

# Outcome Budgeting for Naval Dockyards

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*The Indian Navy (IN) has one Naval Dockyard (ND) each at Mumbai and Visakhapatnam and one Naval Ship Repair Yard (NSRY) each at Kochi, Port Blair and Karwar. The repair and refit requirements of IN ships and submarines are collectively met by the above mentioned repair agencies. NDs have the capacity and capability to handle Major Refits (MR). The Operational-cum-Refit cycle of each ship / class of ship is promulgated by IHQ MoD (N) from time to time. Refits of IN ships and submarines are undertaken by the naval yards or off loaded to defence/ private shipyards depending on the capacity and / or expertise. Implementation of outcome budget is exempted as per the guidelines of MoF. However, as per the directives of the defence minister and in accordance with the recommendations of Standing Committee on Defence, the outcome budget in respect of NDs has been prepared for the year 2010-11. This paper briefly traces the evolution of the concept of outcome budget in India and thereafter brings out the experiences during the preparation of the first ever Outcome Budget for Indian naval yards.*

## Background

The total expenditure of the government of India (GoI), as proposed for the financial year 2010-11 is Rs. 11,08,749 crore. This amounts to an increase of 8.6 per cent over the expenditure of the previous financial year. Out of this, defence has been allocated Rs. 1,47,344 crores which amounts to an increase of 3.98 per cent over budget estimates (BE) for 2009-10. From the total allotment for defence in CFY, Rs. 87,344 crore and Rs. 60,000 crore have been allotted for revenue and capital expenditure respectively. Keeping in view the requirement for modernisation of forces, the capital allocation has been increased by 9.44 per cent from the BE of financial year 2008-09 while the revenue allocation has increased only by 0.5 per cent. However, in monetary terms there is a net reduction of Rs. 1,096 crore for revenue allocation compared to the revised estimates of financial year 2009-10. Last year, the revenue allocation was increased by 50.85 per cent over the BE of financial year 2008-09 due to implementation of the Sixth Pay Commission's recommendations. Since part of that was one-time expenditure, no additional funds were required under the 'pay and allowances' head this year. However,

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considering the fact that a substantial part of revenue expenditure is incurred on stores & equipment, transportation, revenue works, maintenance of buildings, installations, etc, expenditure under these heads will have to be prioritised so as not to compromise operational readiness. Given this background there is a pressing need to formulate an outcome budget for defence.

This paper briefly traces the evolution of the concept of the outcome budget in India and thereafter narrates the experience of preparing the first ever outcome budget for Indian naval yards.

### **Evolution of Outcome Budget**

The outcome budget is an extension and refinement of the concept of performance budget. The outcome budget goes beyond the outputs discussed in

performance budget and brings out the outcomes. Before the evolution of the outcome budget is traced, it would be appropriate to define key terminologies which are frequently used in outcome budget. 'Outlays' are the financial resources available / placed at the disposal of an agency under approved Budget. 'Outputs' are the physical deliverables of a scheme or programme. 'Outcomes' are the end results of various initiatives / projects / schemes. Output is usually an intermediate stage between outlay and outcome. The outcome budget was introduced in India for first time in 2005 by the finance minister in his budget speech. However, the finance minister in his foreword to the outcome budget document on August 25, 2005 said that "I must caution that outlays do not necessarily mean outcome". Probably this is most applicable for the defence forces.

**'Outcomes'** are the end results of various initiatives / projects / schemes. Output is usually an intermediate stage between outlay and outcome.

The preparation of an outcome budget necessitates that the outcomes are clearly identified and quantified so that the outcomes can be measured with reference to the pre-determined outcomes. It is also necessary to identify the risk factors in achieving the outcomes.

The conversion of outlays into outcomes is a complex process, which differs from ministry to ministry and programme to programme. There are several

intermediate stages in converting outlay to outcome. Efficient conversion of outlays into outcomes would require effective delivery systems with appropriate structures and processes, strengthening financial management systems and effective use of information technology. Some of the important steps in the conversion outlays to outcomes as laid down by Dr SC Pandey in his Paper on “Assessing the Scope of Outcome Budget in Defence” are:-

- (a) Outcomes to be specifically defined in measurable and monitor-able terms; intermediate outputs should also be defined wherever required.
- (b) Standardising unit cost of delivery.
- (c) Benchmarking the standards / quality of outcomes and services.
- (d) Capacity building for requisite efficiency at all levels, in terms of equipment, technology, knowledge and skills.
- (e) Ensuring flow of right amount of money at the right time to the right level, with neither delay nor ‘parking’ of funds.
- (f) Effective monitoring and evaluation systems.
- (g) Involvement of community, target groups, recipients of the service, with easy access and feedback systems.

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The MoD (Finance/Budget) made a beginning by preparing an outcome budget for 2008-09 and subsequent years for the following organisations:-

- (a) Military Engineering Services (MES), Married Accommodation Project (MAP), National Cadet Corps (NCC), Ex-Servicemen Contributory Health Scheme (ECHS) – for the organisation as a whole.
- (b) Border Roads Organisation – for the organisation as a whole.

- (c) Headquarters the Army Training Command (ARTRAC), National Defence College (NDC), School of Languages and Directorate General Resettlement (DGR) – in respect of the measurable performance indicators identified by the respective organisations.

It was also decided that the service headquarters would progressively identify more and more organisations and the areas of activity that could be brought under the ambit of the outcome budget. Though the above organisations have been preparing outcome budgets since 2008-09, these were found to be inadequate primarily for following reasons:

- (a) Outcomes are not clearly distinguished from outputs.
- (b) Risk factors are not identified correctly.
- (c) Lack of conceptual understanding of outcome budget.

The Standing Committee on Defence, in their 29<sup>th</sup> and 35<sup>th</sup> reports (Fourteenth Lok Sabha) had recommended that MoD should identify the areas and organisations for which the Outcome Budget could be prepared and presented to Parliament at least from the year 2009-10 onwards.

Though the Outcome Budget was prepared for the year 2009-10 by the various organisations under the MoD, the Standing Committee on Defence was unhappy with the result and the progress in the implementation of outcome budgeting.

It is in this context and as per the directives of defence minister that the outcome budget in respect of NDs has been prepared for the year 2010-11.

### **Preparing the Outcome Budget**

**The Concept:** The concept of an outcome budget is relatively new for the Indian navy and hence it was the endeavour of (IHQMoD) Integrated Headquarters of Ministry of Defence (Navy) to first create a format which could later be improved on the basis of experience.

**Maintenance Setup in the Indian navy:** At this stage it would be appropriate to describe the maintenance set up of the Indian navy before detailing the process of preparation of an outcome budget for NDs. The Indian navy (IN) has one ND each at Mumbai and Visakhapatnam and one Naval Ship Repair Yard (NSRY) each

at Kochi, Port Blair and Karwar. The repair and refit requirements of IN ships and submarines are collectively met by the above mentioned repair agencies. NDs have the capacity and capability to handle major refits (MR). However, NSRYs are limited in capacity to handle Normal Refits (NR). Additionally, NSRY, Port Blair has the unique charter of being the only major repair agency at Port Blair and NSRY, Karwar has commenced operations only in 2006 and is still in the growth phase. The refit of ships and the submarines is looked after by a team under the Command Refit Officer (CRO) at command level. The directorate of fleet maintenance (DFM) at IHQ MoD (Navy) is the controlling directorate for refit of ships and submarines. The operational-cum-refit cycle of each ship / class of ship is promulgated by IHQ MoD (N) from time to time, based upon operating experiences, advancement in technologies, and the induction / phasing out of different classes and types of foreign origin and indigenously built ships and submarines. This is based on the designated life of the ships / submarines and equipment installed in them, frequency of maintenance activities required to be undertaken on hull / equipment and periodic assessment of material state / condition. Refit requirements of ships and submarines are discussed during the Annual Refit Conference (ARC) and reviewed during the Mid Year Refit Review (MYRR). Refits of IN ships and submarines are

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undertaken by the Naval yards. In case the yards are constrained by capacity and / or expertise, the jobs are offloaded to defence or private shipyards, either partially or completely. These refits are taken up under MH 106(a) and that of submarines under Military Hospital (MH) 106(b). Completely offloaded refits are done under MH 204(d). Funds for the offloaded jobs are sought by yards from IHQ MoD (N) through respective commands as per the existing budgeting process. Funds

received by IHQ MoD(N) under various heads at BE and RE stages are sub-allotted to commands who in turn, allot funds to various users for refits / repairs of ships and submarines as per the projected requirement and funds available.

As per the revised guidelines, Outcome Budget is to be prepared by all Ministries / Departments except for the demands / appropriations as listed in the Annexure to the revised guidelines.

**Preparation of Outcome Budget for Naval Dockyards:** A preliminary meeting was held at IHQ MoD (N) / DFM to decide on the way ahead for preparation of the outcome budget. During the meeting it was decided to prepare outcome budgets for all the naval yards (NDs and NSRYs) as refit of IN ships and submarines was a collectively done by these yards. It was also decided to formulate the outcome budget at two levels. One at IHQ MoD

(N) level by DFM and the other at the level of the yards. Based on the inputs from the yards the outcome budget would be formulated by DFM for submission to the ministry.

The preparation of the outcome budget was based on the initial guidelines issued by the ministry of finance in December 2005 and revised guidelines vide MoF OM No 2(1)Pers.E.Coord/OB/2005 dated January 06, 2010. As per the revised guidelines, Outcome Budget is to be prepared by all Ministries / Departments except for the demands / appropriations as listed in the Annexure to the revised guidelines. As the concept was relatively new, outcome budgets pertaining to other ministries / department of GoI available in the public domain were consulted and referenced. The outcome budget in respect of Royal Australian navy was also studied. It was observed that ministries / department of GoI have by-and-large adhered to the guidelines laid down by MoF with minor variations to suit their requirements. Hence, the draft format was arrived at by DFM in accordance with the guidelines laid down by MoF vide OM No 2(1) Pers.E.Coord/OB/2005 dated January 06, 2010. The draft included an executive brief and five chapters. Chapter VI for review of performance of statutory and autonomous bodies under the administrative control of ministry / department was excluded since it did not apply to NDs.

The drafts forwarded by the five refitting yards varied in keeping with their different requirements. Therefore a meeting to identify commonalities was held at DFM. The agreed draft format was discussed chapter-wise in detail during the meeting chaired by the principal director fleet maintenance. The contents of the outcome budget are as follows:

- (a) **Chapter I.** A brief write up by the respective yards covering role, policy, goals and objectives.
- (b) **Chapter II.** Scheme-wise details for major offloading cases under MH 106(a), 106(b) and 204(d). Minor cases to be clubbed together. This chapter also covered funds under MH 111(i) for maintenance of marine assets and works, MH 110(a), MH 110(j) (i) & (iii) for procurement of stores, pay & allowances, passage & conveyance, hiring of transport and other miscellaneous requirements.
- (c) **Chapter III.** Infrastructure upgradation, facility creation, IT and other major initiatives etc.

- (d) **Chapter IV.** Review of performance during 2008-09 and 2009-10. This chapter also included the data pertaining to refit completion, dry dock utilisation, planning initiatives, HR development, quality assurance and major work done.
- (e) **Chapter V.** Data pertaining to budgetary estimates vs. actual expenditure for the years 2008-09 and 2009-10 including the actual expenditure up to September 30, 2010.

Details forwarded by the yards were scrutinised at DFM and the outcome budget for Naval yards was formulated by DFM. The final outcome budget is summarised in the following paragraphs.

### **The Outcome Budget**

The Indian navy is mandated to control the sea encompassing our nation, assure access, and project power beyond the sea, to influence events and advance the nation's interests across the full spectrum of military operations. To achieve the laid down objectives, the Indian navy needs to ensure optimum availability of ships and submarines for operational deployments.

A ship is complex amalgamation of machinery and systems which need maintenance and repairs from time to time. These functions are undertaken by five repairs yards, located at Mumbai, Visakhapatnam, Kochi, Port Blair and Karwar. Given the fact that maintenance is a must for all naval platforms and downtimes are a necessity, the thrust is on optimising the maintenance and repair procedures in the dockyards. This will ensure sustained availability of highly reliable platforms at sea for defence of the country.

Naval Repair Yards are therefore required to measure their intended and actual performance in terms of outcome, by providing quality refits and maintenance of naval platforms in a time bound manner. The hallmark of a dockyard is its innate ability to seamlessly undertake the overhaul and maintenance of ships / submarines / yard craft based equipment and systems, using diverse technology. The yard is able to efficiently and effectively meet this technological challenge, because of its highly skilled and trained workforce, inbuilt and continuously evolving high quality management systems and the availability of a wide range of repair assets and facilities.

The performance of dockyards is required to be measured in terms of their intended and actual performance in terms of outcome. The final outcome of the navy and therefore any naval unit can be defined under the following terms:-

- (a) The protection and advancement of India's national interest through provision of military capabilities and promotion of security and stability.

**The outcome budget of the NDs and NSRYs is intended to highlight the specific roles and objectives of the yard, the programmes, projects, schemes and activities designed to realise these objectives and the outcome of major schemes / programmes implemented by the yard.**

- (b) The advancement of India's strategic interest through the conduct of military operation and other tasks as directed by the government.

Outcome Budget for the period April 01, 2010 to March 31, 2011, covering the entire gamut of activities from refit management, training, welfare, maintenance of yard assets and creation of new facilities has been comprehensively documented and is presented in the report. The outcome budget of the NDs and NSRYs is intended to highlight the specific roles and objectives of the yard, the programmes, projects, schemes and activities designed to realise these objectives and the outcome of major schemes / programmes implemented by the yard. This document also highlights the achievements against the physical and financial targets set for 2009-10 as also the projections for the 2010-11 and is divided into the following chapters:-

- (a) **Chapter I.** Brief introduction, organisational set up, goals and objectives and broad programme of the yard.
- (b) **Chapter II.** The statement of outlays and outcomes / targets in respect of major schemes and projects implemented by the yard (in a tabular format). As the schemes/projects of the yard are many and varied in nature, and mostly related to their routine day to day operations, only major schemes have been included in the statement.
- (c) **Chapter III.** Details of the reform measures and policy initiatives taken by the yard. The focus of these policy initiatives is to become more competitive not only in terms of cost and quality but also in terms of efficiency and productivity.

- (d) **Chapter IV.** Review of past performance in respect of various achievements and planning / production 2008-09 and 2009-10.
- (e) **Chapter V.** This chapter provides details of the financial outlays of the yard.

The indicative format for statement of outlays and outcomes / targets (in tabular form) is given in the Annexure.

### **Issues and Difficulties**

The various issues and difficulties faced during formulation of the outcome budget are enumerated below:

- (a) Details to be included in Chapters I, III, IV, V were as per guidelines and the team had no problems in formulating their scope contents. However, a number of difficulties were faced whilst formulating Chapter II.
- (b) The column for 'Complementary Extra Budgetary Resources' does not apply to NDs and hence has not been included in Chapter II.
- (c) In any financial year, NDs typically offload around 150-200 cases under MH 106(a) and 106(b) whilst NSRYs have around 100 cases of offloading. Thus, the consolidated numbers would be around 700-800 schemes. A list of all schemes would be voluminous; hence it was decided only to enumerate the cases above Rs 25 lac while the cases below this figure were clubbed together.
- (d) Giving the names of the ships and the submarines are indicated in the cases above Rs 25 would mean disclosing classified information on the operational status of ships / submarines which could pose a security threat. In order to overcome this difficulty, it was decided to indicate minor head wise consolidated funds.
- (e) In case minor schemes are indicated under consolidated minor heads, the table becomes over simplified. Hence, the details had to be indicated yard wise under MH 106(a), 106(b) and 204(d) in order to prepare a meaningful outcome budget.
- (f) The role of NDs is such that, for all the refitting activities, the deliverable output is the timely completion of repairs on operational ships /

submarines and completion of refits within the specified time frame. Accordingly, the projected outcomes would be availability of equipment / ship / submarine to the nation / navy.

- (g) Pay and allowances, passage and conveyance, transport etc are for the whole yard. But the quantifiable / deliverable outputs and projected outcomes are same and will be reflected in successful completion of various refits / repairs in time.
- (h) Growth of work on the completely offloaded may happen due to the fact that the complete scope of work in refit can only be arrived at on opening of the machinery. This increase in workload has a direct bearing on the refit completion and hence this is an inherent risk in refitting a ship / submarine.

**Thus, the figures under procurement of spares do not indicate the overall figure for procurement of stores for refits and repairs.**

- (i) Yards do not procure all the spares required for the refit as it is the job of the Material Organisations (MO) to do so. Yards procure the spares for the repair and maintenance of yard machinery as well as the spares which are not available with the MOs but are required for refit completion. Thus, the figures under procurement of spares do not indicate the overall figure for procurement of stores for refits and repairs.

- (j) Repairs of yard equipment are critical as they directly affect the yard's capacity for refitting. Hence, these have been reflected in the outcome budget.
- (k) Maintenance of marine assets has been reflected as these are critical for accomplishing the task of providing berthing assistance and support services to the ships and submarines.

**Recommendations:** The following recommendations are based on the above issues/difficulties:

- (a) The outcome budget can prove to be beneficial once the outputs and outcomes are clearly spelt out. In case the outcomes are to be clearly

indicated, the operational status of a number of ships / submarines will have to be divulged which would be detrimental to national Security.

- (b) The existing system for allotment of funds under revenue head is Minor Head wise. Hence, if the outcome budget is prepared for the revenue head no meaningful conclusion can be drawn. Therefore, the outcome budget should only cover capital expenditure for which the allotment is scheme-based where outcomes can be clearly identified.

**T**herefore, the outcome budget should only cover capital expenditure for which the allotment is scheme-based where outcomes can be clearly identified.

## **OUTLAYS, PHYSICAL OUTPUTS AND OUTCOMES**

1. The budget provisions for the Naval Repair Yards are provided to ensure optimum availability of the Naval platforms for maritime security of the Nation. The focus has been creation of facilities and augmentation of the existing facilities based on the induction of new platforms and up gradation of existing system and ensuring optimum availability of marine assets of the Yards. The outlays and outcomes of the five Repair Yards of Indian Navy are brought out in the succeeding paragraphs. 

## 2. Naval Dockyard, Mumbai.

Sr.	Name of Scheme / Programme	Objective/ Outcome	Outlay (in ` Lakhs)		Quantifiable Deliverable/ Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
1	2	3	4	5	6	7	8	
			Non Plan	Plan				
(a)	Offloading repair of operational ships / partial offloading of refit jobs of ships	Ensuring quality repairs of operational and refit ships on time	xxxxx		Timely completion of repairs of operational ships and submarines and partial jobs of ships and submarines of Western Naval Command (WNC)	Availability of ships and submarines to WNC		
	Offloading repair of operational submarines / partial offloading of refit jobs of submarines	Ensuring quality repairs of operational and refit submarines on time	xxxxxx		Timely completion of repairs of operational ships and submarines and partial jobs of ships and submarines of Western Naval Command (WNC)			
(b)	Complete offloading of refits of ships, submarines & related stores (Capital expenditure)	Ensuring quality refits ships and submarines on time	xxxxx		Completion of refit as per the Annual Refit Program promulgated by HHQ MoD(N)	On time completion of quality refit to ensure availability of ship to WNC		Growth of work in the refit
(c)	Pay & Allowances		xxxxxx		The Outcome will be reflected in successful completion of various refit / repair on time			
(d)	Passage & Conveyance		xxxxxx					
(e)	Hiring of Transport		xxx					
(f)	Repairs of miscellaneous equipment	Maintenance of plant and machinery	xxxxx		AMCs of various plants and machineries	Complete availability of Yard machinery		
(g)	Procurement of stores & equipment	Availability of Yard material and spares	xxxxx		Procurement of stores as per the requirement of ships	On time availability of spares for refit completion		
(h)	Maintenance of marine assets & works expenditure	Maintenance and repairs of all marine assets	xxxxx		Repair and maintenance of marine assets like pontoons, gangways, fenders, dock blocks, dock gates & caissons	Complete availability of yard marine assets		
(j)	Training and adventure / sports activity for civilian personnel	Civilian personnel training and physical fitness	xxxxx		Organising sports / training programme / human resource development	Improved motivational of yard personnel		
	<b>Total</b>		<b>xxxxxxx</b>					