00	Tenth Session, Item 8
	13.30 - 17.00	Eleventh Session, Item 9
Tuesday,	4 March 1969	
	8.30 - 12.00	Twelfth Session, Item 9
	13.30 - 17.00	Thirteenth Session, Item 10

Wednesday, 5 March 1969
8.30 - 12.00 **Fourteenth Session, Item 11**
13.30 - 17.00 **Final Review of Report**

Thursday, 6 March 1969
8.30 - 12.00 **Final Review of Report**
13.30 - 17.00 **Final Review of Report**

Friday, 7 March 1969
8.30 - 12.00 **Final Review of Report**
13.30 - 17.00 **Closing Session**

Saturday, 8 March 1969
Reserved time

Sunday, 9 March 1969 **No official business**

Monday, 10 March 1969 till Friday, 14 March 1969
Plant visits:
The following plants are scheduled to be visited:

- Jawa Development Works - Prague - Design and testing of motorcycles
- Jawa Works - Tynec - Production of motorcycles
- Metaz - Tynec - Light metals foundry
- Skoda Works - Mlada Boleslav - Production of automobiles
- Liaz - Rynovice - Mechanized truck engine testing
- Pal - Kbely - Manufacture of electrical equipment

An exact schedule will be distributed during the Seminar.

Saturday, 15 March 1969
Departure for home countries

**SEMINAR ON THE ESTABLISHMENT AND DEVELOPMENT OF
AUTOMOTIVE INDUSTRY IN DEVELOPING COUNTRIES**

24 February - 14 March 1969, Karlovy Vary, ČSSR

1st MEETING DAY, MONDAY, 24 FEBRUARY 1969

Opening Session 10.30 - 12.00

In the Chair	Mr. O. V. Soskuty, UNIDO
Presentation of the Seminar	Mr. O. V. Soskuty Director of the Seminar
Welcome Address	Mr. A. Brčák Vice-Chairman Federal Committee for Industry
Message to the Seminar	Mr. I. H. Abdel-Rahman Executive Director of UNIDO
Address	Mr. V. Keppert Co-Director of the Seminar
Election of Chairman and Vice-Chairman	
Chairman's Address	

First Meeting Day, Monday, 24 February 1969

Session I - 13.30 - 17.00

Item 1

Discussion Leader: Mr. Fernand Picard, France

General Elements of Preliminary Planning

- (a) Resources, basic industries and forward plans - iron and steel, chemicals and plastics, electrical and general light industry, power supply, gas, water, oil, natural resources.
- (b) Town planning, urbanization plans, road planning, plans for other forms of transport (rail, water, pipelines).
- (c) Road vehicle priorities - tractors, trucks, buses, passenger cars, motorcycles, commercial engines.
- (d) Other justifications for the establishment of a motor industry development.
- (e) Preliminary assessment of vehicle demand.

Papers:

- The importance of the automotive industry in the national economy. Its influence on and relations with other industry sectors.

Mr. W. Ricart - Spain

- The rationale of the gradual development of the automotive industry in developing countries; from assembly of imported parts to complete local production.

Mr. F. Picard - France

- The state and development of the USSR automobile industry; its role and significance in the national economy.

Mr. V. Pobedonostsev - USSR

Second Meeting Day, Tuesday, 25 February 1969

Session II - 8.30 - 12.00

Item 2

Discussion Leader: Mr. Jiri Langraf, CSSR

Vehicle Service Plans

- (a) Repair and maintenance
- (b) Accessory and spare parts distribution and storage
- (c) Secondhand vehicle purchase, vehicle fleet operation

Papers:

- Maintenance of heavy duty commercial
automotive equipment.

Mr. W. Eaton - USA

- The use of secondhand transportation
equipment

Mr. M. Alth - USA

Session III - 13.30 - 17.00

Item 3

Discussion Leader: Mr. A. Riha, CSSR

Intermediate Assessment of Vehicle Demand on a Make and Buy Pattern

- (a) Mandatory limitations on variety by type and manufacturing preference.
- (b) Establishment of terms of reference for negotiations with existing manufacturers (what to ask for and what to expect).
- (c) Assembly planning and integration of easily made parts, ancillary industry plans, accessory manufacture.
- (d) Second stage of manufacturing integration.
- (e) Final stage of manufacturing integration.

Papers:

- Planning of facilities for the manufacture of automobiles and trucks, with special reference to developing countries.
- Some problems involved in the establishment of the automotive lighting industry.
- The motorcycle, its presence and future.
- Automotive demand in developing countries

Mr. A. Řiha - ČSSR

Mr. L. Zajíc - ČSSR

Mr. V. Jansa - ČSSR

Mr. A. G. Nowicki
- Germany, F.R.

Third Meeting Day, Wednesday, 26 February 1969

Session IV - 8.30 - 12.00

Item 3

Discussion Leader: Mr. A. Riha, ČSSR

Continuation of discussion of item 3 and related papers.

Session V - 13.30 - 17.00

Item 4

Discussion Leader: Mr. J. Valecký, ČSSR

Technological Problems

- (a) The technological "gap" between developing and developed countries - its significance and limiting implications
- (b) The technology of: assembly, manufacture of easily made parts, major units (engines, etc.)
- (c) Manufacture of bodies
 - sheet metal
 - plastic materials

Papers:

- Quality control in foundry operations for automotive parts manufacture
Mr. L. Komarov - USSR
- Automotive research and development
Mr. F. Hooven - USA
- Application of the pressure die-casting process to the production of light metal castings in the automotive industry
Mr. J. Valecký - ČSSR
- Some aspects of automobile body building
Mr. Z. Kejval - ČSSR
- Automobiles and computers
Mr. S. Kotoč - ČSSR

Fourth Meeting Day, Thursday, 27 February 1969

Session VI - 8.30 - 12.00

Item 4

Discussion Leader: Mr. J. Valecky, CSSR

Continuation of discussion of item 4 and related papers.

Session VII - 13.30 - 17.00

Item 5

Discussion Leader: Mr. D.J. Page, UK

Cost implications, Capital and Expense, Profitability

- (a) Assembly
- (b) Easily made parts
- (c) Major units (engines, axles, etc.)
- (d) Sheet metal
- (e) Plastic bodies
- (f) The economics of low-volume production

Papers:

- Problems related to the production and supply
of automotive equipment components
Mr. E. Gibian - USA
- Production of fibre-glass reinforced bodies
in developing countries
The Reliant Motor Co. - UK

Fifth Meeting Day, Friday, 28 February 1969

Session VIII - 8.30 - 12.00

Item 6

Discussion Leader: Mr. Ch. Moore, ILO

Training Requirements and Timing

- (a) Production semi-skilled workers
- (b) Skilled workers
- (c) Technicians (manufacturing engineers, plant engineers)
- (d) Cost accounting
- (e) Production planning and control (including store keeping)
- (f) Quality control

Papers:

- The work of the ILO in relation to the metal trades

Secretariat - ILO

Session IX - 13.30 - 17.00

Item 7

Discussion Leader: Mr. A. Gazarin, UAR

Launching Problems

- (a) Preproduction training facilities
- (b) Launching planning
- (c) Capacity planning and production build up
- (d) Shift working
- Discussion of typical cases of establishment of automotive industries in developing countries

Papers:

- Establishment and development of the automotive equipment industry in India

Mr. K. Merchant - India

- Establishment and development of the automotive equipment industry in Yugoslavia

Mr. P. Raković - Yugoslavia

- The establishment and development of the automotive equipment industry in the UAR

Mr. A. Gazarin - UAR

Sixth Meeting Day, Monday, 3 March 1969

Session X - 8.30 - 12.00

Item 8

Discussion Leader: Mr. C. Nebelung, Germany (Federal Republic)

Personnel Relations

- (a) Safe working practices, control of toxic substances and machine guarding
- (b) Heat, light and ventilation
- (c) Employee services - pensions, health, recreation, security, canteens
- (d) "In plant training" and management development
- (e) Statutory regulations

Papers:

- The establishment and development of the automotive industry in Brazil

Mr. C. Nebelung - Germany, F.R.

Session XI - 13.30 - 17.00

Item 9

Discussion Leader: Mr. V. Jansa, ČSSR

Regional co-operation

- (a) Preliminary planning on joint ventures

Papers:

- The automotive industry: The problems of integration and specialization and regional co-operation

Mr. T. Yoshiki - Japan

Seventh Meeting Day, Tuesday, 4 March 1969

Session XII - 8.30 - 12.00

Item 9

Discussion Leader: Mr. V. Jansa, ĀSSR

Continuation of discussion of item 9 and related papers.

Session XIII - 13.30 - 17.00

Item 10

Discussion Leader: Mr. A.S. El Darwish, IFC

Completion of Motor Industry Planning

- (a) Timing plan
- (b) Financial planning - calendarisation of investments
production expense, importation cost, tax and import
controls
- (c) Planning revisions

Papers:

- The establishment of an automotive industry
in developing countries
Mr. A.S. El Darwish - IFC
- Automotive Industries in developing
countries
Mr. J. Baranson - IBRD

Eighth Meeting Day, Wednesday, 5 March 1969

Session XIV - 8.30 - 12.00

Item 11

Discussion Leader: Mr. J. Fath, UNIDO

Review of prospects and plans for the automotive industry in the participating countries during the second development decade (1970-1980).

Session XV - 13.30 - 17.00

Final Review of Report

Ninth Meeting Day, Thursday, 6 March 1969

Session XVI - 8.30 - 12.00

Final Review of Report

Session XVII - 13.30 - 17.00

Final Review of Report

Tenth Meeting Day, Friday, 7 March 1969

Session XVIII - 8.30 - 12.00

Final Review of Report

Session XIX - 13.30 - 17.00

Final Review of Report and Closing Session

Saturday, 8 March 1969

Reserved time

Sunday, 9 March 1969

No official business

Eleventh Meeting Day, Monday, 10 March 1969 - Friday, 14 March 1969

Visits to various plants

Saturday, 15 March 1969

Departure for home countries





28. I. 72