

**EIGHTY-SIXTH REPORT**  
**PUBLIC ACCOUNTS COMMITTEE**  
**(1994-95)**

**(TENTH LOK SABHA)**

**PRODUCTION OF AN ARMOURED VEHICLE 'Z',  
ITS GUN AND AMMUNITION**

**MINISTRY OF DEFENCE**

*[Action Taken on 71st Report of Public Accounts Committee  
(10th Lok Sabha)]*



*Presented to Lok Sabha on 23 March, 1995  
Laid in Rajya Sabha on 23 March, 1995*

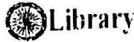
**LOK SABHA SECRETARIAT  
NEW DELHI**

*February, 1995/Phalgun, 1916 (Saka)*

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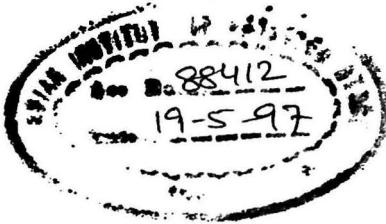
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PUBLIC ACCOUNTS COMMITTEE  
(1994-95)

Shri Bhagwan Shankar Rawat—*Chairman*

**MEMBERS**

*Lok Sabha*

2. Shri Bandaru Dattatraya
3. Shri Anil Basu
4. Shri Dileep Singh Bhuria
5. Sqn. Ldr. Kamal Chaudhry
6. Dr. K.V.R. Chowdary
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20. Shri Murasoli Maran
21. Smt. Jayanthi Natarajan
22. Shri G. G. Swell

**SECRETARIAT**

1. Shri Murari Lal — *Joint Secretary*
2. Smt. P. K. Sandhu — *Director*
3. Shri P. Sreedharan — *Under Secretary*



## INTRODUCTION

I, the Chairman of the Public Accounts Committee, as authorised by the Committee, do present on their behalf this Eighty-Sixth Report on action taken by the Government on the recommendations of the Public Accounts Committee contained in their 71st Report (10th Lok Sabha) on Production of an armoured vehicle 'Z', its gun and ammunition.

2. In their earlier Report the Committee had found inordinate delay in the completion of armoured vehicle 'Z' project resulting thereby in cost and time-overruns, besides several other shortcomings in the execution of the project. These mainly related to the inadequacies in project planning, under-utilisation of capacity, extra expenditure incurred involving foreign exchange on imports of machine/components due to the delay in the completion of the project, deficiencies in the monitoring of the project, irregularities in the execution of civil works etc. The Ministry of Defence have in their action taken note stated that in pursuance of the recommendations of the Committee necessary rectificatory steps have been taken and that instructions have been issued to all concerned with a view to avoiding inordinate delays in the execution of such defence projects. In this Report the Committee have desired that the instructions should be scrupulously followed, reviewed by the Ministry at regular intervals and non-compliance of the same should be viewed seriously.

3. This Report was considered and adopted by the Public Accounts Committee at their sitting held on 20 February, 1995. Minutes of the sitting form Part-II of the Report.

4. For facility of reference and convenience, the recommendation of the Committee has been printed in thick type in the body of the report and has also been reproduced in a consolidated form in Appendix\* to the Report.

5. The Committee place on record their appreciation of the assistance rendered to them in the matter by the Office of the Comptroller and Auditor General of India.

NEW DELHI;  
24 February, 1995  

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5 Phalgun, 1916 (Saka)

BHAGWAN SHANKAR RAWAT,  
Chairman,  
Public Accounts Committee.

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\*Not appended.

## **CHAPTER I**

### **REPORT**

This Report of the Committee deals with the action taken by Government on the recommendations and observations contained in their 71st Report (Tenth Lok Sabha) on Paragraph 33 of the Report of the Comptroller & Auditor General of India for the year ended 31st March, 1991, No.8 of 1992, Union Government (Defence Services—Army & Ordnance Factories) relating to Production of an armoured vehicle 'Z', its gun and ammunition.

1.2 The 71st Report which was presented to Lok Sabha on 27 April, 1994 contained 11 recommendations. Action taken notes have been received in respect of all the recommendations and these have been broadly categorised as follows:

- (i) Recommendations and observations which have been accepted by Government:  
S. Nos. : 1, 2, 5, 6, 7, 10 and 11
- (ii) Recommendations and observations which the Committee do not desire to pursue in the light of the replies received from Government:  
S.Nos. : 3, 4, 8 & 9
- (iii) Recommendations and observations replies to which have not been accepted by the Committee and which require reiteration :  
-NIL-
- (iv) Recommendations and observations in respect of which Government have furnished interim replies :  
-NIL-

1.3 In the succeeding paragraphs the Committee deal with the action taken by Government on some of the recommendations:

#### *Delay in Production of armoured vehicle 'Z'*

1.4 A project for production of armoured vehicle 'Z' was sanctioned in April 1987 with an estimated cost of Rs. 503.75 crores and was planned to be completed by May 1989. However, the project was completed in March, 1994. The 71st Report of the Committee (10th Lok Sabha) besides revealing the cost and time overruns had also pointed out several other shortcomings/irregularities in the execution of the project. These mainly related to the inadequacies in project planning, under-utilisation of rated capacity due to reduced demands from army, avoidable outgo of foreign



exchange on assembly of 175 vehicles with imported CKD components valuing Rs. 270.75 crores, as against the originally envisaged expenditure of Rs. 63.86 crores for 50 vehicles, which was necessitated due to the delay in the completion of the project, deficiencies in the monitoring of the project, irregularities in the execution of civil works etc. Expressing their concern over the inordinate delay in the completion of the project the Committee had emphasised the need to make the functioning of the mechanism for monitoring the progress in the execution of important projects involving defence preparedness of the country more effective.

1.5 The Ministry of Defence have in their action taken note furnished to the Committee on 8.2.1995 *inter-alia* stated that instructions have been issued regarding planning and execution of major defence projects. As per these instructions, formulation of a project report should be done with utmost care and meticulous regard for details and a clear understanding of the complexities involved in the execution of the project. While fixing time frame for completing various stages/phases of the project, due note should be taken of all the factors that could have a bearing on their implementation, based on past experience as also foreseeable trends with a view to laying down realistic target which are capable of being achieved and also for strict adherence for achieving the time frames so fixed. The Ministry have also emphasised that the terms of reference, functions and frequency of meeting of the institutionalised monitoring mechanisms like steering committees, monitoring groups, working groups etc. which are constituted for monitoring implementation of the projects should be clearly laid down and efforts should be made not only to hold structured meetings of these groups, as per the frequency envisaged but structures of the meetings should be so designed that the discussions are made effective and purposeful in regulating critical/bottleneck areas which could contribute to avoidable delays.

1.6 Reacting to the Committee's observations regarding outgo of precious foreign exchange due to avoidable imports arising out of the delay in the completion of the project, the Ministry of Defence have informed the Committee that there has been a marked achievement in the indigenisation of components/sub-assembly of vehicle 'Z'. According to the Ministry, the indigenisation achieved by March 1994 was to the extent of 93%. As regards under-utilisation of capacity the Ministry of Defence have in their action taken note *inter-alia* stated that spare capacity available is now being utilised for new emerging requirements of the Army for overhaul of 'Z' vehicles, manufacture of prototypes of new MBT, variants of 'Z' vehicles etc. According to the Ministry, utilisation of the spare capacity for the above mentioned purposes would result in substantial savings in setting up of facilities for those purposes which would have been otherwise needed. Dealing with the irregularities pointed out by the Committee in the execution of civil works etc. the Ministry stated that a policy letter has been issued to all concerned emphasising the need to

exercise due care in planning and execution of works to avoid recurrences of such cases in future.

1.7 In their earlier report the Committee had found inordinate delay in the completion of armoured vehicle 'Z' project resulting thereby in cost and time overruns, besides several other shortcomings/irregularities in the execution of the project. These mainly related to the inadequacies in project planning, under-utilisation of capacity, extra expenditure incurred involving foreign exchange on imports of machines/components due to the delay in the completion of the project, deficiencies in the monitoring of the project, irregularities in the execution of civil works etc. The Ministry of Defence have in their action taken note stated that in pursuance of the recommendations of the Committee necessary rectificatory steps have been taken and that instructions have been issued to all concerned with a view to avoiding inordinate delays in the execution of such defence projects. The Committee desire that the instructions should be scrupulously followed, reviewed by the Ministry at regular intervals and non-compliance of the same should be viewed seriously.

## CHAPTER II

### RECOMMENDATIONS AND OBSERVATIONS WHICH HAVE BEEN ACCEPTED BY GOVERNMENT

#### Recommendation

The Committee note that based on extensive trials in 1979, the Army Headquarters recommended the induction of Armoured Vehicles 'Z' into the Indian Fleet to be used as interim vehicle pending production of an indigenously developed Armoured Vehicle 'M'. The Cabinet Committee on Political Affairs (CCPA) while approving the proposal in Jun 81 had directed the Ministry of Defence to explore the possibility of manufacturing these vehicles in the country under licence from the foreign supplier. Accordingly in Jul'82 the M of D concluded an agreement with the foreign supplier for licence and technical know-how for indigenous manufacture of certain number of vehicles on payment of a licence fee of Rs. 45.59 crores. It was decided to produce the vehicle 'Z' at Factory 'A' by augmenting its existing capacity and after transfer of technology by the Collaborator. The Project was sanctioned in Apr'87 with an estimated cost of Rs. 503.75 Crores including foreign exchange component of Rs. 149.15 Crores. The planned date of completion of the project was May'89 and peak production was expected to be achieved during 91-92. The project was strictly a time bound one and trickle production was expected from 1987-88. The Committee's examination of the Audit Review has revealed several short-comings in the implementation of the Project which are dealt with in the succeeding paragraphs.

[S. No. 1, Para 57, Appendix II of 71st Report of PAC (10th Lok Sabha)]

#### Action Taken

The project was operational since May 1989. The schedules for completion of Civil Works and P&M and actuals are as under:—

Sl.	Shop	Sch for C.W.	Actual	Sch of P&M	Actual
1	2	3	4	5	6
1.	GA	11/87	11/87	4/88	9/89
2.	HT	02/87	02/87	10/88	9/90
3.	EP	02/87	02/87	10/88	8/90
4.	TRANS	02/87	02/87	10/88	6/91
					(Except 2 Key CNC VTL under JWA)
5.	RG	08/87	08/87	03/89	4/92 (-do- under JWA)

1	2	3	4	5	6
6.	CA	08/87	08/87	03/89	4/92 (-do- under JWA)
7.	HULL	08/88	08/88	04/89	4/92 (Except 3 imported key CNC M/cs)
8.	TUREET	11/87	11/87	04/89	12/92 (Except 7 imported key CNC M/cs)

It could thus be seen that buildings were completed on time.

2. P&M were practically ordred for all the shops barring a few exceptional cases and for reasons beyond control of the Project Authorities/Deptt. The progress with regard to positioning of P&M and project implementation was as under:—

Month/Year	4/87	4/88	3/89	5/89	3/90	3/91	3/92	3/93	3/94
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#### PLANT AND MACHINERY

S.D. Placed	48	1150	1292	1301	1310	1313	1356	1360	* 1359
P&M Recd	29	313	919	993	1238	1293	1313	1354	1359
P&M Erected	29	205	631	724	1223	1282	1302	1345	1359
P&M Commi- sioned	27	137	489	579	1156	1232	1285	1331	1359

\* 1 No. Cancelled.

#### NOTES

During the period 4/87 till 4/88, the activities with regard to placement of Supply Orders for P&M were intense and monthly rate registered an all time high figure.

This tempo was sustained thereafter to the extent technically practicable and depending upon complexity of the specific cases.

Bulk of the machines were received by May 1989.

This was achieved inspite of the following constraints which were beyond the control of the Project Authorities/Deptt.

Delays in the actual transfer of "Technology Project Report" by the Collaborators. In spite of pursuing the issue at the highest level, the Russian authorities took time to finalise the Report (Tech Project Report - TPR).

Embargo with regard to export of P&M by Foreign Govts. for Defence Industries in India. The particulars of countries, key machines involved,

and the components affected are furnished below: These are part of major assemblies for 'Z'

Country:	S. Korea	Germany	Japan
Machines:	Vertical Machining Centre	Vertical Turret Lathes	Chuckers

**Primary Components affected:**

Hull assy. Rotary Conveyor, Gear Box, Fan drive, Sprocket Assy. and Idler Wheel Assy. Initial offers received were too high as compared to estimates and techno-economic assessment. This necessitated re-tendering as well as negotiations with indigenous machine tool manufacturers preferably PSUs which resulted in substantial reduction in cost but delayed placement of orders.

The joint working arrangements have been dropped abruptly by some of the foreign machine tool manufacturers. This situation was beyond the control of Project Authorities. eg. DORRIES & Schiess of Germany and COMMOU of Italy.

Emphasis was laid in encouraging Indian machine tool Industries. However, they could not come up to expectations because of their constraints in building up capacity and resources and also the constraints experienced by them not only in supply but also in commission/executing the orders.

Delay in commissioning of imported machines by some of foreign suppliers because of change of ownership at their end.

Trickle production did commence from 1987-88 and 15 'Z' vehicles were issued.

[Ministry of Defence/Department of Defence Production & Supplies  
O.M. No. PC11 2(9)/83/DP(Pig-III) dated 08-02-1995]

**Recommendation**

The Committee are distressed to find that the Project originally scheduled to be completed by May'89 has been completed in Mar' 94. The Ministry of Defence (Deptt. of Def. Prodn & Supplies) attributed the delay *inter-alia* to the delay in ordering, receipt and commissioning of the plant & machinery. The Ministry also stated that the original time schedule of two years for a project of this magnitude was ambitious, too tight and unrealistic. To say the least the Committee are surprised over this plea taken by the Ministry at this stage. This is clearly indicative of the lack of proper planning and also of the fact that the targets fixed are not such as are capable of achievement. Further considering the fact that project has been completed after a lapse of seven years as against the target of two

years clearly shows laxity in the execution of the projects. The Committee take a serious view of such delays in the execution of projects particularly those involving defence preparedness of the country.

[Sl. No. 2, para 58, Appendix II of 71st Report of PAC (10th Lok Sabha)]

#### Action Taken

The project stands physically completed as of Mar' 94 with the erection/commissioning of all the 1359 machines. In real terms, the project was operational since May' 89. All building work was completed 96% of P&M (1301 out of 1359) had been ordered. About 73% (993 out of 1359) P&M had been received and 53% erected (724 Nos.) Trickle manufacture commenced in 1987-88 as planned.

It may be appreciated that even during the phase of ordering, receipt and commissioning of machines, manufacturing activities had been commenced and the laid down annual targets have been met for manufacture and issue of Equipment 'Z'. The project was constantly monitored by Steering Committee at Secy (DP&S) level, monitoring Committee at Addl. Secy level, and Working groups at Addl DG level in an effort to complete the project within the time schedule. However, there was extraneous factors which led to the delay in full completion of the Project, as given below:—

(a) Delays in the actual transfer of 'Technology Project Report' by the collaborators: In spite of pursuing the issue at the highest level, the Russian authorities took time to finalise the report.

(b) Embargo with regard to export of P&M by foreign governments for defence industries in India:

Key machines like vertical machining centre, vertical turret lathes, chucks were delayed because of embargo imposed by South Korea, Germany and Japan. This necessitated re-tendering as well as negotiations with indigenous machine tool manufacturers. Even joint working arrangement was dropped by some of the foreign machine tool manufacturers which led to delay for some of the critical machines. Further, commissioning, of some of the imported machines got delayed due to change in ownership at suppliers end. In spite of these, special efforts were made to meet the targets of 'Z' vehicles by importing some of the balancing components/sub-assemblies and by taking assistance from trade. All the targets of 'Z' vehicles specified by the Army were regularly met.

Instructions have been issued that time schedule for completing such projects be laid down after considering the complexities involved and that realistic targets capable of being achieved be fixed. One copy of instructions is at Annexure I.

[Ministry of Defence/Department of Defence Production & Supplies  
O.M.No. PC11 2(9)/83/DP(Plg-III) Dated 08-02-1995]

### Recommendation

The Committee note that as against the original rated capacity of 200 vehicles per annum the actual production of the factory has been far less. They find that the actual production achieved during the year 1991-92 and 1992-93 were only 72 and 80 respectively. The Committee have been informed that the production schedule has since undergone changes. According to the Ministry, the Production Schedule had to be revised due to reduced demands from Army on account of budgetary constraints, uncertainties in supply of certain parts from the supplier etc. The Committee note with great concern that the production capacity created at great cost remains largely under-utilised.

[Sl. No. 5, para 61, Appendix II of 71st Report of PAC (10th Lok Sabha)]

### Action Taken

There was a revision in the targets set by Army and all the requirements have been regularly met. Though infrastructure and P&M is for 200 equipment, manpower has been positioned for the revised targets only. However, spare capacity available is now being utilised for new emerging requirements of the Army. The overhaul of 'Z' vehicles has commenced in the first year of requirement projected by the services which otherwise would have taken a long time. Production of prototypes of new series of MBT has also been taken up. A few variants of 'Z' equipment, requiring facilities similar to 'Z' vehicles has also been taken up. In fact, work equivalent to about 110-120 'Z' vehicles is planned during 1994-95.

Utilisation of these facilities for new emerging requirements has not only helped in taking up production in the very first year of requirement, but has also resulted in substantial savings in setting up of facilities which would have been otherwise needed.

[Ministry of Defence/Department of Defence Production & Supplies  
O.M.No. PC11 2(9)/83/DP(Plg-III) Dated 08-02-1995]

### Recommendation

As regards remedial steps, the Committee were informed by the Ministry that they had gone in for diversification for optimum utilisation of plant and machinery installed by way of rendering assistance to HAL, EML, Praga, VSSC, ADA, ISRO, Railways etc. However, according to the Ministry diversification to civil sector is further constrained owing to the fact that, Ordnance Factory set up had been entirely dedicated to defence needs only. The Committee recommend that the Ministry should strive for exploring possibilities of further diversification and exploring of foreign markets for optimum utilisation of the installed capacity.

[Sl. No. 6, Para 62, Appendix II of 71st Report of PAC (10th Lok Sabha)]

### Action Taken

A constant review is being taken for spareable capacities and utilisation thereof. New emerging requirements of the Army for overhaul on 'Z' vehicles, manufacture of prototypes of new MBT, variants of 'Z' vehicles, which would have required setting up of new facilities have been planned to be taken up in 1994-95. In 1995-96, overhaul of 'Z' vehicles is planned to be increased by 3 times than that in 1994-95.

Possibilities for further utilisation of spareable capacity are being kept in view with the objective to further enhance the output of capacities available.

[Ministry of Defence/Department of Defence Production & Supplies  
O.M.No. PC11 2(9)/83/DP (Plg-III) Dated 08-02-1995]

### Recommendation

The Committee find that a Steering Committee and different Working Groups under the former were constituted to identify and resolve critical bottleneck areas in the implementation of the Project. They are, however constrained to observe that during Feb. 83 to Mar. 91, the Steering Committee had met only 13 times as against 49 meetings envisaged and the Working Group on specific areas met between 7 to 18 times only against 28 meetings envisaged for each group during the above period. Considering the inordinate delays in the completion of the project, it is apparent that the Steering Committee failed in resolving the critical bottleneck areas in the implementation of the Project. The Committee recommend that the Ministry of Defence should look into the inadequacies in the functioning of the Steering Committee/Working Groups for appropriate remedial action.

[Sl. No. 7 Para 63, Appendix II of 71st Report of PAC (10th Lok Sabha)]

### Action Taken

Though there were structured meetings planned, intense monitoring was done at the field level, at the Board level and also at the Ministry level. Working Group meetings were also arranged as and when required. The monitoring was so intense that in some cases manufacturers had to pay a penalty for delay in supply of items in time and also in non-commissioning of machines. However, instructions have been issued that steps should be taken to hold structured meetings of Steering Committee and working groups at the frequency envisaged for major projects so as to make them effective and purposeful in resolving critical/bottleneck areas. One copy of the instructions is at Annexure I.

[Ministry of Defence/Department of Defence Production & Supplies  
O.M.No. PC11 2(9)/83/DP (PLG-III) Dated 08-02-1995]



### Recommendation

The Committee further note that subsequent to the diversion of the pipe-lines, pipes worth Rs.5.00 lakhs were stolen from the area where excavation for rechecking lead contents was done by the contractor. The pipes were reported to be stolen twice once in Aug. 88 and then in Oct. 88. According to the Ministry, defence properties within the boundary wall or fencing are only regularly guarded and the existing pipelines where the theft occurred was not within the fencing or boundary wall. The Committee cannot accept this as a valid argument and desire that suitable steps should be taken by the authorities concerned for safeguarding the government properties.

[Sl.No. 10, Para 66, Appendix II of 71st Report of PAC (10th Lok Sabha)]

### Action Taken

#### Remedial/Corrective action taken

A portion of unguarded pipeline was stolen in 1988 which was not within any boundary wall/fenced area.

The pipeline is presently secured within a compound wall constructed later for another project and is also checked by departmental personnel to avoid theft.

A policy letter has also been issued vide letter No 95533/Pol/E2 (WPC) dated 16 June, 94 by E in C Branch to avoid such occurrences in future. One copy of the letter is at Annexure II.

[Ministry of Defence/Department of Defence Production & Supplies  
O.M.No. PC11 2(9)/83/DP (Plg-III) Dated 08-02-1995]

### Recommendation

To summarise the foregoing paragraphs reveal inordinate delay in execution of project involving cost and time over-run. There had been several other shortcomings/irregularities in the execution of project for production of the Armoured vehicle 'Z', Its gun and ammunition. These mainly related to the inadequacies in Project. Planning, under utilisation of capacity, extra expenditure due to avoidable imports, irregularities in the execution of civil works etc. The Public Accounts Committee have time and again commented upon the inordinate delay in the execution of important defence projects. In their 58th Report (Tenth Lok Sabha) the Committee had recommended that the Ministry of Defence should have a fresh look at the functioning of the mechanism for monitoring the progress in the execution of important Defence projects to make it more effective. The Committee desire that the Ministry of Defence while reviewing the mechanism should also make use of the facts brought out in this report as useful inputs in the process.

[Sl. No. 11, Para 67, Appendix II of 71st report of PAC (10th Lok Sabha)]

**Action Taken**

As directed by Public Accounts Committee, the facts brought out in the report will be made use of as useful inputs in having a fresh look at the functioning of mechanism for monitoring the progress in execution of Defence projects.

[Ministry of Defence/Department of Defence Production & Supplies,  
O.M. No. PC11 2(9)/83/DP (Plg-III) Dated 08-02-1995]

MINISTRY OF DEFENCE  
(Department of Defence Prod'n. & Supplies)

SUBJECT: *Instructions regarding planning & execution of major defence projects.*

In their Seventy First report on production of an armoured vehicle 'Z', its gun and ammunition the Public Accounts Committee (Tenth Lok Sabha) have, *inter-alia*, made the following observations/recommendations:

"58 ..... The Ministry also stated that original time schedule of two years for a project of this magnitude was ambitious, too tight and unrealistic. To say the least, the Committee are surprised over this plea taken by the Ministry at this stage. This is clearly indicative of the lack of proper planning and also of the fact that the targets fixed are not such as are capable of achievement....."

"63. The Committee find that a Steering Committee and different Working Groups under the former were constituted to identify and resolve critical bottleneck areas in the implementation of the Project. They are, however, constrained to observe that during February 1983 to March 1991 the Steering Committee had met only 13 times as against 49 meetings envisaged and the Working Groups on specific areas met between 7 and 18 times only against 28 meetings envisaged for, each group during the above period. Considering the inordinate delays in the completion of the project, it is apparent that the Steering Committee failed in resolving the critical bottleneck areas in the implementation of the project. The Committee recommended that the Ministry of Defence should look into the inadequacies in functioning of the Steering Committee/Working Groups for appropriate remedial action."

2. The observations/recommendations have been examined. It hardly needs emphasis that the formulation of a project report should be done with utmost care with meticulous regard for details and a clear understanding of the complexities involved in execution of the project. While fixing time frame for completing various stages/phases of the project, due note should be taken of all the factors that could have a bearing on their implementation, based on past experience as also foreseeable

trends with a view to lay down realistic target which are capable of being achieved. Once such targets are fixed, the time frames for achieving them should be strictly adhered to.

3. The terms of reference, functions and frequency of meetings of the institutionalised monitoring mechanisms like steering committees, monitoring groups, working groups etc. which are constituted for monitoring implementation of the projects should be clearly laid down and efforts should be made not only to hold structured meetings of these groups, as per the frequency envisaged but structure of the meetings should be so designed that the discussions are made effective and purposeful in resolving critical/bottleneck areas which could contribute to avoidable delays.

4. These instructions may kindly be brought to the notice of all concerned for strict compliance.

sd/-

(Satish Kumar)  
Joint Secretary (OF)  
Tele: 3013694

*All Joint Secretaries in the Ministry of Defence*

M of D ID No. PC.11 2(9)83/DP(Plg.III) dated 30.11.94.

Copy to:

1. DGOFC/Chairman  
Ordnance Factory Board,  
10-A, Auckland Road,  
Calcutta.
2. Chief Executives of all Defence PSU.  
N.O.O.
  - (i) Addl. FA(T)
  - (ii) Director (Works), DPE in C Branch.
  - (iii) OSD (P)
  - (iv) PPS to Secy (DP&S)

Sd/-

(Satish Kumar)  
Joint Secretary (OF)

**ANNEXURE II**

Tele: 3019637

Dy. Dte. Gen. of Works (P&C)  
Engineer-in Chief's Branch  
Army Headquarters  
Kashmir House, DHQ PO  
New Delhi-110011

No. 95533/Pol/E2(WPC)

16th June 94

E-in-C's List 'A'

**PLANNING AND UTILISATION OF EM SERVICES**

1. Detailed instructions on various factors that need to be considered in depth while planning and execution of water supply schemes; already exist. Important among these are assured availability of water, an undertaking from the water supply agency that water to the extent agreed upon will be supplied and full utilisation of the scheme on completion/commissioning.

2. In spite of this, a case has come to the notice of this HQ where a pipeline for supply of water to a tank was laid at considerable cost but could not be effectively utilised due to non supply of committed quantum of water by the supply agency. Also, there was theft of a large portion of pipeline resulting in initiation of a loss statement for approximately Rs. 5 lakhs.

3. It is therefore imperative that due care is exercised in planning and execution of works to avoid reoccurrences of such cases in future. Before undertaking water supply schemes, adequate supply of water should be invariably ensured. A penalty clause in the agreement for short supply could also be considered. It should also be ensured that in future assets created are fully and effectively utilised and safe-guarded.

4. Please issue necessary instructions to all Zonal CE's/CsWE to ensure compliance of the above instructions.

5. Please acknowledge.

(K. Prabhakara Rao)  
Chief Engineer,  
DDGW (P&C)  
for E-in-C

Copy to :-

Internal : ADGW (DP)  
DDGW (Utilities)

## CHAPTER III

### RECOMMENDATIONS AND OBSERVATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN THE LIGHT OF THE REPLIES RECEIVED FROM GOVERNMENT

#### Recommendation

As regard the cost over-runs, different figures have been furnished to the Committee. According to audit due to time overrun in the Completion of the Project and reduction in procurement of the number of machine originally envisaged resulted in cost overrun of Rs 74.13 crores. However as per the note furnished to the Committee the Ministry of Defence have stated that the anticipated expenditure of the project on completion would be Rs 424.59 crores as against the original estimated cost of Rs. 503.75 crores. The Committee consider it relevant to point out in this connection that the reduction in the number of plant and machines from that which was originally envisaged is also a significant factor in determining the cost over-run. As against the original provision for import of 2008 machines, the actual number of machines imported was 1359. The estimated cost of the machines which were not imported has not been intimated to the Committee. Under these circumstances, the Committee are not able to find the precise cost overrun on the Project. They therefore, desire to be apprised of the precise expenditure incurred on the project with reference to original estimates after taking into account the impact of the reduction in the number of machines imported.

[Sl. No. 3, Para 59, Appendix II of 71st Report of PAC (10th Lok Sabha)]

#### Action Taken

1. As against 2008 machines to be procured, only 1359 machines were actually procured, out of which 108 numbers were imported machines. At the time DPR was prepared, most of the machines envisaged to be procured were conventional machines. However, due to technological advancement and upgradation of process technology and the availability of CNC machines, project executing authorities procured reduced number of high productivity machines by reducing conventional machines but without derating overall capacity. Hence, it was feasible to build in the capacity for the project with 1359 machines within Rs. 292.21 Crores. Estimated DPR cost of 649 machines which were not procured works out to approx. Rs. 123.03 crores.

2. Reduction with regard to number of machines was possible only after obtaining actual techno-commercial offers from machine tool manufacturers of repute. The emergence of computerised numerically

controlled machines technology during the particular period/years had its own impact in giving an upgradation in the decision making process viz. choice of CNC machines.

This indepth analysis was not practicable in full in DPR stage, but could be realised on the basis of actual and specific responses at the procurement stage of machines.

3. Out of the total expenditure of 317.21 Crs. (P&M & Eqpt) as reported till date, the expenditure on the ordered 1359 machines alone works out to Rs. 292.13 Crores.

Precise Expenditure incurred as of 20 Sept. 94

P&M —Rs. 317.21 Crores\*

(Fee: Rs. 76.984 Crores)

Civil works —Rs. 88.21 Crores

\*This included Rs. 25.00 Crores (RE) of Tooling & Equipments

Total —Rs. 405.44 Crores

4. Hence, there has been no cost overrun inspite of time overrun over the earlier projected schedules.

[Ministry of Defence/Department of Defence Production & Supplies  
O.M.No. PC 11 2(9)/83/DP (Plg-III) Dated 08-02-1995]

#### Recommendation

The Committee note that as per the Project Report, production of the Armoured Vehicles was to commence from 1987-88 onwards. According to the original schedule 200 vehicles were to be produced by 1989-90 out of which the first 50 vehicles valued at Rs. 63.86 Crores only were to be assembled from imported CKDs. The Committee however find that entire production of 175 vehicles during this period was by assembly with improted CKDs excepting a few of CKDs valued at Rs. 270.75 crores. The Committee regret to note that the delay in the completion of the project had led to an avoidable outgo of precious foreign exchange of sizeable magnitude.

[Sl. No. 4, Para 60, Appendix II of 71st Report of PAC (10th Lok Sabha)]

#### Action Taken

With a view to achieve self reliance in productionisation, it was decided to plan indigenisation of all the components/sub-assemblies except for a few items, keeping in view the industrial base available in the country. 36 main codes and 18 part codes out of a total of 81 main codes and 18 part codes were planned to be Indigenised taking assistance of the civil sector, 34 main codes were planned to be manufactured by the project taking assistance from the trade. Some of the items were to be specially developed and established by indigenous sources in the country for the first time. There was some delay in getting indigenous equivalent of Russian

material, products, sub-systems for the 'Z' equipment. Development of suitable armour plates equivalent to Russian product by the indigenous sources also took time. In addition, for some of the sub-systems for which there was delay in receipt of machine and plant because of embargo imposed by Germany, South Korea and Japan. It was proposed to obtain these from Russia by invoking the provisions of Licence agreements which provided for delivery of tank components at various stages of technological readiness and also for delivery of completing articles, some blanks, parts and materials for the period of mastering of tank production under agreed upon lists by both the sides. Accordingly importation of product support of small assemblies/sub-assemblies had been resorted to on need basis. This was with a view that target set for manufacture of 'Z' equipment is adhered and there is no delay in manufacture of 'Z' equipment required for defence preparedness.

2. There has been a marked achievement in indigenisation, eg. in the first 4 years, i.e. by the year 1990-91, more than 50% indigenisation by value was achieved and by March 1994, the indigenisation achieved was 93%.

[Ministry of Defence/Department of Defence Production & Supplies  
O.M. No. PCII 2(9)/83/DP (Plg—III) Dated 08-02-1995]

#### Recommendation

The Committee noted that a Project for manufacture of gun 'P' and 'Q' sanctioned on 15 Nov. 1988 at a cost of Rs. 19.70 crores, was scheduled to be completed by 14 May 90 but could be completed only in 1993 after a delay of 3 years. According to the Ministry subsequent change in the scope of the Project and delay in execution of Civil Works were the contributory factors for belated completion of the Project. The requirements of guns and ammunition for the Armoured Vehicle 'Z' assembled at the factory during this period had been met either through direct import along with vehicle 'Z' or as CKD assemblies thereby rendering additional expenditure. The Committee regret to point out that had there been proper planning to synchronise production of guns and ammunitions to that of the vehicle 'Z' avoidable additional expenditure incurred in to as of foreign exchange on imports could have been avoided.

[Sl. No. 8, Para 64, Appendix II of 71st Report of PAC (10th Lok Sabha)]

#### Action Taken

The project envisaged that barred which required import of sophisticated machine called cold swaging machine and a few more components would be manufactured in the factory and all other components would be developed with trade. On floatation of the tender, it was learnt that lead time for importation of the cold swaging machine was 42 months and thereafter, 6 months would be required for erection, commissioning and



establishing production at the factory. The machine was ordered in June 1990 and received in May, 1992. All other machines were received and commissioned by March 1993. But response from civil sector for supply of other components turned out to be very poor in view of (i) requirements being for small numbers and (ii) items requiring special skill and machinery.

2. The perspective planning *vis-a-vis* the action plan as envisaged in the period 1986 to 1988 had to be changed/recast subsequently because of drastic reduction of Army's requirement both for armaments and ammunitons. Factory had to take up the manufacture of all other components also with its existing facility and develop those items not envisaged. As such, to meet the requirements of vehicle 'Z' CKDs and components were imported-as essentially required by Factory. There was no avoidable additional expenditure.

#### Regarding Ammunitions for Guns P & Q.

3. In 1985 & 1987 substantive requirement of ammunition for Gun 'Q' was projected by Army in their perspective plan. Accordingly a project for creating manufacturing facilities for production of 1.675 lakhs rounds per annum for ammunition 'Q' was sanctioned by Govt. in June 88. Subsequently when it was intimated that there would be no requirement of the variety of the ammunitions, the project was cancelled by Govt, in July 92 without any financial repercussions.

4. For the ammunition for Gun 'P' project was neither envisaged nor sanctioned.

5. Based on Army's requirement for subsequent years, various CKDs for both the Ammnns. P & Q were imported from Russia in 1987 and 1988. Part of such CKDs are still in stock since no substantive order/indent was received from Army inspite of repeat expeditors and discussions.

[Ministry of Defence/Department of Defence Production & Supplies  
O.M. No. PCII 2(9)/83/DP(Pig—III) Dated 08-02-1995]

#### Recommendation

During the course of examination the Committee came across certain other deficiencies in the execution of the project. The Committee find that with a view to setting up additional facilities at Factory 'A' for the manufacture of vehicle 'Z' Army land adjacent to Factory 'A' was taken over by Ordnance Factory Board from the Army. An Army pipeline of 2722.5 metres traversing the land so taken over was obstructing the factory facilities and therefore, it was decided to re-route the same. The conversion work was got executed by the Garrison Engineer in Nov. 85 at a cost of Rs. 16.79 Lakhs and the entire cost was borne by the Project Authorities. According to Audit there had never been any occasion to use the pipe-line ever since its diversion in 1985 and the expenditure of Rs. 16.79 Lakhs lacked justification. In the opinion of the Committee this is

one more indication of the lack of proper Project Planning with reference to the ground realities.

[Sl. No. 9, Para 65, Appendix II of 71st Report of PAC (10th Lok Sabha)]

#### Action Taken

As required land was not available in the existing Factory, Army land adjacent to the factory was identified as the most suitable and taken over by OFB from Army. It was found that an Army pipeline feeding an Army installation was traversing the taken over land. This pipeline was diverted outside the Factory facilities. This work was completed on 30.11.85. Due to inadequate water supply from TWAD Board (as per agreement) this pipeline could not be effectively utilised. However with the completion of Krishna Water Supply Scheme by 1996-97, the availability of water is likely to improve and committed quantum of water is expected to be supplied by TWAD Board. The Life of pipe-line is 40 years. It may also be mentioned that prior to diversion, the pipe-line was being utilised for supply of water. It will be fully utilised again on availability of water at old pump house on completion of Krishna Water Scheme for pumping water to reservoir.

The pipe-line though designed as a rising main to pump water to a storage reservoir, but there were occasions to make use of this pipe as a gravity main to supply water from storage reservoir (which has other sources of supply as well) for the units located near the pumping station. It may also be mentioned that the pipe will be fully utilised again on availability of water at old pump house on completion of Krishna water scheme for pumping water to reservoir.

[Ministry of Defence/Department of Defence Production & Supplies O.M.  
No. PCII 2(9)83DP(P1g-III) Dated 08-02-1995]

**CHAPTER IV**

**RECOMMENDATIONS AND OBSERVATIONS REPLIES TO  
WHICH HAVE NOT BEEN ACCEPTED BY THE COMMITTEE AND  
WHICH REQUIRE REITERATION**

**—NIL—**

**CHAPTER V**

**RECOMMENDATIONS AND OBSERVATIONS IN RESPECT OF  
WHICH GOVERNMENT HAVE FURNISHED INTERIM REPLIES**

—NIL—

**NEW DELHI;**  
**24 February, 1995**

**5 Phalguna, 1916 (Saka)**

**BHAGWAN SHANKAR RAWAT,**  
*Chairman,*  
*Public Accounts Committee.*



## PART II

### MINUTES OF THE TWENTY-FIRST SITTING OF THE PUBLIC ACCOUNTS COMMITTEE (1994-95) HELD ON 20 FEBRUARY, 1995

The Committee met from 1100 to 1130 hrs. on 20 February, 1995 in Committee Room 'D', Parliament House Annexe, New Delhi.

#### PRESENT

Shri Bhagwan Shankar Rawat — *Chairman*

#### MEMBERS

##### *Lok Sabha*

2. Shri Bandaru Dattatraya
3. Shri Dileep Singh Bhuria
4. Sqn. Ldr. Kamal Chaudhry
5. Dr. K.V.R. Chowdary
6. Shri Jagat Veer Singh Drona
7. Shrimati Krishnendra Kaur (Deepa)
8. Shri V. Krishna Rao
9. Shri Mohan Singh

##### *Rajya Sabha*

10. Shri Somappa R. Bommai
11. Shri Triloki Nath Chaturvedi
12. Mrs Saroj Khaparde
13. Shri G.G. Swell

#### SECRETARIAT

1. Shri Murari Lal — *Joint Secretary*
2. Smt. P.K. Sandhu — *Director*
3. Shri P. Sreedharan — *Under Secretary*

#### REPRESENTATIVES OF AUDIT

1. Shri Samir Gupta — Addl. Dy. C&AG
  2. Shri S.H. Manghani — Addl. Dy. C&AG
  3. Shri K.S. Menon — Pr. Director of Audit,  
— (Air Force and Navy)
  4. Shri A. Sathyavardhana — Pr. Director of Audit (Indirect Taxes)
  5. Smt. Ruchira Pant — Director of Audit (Customs)
  6. Shri Asim Sharma — Dy. Director (DT)
2. The Committee considered the following Draft Reports:
- |      |      |      |      |      |
|------|------|------|------|------|
| (i)  | .... | .... | .... | .... |
| (ii) | .... | .... | .... | .... |

(iii)    \*\*\*\*                    \*\*\*\*                    \*\*\*\*                    \*\*\*\*  
 (iv)    \*\*\*\*                    \*\*\*\*                    \*\*\*\*                    \*\*\*\*

- (v) Production of an armoured vehicle 'Z'; its gun and ammunition  
 [Action taken on 71st Report of PAC (10th Lok Sabha)].

The Committee adopted the above mentioned draft Reports without any amendment/modification.

3. The Committee authorised the Chairman to finalise the draft report on "Induction of an aircraft" after considering the comments of the Ministry of Defence from the security angle. They also authorised the Chairman to finalise the draft Reports in the light of the comments of Audit arising out of factual verification, and also to present the Reports to the House.

4. \*\*\*\*                    \*\*\*\*                    \*\*\*\*                    \*\*\*\*

*The Committee then adjourned.*

*Statement of Conclusions/Recommendations*

Sl.No.	Para No.	Ministry/Deptt. Concerned	Recommendations/Conclusions
1	2	3	4
1	1.7	Ministry of Defence (Deptt. of DP&S)	In their earlier report the Committee had found inordinate delay in the completion of armoured vehicle 'Z' project resulting thereby in cost and time-overruns, besides several other shortcomings/irregularities in the execution of the project. These mainly related to the inadequacies in project planning. Under-utilisation of capacity, extra expenditure incurred involving foreign exchange on imports of machines/components due to the delay in the completion of the project, deficiencies in the monitoring of the project, irregularities in the execution of civil works etc. The Ministry of Defence have in their action taken note stated that in pursuance of the recommendations of the committee necessary rectificatory steps have been taken and that instructions have been issued to all concerned with a view to avoiding inordinate delays in the execution of such defence projects. The Committee desire that the instructions should be scrupulously followed, reviewed by the Ministry at regular intervals and non-compliance of the same should be viewed seriously.

