

Demand for Grants 2019-20 Analysis

Defence

The Ministry of Defence frames policies on defence and security-related matters, and ensure its implementation by the defence services (i.e. Army, Navy and Air Force). In addition, it is responsible for production establishments such as ordnance factories and defence public sector undertakings, research and development organisations, and ancillary services that assist the defence services, such as the Armed Forces Medical Services. This note analyses budgetary allocations and expenditure trends in the Ministry. It also provides insights into key issues affecting the defence sector.

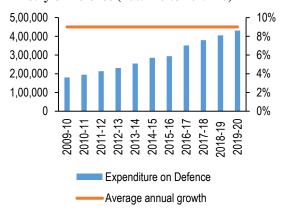
Overview of finances

In 2019-20, the Ministry of Defence has been allocated Rs 4,31,011 crore (including pensions) for expenditure across the various services, production establishments, and research and development organisations. This forms 15.5% of the central government's budget of 2019-20 and 2% of India's estimated GDP. The allocation to the Ministry of Defence is the highest allocation among all ministries of the central government.

Defence budget has decreased as a proportion of GDP over the years

Over the last ten years (2009-10 to 2019-20), the budget of the Ministry of Defence has grown at an annual average rate of 9%.

Figure 1: Average annual growth in budget of Ministry of Defence (2009-10 to 2019-20)

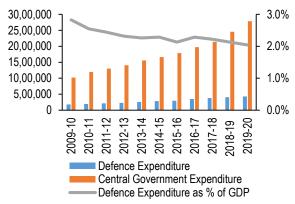


Sources: Union Budget Documents 2011-19; PRS. Note: Figures for 2019-20 are Budget Estimates and for 2018-19 are Revised Estimates.

However, as a proportion of central government expenditure and GDP, defence expenditure has decreased in the last ten years. In 2009-10, defence expenditure was 2.8% of GDP and 17.6% of central

government expenditure, which has decreased to 2% and 15.5% respectively, in 2019-20. The Standing Committee on Defence has recommended that defence expenditure should be 3% of GDP to ensure adequate preparedness of the armed forces.¹

Figure 2: Defence expenditure as a percentage of GDP and total central government expenditure (2009-10 to 2019-20) (in Rs crore)

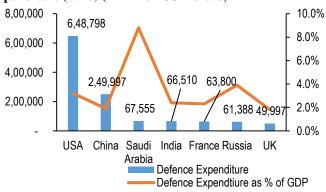


Sources: Union Budget 2011-19, Central Statistics Office; PRS.

India was the fourth-largest defence spender in 2018

According to the Stockholm International Peace Research Institute (SIPRI), India was the fourth-largest defence spender in absolute terms in 2018 (at 66.5 billion USD).² Figure 3 below compares India's defence expenditure with the seven largest spenders in absolute terms as well as a percentage of GDP. Countries such as USA and Saudi Arabia spent higher than India on defence, both in absolute terms as well as percentage of GDP. China spent lower in terms of percentage of GDP, but higher in terms of absolute expenditure.

Figure 3: International comparison of defence expenditure (2018) (in Billion US Dollars)



Source: "SIRPI Military Expenditure Database", Stockholm International Peace Research Institute; PRS.

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Growth of 6.4% over last year's budget

The budget of Ministry of Defence is estimated to grow by 6.4% in 2019-20 over revised estimates of 2018-19. The increase is highest for the capital outlay component of the defence budget, which is expected to grow at 10%. Capital outlay includes expenditure on construction work, machinery, and equipment such as tanks, naval vessels, and aircrafts. Salaries and pensions are expected to grow at 5.5% and 5% respectively compared to the revised estimates of 2018-19.

Table 1: Defence Budget Allocation (Rs crore)

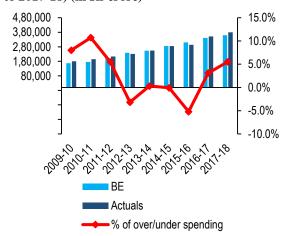
Major Head	Actual 17-18	Revised 18-19	Budgeted 19-20	% change (RE to BE)
Salaries	1,02,000	1,02,851	1,08,461	5.5%
Capital Outlay	90,438	93,982	1,03,394	10.0%
Pensions	92,000	1,06,775	1,12,080	5.0%
Stores	42,464	42,657	45,310	6.2%
Others	52,800	58,928	61,776	4.8%
Total	3,79,702	4,05,194	4,31,011	6.4%

Note: Salaries and pensions are of the three services. Pensions include rewards. Capital outlay includes capital expenses for research and development and ordnance factories. Stores includes ammunition, repairs and spares. Others include administration expenses, construction of roads and bridges in border areas and housing. RE is revised estimate and BE is budget estimate. Source: Expenditure Budget, Union Budget 2019-20; PRS.

Actual expenditure has been higher than budgeted expenditure over the years

Between 2009-10 and 2017-18, the actual expenditure was higher than the budgeted allocation for six years, which implies overspending by the Ministry of Defence for some years. This was mostly due to overspending on defence pensions. Expenditure on pensions reduces funds available for defence modernisation.³ The figure below shows the actual and budgeted expenditure over ten years, and the percentage of over/underspending.

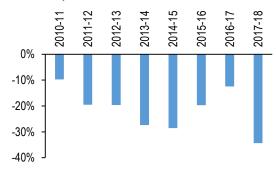
Figure 4: Budget Estimates vs Actuals (2009-10 to 2017-18) (in Rs crore)



Sources: Union Budget 2009-19; PRS. Note: BE= 'Budget Estimates'

The expenditure on defence has been lower than the amounts projected by the three armed forces. In 2016-17, while the forces projected a required total of Rs 2,69,243 crore, the actual expenditure during the year was Rs 2,35,769 crore (a shortfall of 12%). The figure below shows the difference between the amounts projected by the forces and actual expenditure between 2010-11 and 2017-18. The average shortfall was 21% during these years.

Figure 5: Shortfall between amount projected by the armed forces and actual expenditure (2010-11 to 2017-18)



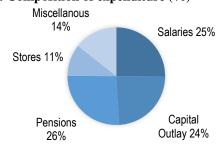
Source: 42nd Report, Standing Committee on Defence, March 13, 2018; PRS.

Note: Expenditure for 2017-18 is up to January 2018

Salaries and pensions comprise 51% of the budget

In 2019-20, salaries and pensions of the defence personnel formed the largest portion of the defence budget (51% or Rs 2,20,541 crore). This is followed by expenditure on capital outlay (24% or Rs 1,03,380 crore). The remaining allocation is towards stores (maintenance of equipment) and other items such as border roads, and administrative expenses.

Figure 6: Composition of expenditure (%)

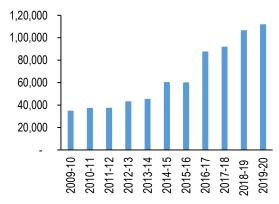


Sources: Expenditure Budget, Union Budget 2019-20; PRS.

Expenditure on defence pensions have grown at an average annual rate of 12% in the last ten years. In November 2015, a decision was taken to implement One Rank One Pension for armed forces personnel. This implies that a uniform pension will be paid for defence personnel retiring at the same rank, irrespective of their date of retirement. Figure 7 shows the allocation for defence pensions between 2009-10 to 2019-20.

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Figure 7: Allocation towards defence pensions (2009-10 to 2019-20) (in Rs crore)



Sources: Union Budget 2011-19; PRS.

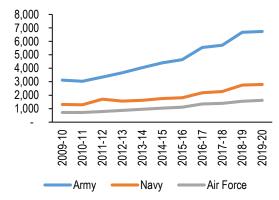
Note: Figures for 2018-19 are Revised Estimates, and for 2019-20 are Budget Estimates.

The Standing Committe

The Standing Committee on Defence noted in 2019 that since approximately 60,000 service personnel retire every year, the percentage of funds for pensions is bound to rise. This would reduce funds available for modernisation of the armed forces.³ It stated that the government could reduce the pension bill by introducing some other pension scheme or assured jobs on early retirement.³ As of April 2016, there were around 25 lakh defence pensioners.⁴

Note that salaries of civilian employees of the armed forces have also increased. The expenditure on salaries of civilians for the three armed forces between 2009-19 is show in Figure 8 below. This has increased at an annual average rate of 8% for the three forces during this time period. As of March 2016, the Ministry of Defence employed around 4 lakh civilian employees.⁵

Figure 8: Expenditure on salaries of civilian employees (2009-10 to 2019-20) (in Rs crore)



Sources: Union Budget 2011-19; PRS.

Note: Figures for 2018-19 are Revised Estimates, and for 2019-20 are Budget Estimates.

Decreasing proportion of budget spent on capital outlay

In 2019-20, capital expenditure has been budgeted at Rs 1,03,394 crore, which accounts for 24% of the

budget of the Ministry of Defence. Capital outlay includes expenditure on purchasing defence equipment, weaponry, aircrafts, naval ships, land, and construction of roads and bridges in border areas. Over the last ten years, capital outlay as a percentage of total defence budget, has declined. The percentage was highest during 2010 and 2011 at 32% of the total defence budget.

Table 2: Capital outlay as a percentage of defence expenditure (2009-10 to 2018-19) (in Rs crore)

Year	Total defence expenditure	Capital outlay	% of defence expenditure
2009-10	1,80,018	51,112	28%
2010-11	1,94,606	62,056	32%
2011-12	2,13,673	67,902	32%
2012-13	2,30,642	70,499	31%
2013-14	2,54,133	79,125	31%
2014-15	2,85,005	73,401	26%
2015-16	2,93,920	71,675	24%
2016-17	3,51,550	86,357	25%
2017-18	3,79,704	90,438	24%
2018-19	4,05,199	93,982	23%
2019-20	4,31,011	1,03,394	24%

Sources: Union Budgets 2011-19; PRS.

Note: Figures for 2018-19 are Revised Estimates and 2019-20 are Budget Estimates.

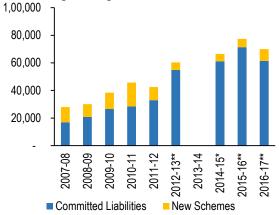
Note that capital acquisition of the armed forces consists of two components: (i) committed liabilities, and (ii) new schemes. Committed liabilities are payments anticipated during a financial year in respect of contracts concluded in previous years. This is due to the fact that defence acquisition is a complicated process involving long gestation periods. New schemes include new projects, which are at various stages of approval and are likely to be implemented in the future.

The expenditure on committed liabilities has increased over the years. This has led to a decline on expenditure for new capital acquisition schemes.

Given the long-term nature of defence acquisition, the Standing Committee on Defence has recommended creation of a Non-Lapsable Capital Fund Account for defence modernisation. According to the Committee, this would ensure that money allocated for a particular item is spent on the specific item only. However, the Ministry of Finance has objected to the creation of such a fund on various grounds including that balances in the non-lapsable fund would not be available to the Ministry of Defence automatically, as it would require Parliament's sanction.

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Figure 9: Expenditure on committed liabilities and new capital acquisition schemes (in Rs crore)



Sources: 15th Report, Standing Committee on Defence, April 2012; 22nd Report, Standing Committee on Defence, May 2016; PRS.

Note: Figures for 2014-15 are Revised Estimates and figures for 2012-13, 2015-16, and 2016-17 are Budget Estimates. Data for 2013-14 was not available.

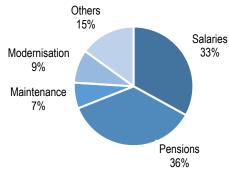
Analysis of the Forces

This section analyses the budget of each of the three armed forces, as well as issues related to their operational preparedness and modernisation.

Army

The Army is the largest of the three forces, both in terms of budget as well as number of personnel. An amount of Rs 2,66,155 crore has been allocated for the Army in 2019-20. The figure below provides the composition of the Army's budget for 2019-20.

Figure 10: Composition of Army Budget (2019-20)

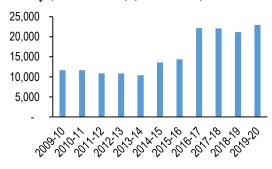


Source: Union Budget 2019-20; PRS.

Almost 70% of the Army's budget (Rs 1,71,853 crore) has been allocated for salaries and pensions of personnel. Note that as of July 2017, the Army has a sanctioned strength of 12.6 lakh personnel. Significant expenditure on salaries and pensions, leaves only 9% of the Army's budget (Rs 22,951 crore) for modernisation. Modernisation involves acquisition of state of the art technologies and weapons systems to upgrade and augment defence capabilities of the forces.

The figure below shows the allocation of funds for modernisation of the Army over the last ten years. Funds for modernisation of the Army have grown at an annual average rate of 6% between 2009-10 and 2019-20.

Figure 11: Allocation of funds for modernisation of Army (2009 to 2019) (in Rs crore)



Sources: Union Budgets 2011-19; PRS.

Notes: Figures for 2018-19 are Revised Estimates and for 2019-20 are Budget Estimates. Modernisation funds for the Army is calculated from the following heads of the capital outlay: (i) Aircraft and Aeroengine, (ii) Heavy and Medium Vehicles, (iii) Other Equipment, (iv) Rolling Stock, and (v) Rashtriya Rifles.

A modern armed forces should have one-third of its equipment in the vintage category, one-third in the current category, and one-third in the state of the art category.8 However, according to the Standing Committee on Defence, the current position of the Indian Army is that 68% of its equipment is in the vintage category, 24% in the current category, and only eight per cent in the state of the art category. Further, the Standing Committee noted that the Indian Army has significant shortage of weapons and ammunition. According to the Committee, these shortages have persisted since adequate attention was lacking both in terms of policy and budget for modernisation. The Committee stated that such a situation does not augur well in the context of a twofront war.8

Navy

The Navy was allocated Rs 51,504 crore in 2019-20. Modernisation comprises 43% (Rs 22,106 crore) of the budget of the Navy.

Figure 12: Composition of Navy Budget (2019-20)

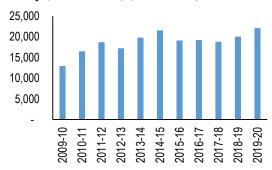


Source: Union Budget 2019-20; PRS.

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The percentage of capital budget of the Navy to the total defence budget has declined from 12.8% in 2012-13 to 7.5% in 2017-18.8 The Standing Committee on Defence has stated that this could lead to a delay in induction of critical capabilities and resultant cost-overruns. The Standing Committee also observed that the number of ships and submarines was 138 and naval aircrafts was 235 in 2017, which decreased to 136 and 219 respectively in 2018.8

Figure 13: Allocation of funds for modernisation of Navy (2009 to 2019) (in Rs crore)



Sources: Union Budgets 2011-19; PRS.
Notes: Figures for 2018-19 are Revised Estimates and for 2019-20 are Budget Estimates. Modernisation funds for the Navy is calculated from the following heads of the capital outlay: (i) Aircraft and Aeroengine, (ii) Heavy and Medium Vehicles, (iii) Other Equipment, (iv) Joint Staff, (v) Naval Fleet, and (viii) Naval Dockyards and Projects.

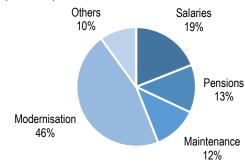
The Standing Committee on Defence has also observed delays in various projects of the Indian Navy. For example, Project 75 (which involved construction of six Scorpene Class submarines), had an initial delivery date of all submarines by December 2017. However, the likely date of delivery of all submarines is February 2022.8

Since acquisition of new ships and submarines involves a lengthy procurement process, accident prevention is an important aspect of the organisational set up of the Navy. In an audit report of 2017, the Comptroller and Auditor General (CAG) has observed that between 2007-08 and 2015-16, 38 naval accidents took place, which claimed the lives of 33 sailors. Further, all naval accidents are to be investigated by a Board of Inquiry. The CAG found that only 21% of the total recommendations made by these Boards were implemented. It recommended that a mechanism should be put in place for implementing these recommendations in a time-bound manner.

Air Force

Figure 14 shows the composition of the budget of the Indian Air Force (IAF) for the year 2019-20. In 2019-20, an amount of Rs 79,634 crore was allocated to the IAF.

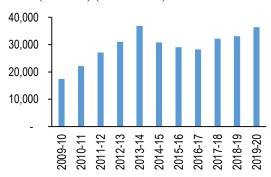
Figure 14: Composition of Indian Air Force Budget (2019-20)



Source: Union Budget 2019-20; PRS.

Modernisation comprises 46% (Rs 36,365 crore) of the budget of the IAF.

Figure 15: Allocation of funds for modernisation of IAF (2009-19) (in Rs crore)



Sources: Union Budgets 2011-19; PRS.
Notes: Figures for 2018-19 are Revised Estimates and for 2019-20 are Rudget Estimates. Modernication funds for the Air Force

20 are Budget Estimates. Modernisation funds for the Air Force is calculated from the following heads of the capital outlay: (i) Aircraft and Aeroengine, (ii) Heavy and Medium Vehicles, and (iii) Other Equipment.

Issues have been raised in relation to the capital acquisition process of the IAF. ¹⁰ In a report of 2019, the CAG examined 11 contracts of capital acquisition signed between 2012-13 and 2017-18, with a total value of approximately Rs 95,000 crore. It found that the current acquisition system was unlikely to support the operational preparedness of the IAF and recommended that the Ministry of Defence undertake structural reforms of the entire acquisition process. ¹⁰

One of the recommendations of the CAG related to the planning and tendering process. ¹⁰ The acquisition of air assets starts with the formulation of user requirements known as the Air Staff Qualitative Requirements (ASQR). The CAG had recommended in 2007 that the ASQR should be stated in terms of functional parameters, which are measurable. However, it noted that instead of using functional parameters, the IAF made the ASQR exhaustive and included technical details. In this context, the CAG repeated its earlier recommendation that ASQR should be stated in terms of functional parameters. Further, it

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recommended that technical experts with knowledge of the systems being considered could be involved in the acquisition process.¹⁰

The Estimates Committee (2018) has noted that since aircrafts have to undergo standard maintenance checks, there should be 70% serviceability of aircraft. However, as of November 2015, the availability of aircraft was 60%.

Issues in defence procurement

Defence procurement refers to the acquisition of defence equipment, systems and platforms which is undertaken by the Ministry of Defence, and the three armed forces. The Ministry released the Defence Procurement Procedure (DPP), 2016 in March 2016 which lays down detailed guidelines regulating defence procurement in India.¹²

Procurement of defence hardware is a long process, involving large number of stakeholders. Coordination issues between these stakeholders sometimes results in delays. For example, in the case of procurement of equipment for the air force, the CAG found that it took three to five years to just sign the contract, and another three to five years to complete the delivery (the Annexure to this note provides details of the procurement process for the air force).

The defence procurement executive is currently in the Ministry of Defence. The Ministry of Defence. The Ministry of Defence. The Ministry of Defence Procurement (2015) observed that a procurement organisation needs to have specialised knowledge of various fields including technology, commercial negotiations, cost estimations, and financial structures. Therefore, it recommended the creation of a separate defence procurement executive, with specialist wings and personnel, outside the formal structure of the Ministry of Defence. This executive would spearhead the procurement process, with the Ministry of Defence and Service Headquarters. Note that countries such as France and the United Kingdom have independent agencies responsible for defence procurement.

High dependence on imports

According to the Stockholm International Peace Research Institute, India was the fourth-largest importer of defence goods and services in 2018. 14 Of the total defence equipment, 40% is produced indigenously and 60% is imported. 11 The Estimates Committee (2018) had stated that dependence on foreign suppliers for military hardware not only results in huge expenditure on imports, but makes national security vulnerable as suppliers may not provide weapons during emergency situations.

An Expert Committee (Chair: Mr. Dhirendra Singh) was set up to suggest amendments to the Defence Procurement Procedure, to facilitate the 'Make in India' scheme in the defence sector.¹³ The Expert

Committee recommended three models for defence procurement: (i) strategic partnership model, for projects that are of strategic importance (such as aircrafts or submarines), (ii) development partnership model, where quality is critical and the vendor base is narrow, and (iii) competitive bidding process, where the vendor base is large and competition is feasible. Note that the DPP 2016, has a chapter on implementation of the Strategic Partnership Model.

Further, the Draft Defence Production Policy, 2018 was released in April 2018.¹⁵ The draft policy aims to reduce India's current dependence on imports, and achieve self-reliance in development and manufacture of 13 categories of weapon systems, including fighter aircraft, warships, and missile systems by 2025.

The Estimates Committee (2018) has observed that the indigenisation level in the defence sector is increasing at a very slow rate. It further stated that nothing concrete has been done for the implementation of the strategic partnership model, which envisaged a key role for private players in building platforms such as submarines and fighter jets in India. The Committee also noted the high dependence on external content by Defence Public Sector Undertakings (DPSUs). For example, the import content for platforms manufactured by Hindustan Aeronautics Limited (in terms of value of the platform), ranged between 40% to 60%.

In order to achieve self-reliance in the defence sector, the government has allowed 100% FDI in the defence sector, with 49% under automatic approval, and beyond this with the approval of the government. The Estimates Committee has however observed that there is no existing mechanism to facilitate public-private partnership in the defence sector. Further, the strategic partnership model does not specify a clear role for major DPSUs. Given the skill sets and trained manpower of DPSUs, the Committee recommended that steps may be taken to institutionalise public private partnerships in the defence sector. ¹¹

Border Roads Organisation

An amount of Rs 3,061 crore was allocated in 2019-20 for works carried out by the Border Roads Development Board (BRDB). This is 14% higher than the revised estimate for 2018-19 (Rs 2,696 crore). The BRDB was created in 1960 to ensure coordination of road construction projects in north and northeast states, for enhancing defence preparedness. The Border Roads Organisation (BRO) is the executive arm of BRDB. ¹⁶

The Standing Committee on Defence observed in 2019 that since 2007-08, the targets set for various construction works by BRO could not be achieved. However, despite the failure to achieve these targets,

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higher targets were set in subsequent years which led to further underperformance. The failure to achieve targets was attributed to various issues faced by BRO such as difficult terrain, limited working period, and lack of raw material. ¹⁶

Further, the availability of construction equipment with the BRO was less than the authorised numbers in 2016-17.¹⁶ Equipment such as stone crushers and tippers were 40% and 50% less than the authorised numbers, respectively. The Standing Committee also noted that BRO was using indigenous equipment as they operate in remote locations where use of sophisticated equipment is not feasible. It recommended that use of sophisticated construction equipment may be explored to ensure quicker completion of projects.

Research and Development

Defence research is primarily carried out by the Defence Research and Development Organisation (DRDO). DRDO is engaged in developing defence technologies covering various areas including aeronautics, combat vehicles, and missiles. ¹¹

The Estimates Committee (2018) in a report on defence production analysed the functioning of DRDO. ¹¹ It stated that an examination of 14 mission mode projects, carried out by DRDO laboratories, revealed that all projects failed to meet their timelines and the date of completion was extended many times. ¹¹ These projects included creation of a secure communication system between airborne platforms and ground stations, and an electronic warfare suit for the modified Mig-29 fighters. Further, a Committee constituted by the Ministry of Defence stated that at least 11 laboratories of DRDO need to be closed down, and its non-core research activities need to be stopped. ¹¹

https://cag.gov.in/sites/default/files/audit_report_files/Report_No. 20 of 2017 Compliance audit Union Government Defence Services Navy and Coast Guard.pdf.

¹⁰ "Report No. 3 of 2019: Performance Audit Report of the Comptroller and Auditor General of Indian on Capital Acquisition in Indian Air Force", Comptroller and Auditor General, February 13, 2019.

11 "29th Report: Preparedness of Armed Forces- Defence Production and Procurement", Committee on Estimates, July 25, 2018.

 $\frac{http://164.100.47.193/lsscommittee/Estimates/16_Estimates_29.p}{df.}$

¹² Defence Procurement Procedure 2016, Ministry of Defence, March 28, 2016,

https://mod.gov.in/dod/sites/default/files/Updatedver230818.pdf

¹³ "Committee of Experts for Amendments to DPP 2013 Including Formulation of Policy Framework", Ministry of Defence, July 2015,

 $\underline{https:/\!/mod.gov.in/sites/default/files/Reportddp.pdf}.$

14 "SIPRI Arms Transfers Database", Stockholm International Peace Research Institute.

http://armstrade.sipri.org/armstrade/html/export_values.php.

 $\frac{https://ddpmod.gov.in/sites/default/files/Draft%20Defence%20Production%20Policy%202018%20-%20for%20website.pdf.}{}$

¹⁶ "50th Report: Provision of all-weather connectivity under Border Roads Organisation (BRO) and other agencies up to International borders as well as the strategic areas including approach roads- An appraisal", Standing Committee on Defence, February 11, 2019,

 $\underline{http://164.100.47.193/lsscommittee/Defence/16_Defence_50.pdf}.$

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¹ "40th Report: Demands for Grants (2018-19) General Defence Budget, Border Roads Organisation, Indian Coast Guard, Military Engineer Services, Directorate General Defence Estates, Defence Public Sector Undertakings, Welfare of Ex-Servicemen, Defence Pensions, Ex-Servicemen Contributory Health Scheme", Standing Committee on Defence, Lok Sabha, March 12, 2018, http://164.100.47.193/lsscommittee/Defence/16_Defence_40.pdf.

² "SIPRI Military Expenditure Database", Stockholm International Peace Research Institute.

 $[\]frac{https://www.sipri.org/sites/default/files/Data%20for%20all%20countries%20from%201988\%E2%80%932018%20as%20a%20share%20of%20GDP%20%28pdf%29.pdf.$

 ^{3 &}quot;46th Report: Action Taken by the Government on the Observations/Recommendations contained in the Fortieth Report (16th Lok Sabha) on 'Demands for Grants (2018-19) General Defence Budget, Border Roads Organisation, Indian Coast Guard, Military Engineer Services, Directorate General Defence Estates, Defence Public Sector Undertakings, Welfare of Ex-Servicemen, Defence Pensions, Ex-Servicemen Contributory Health Scheme", Standing Committee on Defence, Lok Sabha, January 7, 2019, http://164.100.47.193/lsscommittee/Defence/16 Defence 46.pdf.
 4 Unstarred Question No. 287, Lok Sabha, Ministry of Defence,

February 3, 2017, http://loksabhadocs.nic.in/loksabhaquestions/annex/11/AU286.pd

http://loksabhadocs.nic.in/loksabhaquestions/annex/11/AU286.pcf.

⁵ Annual Report on Pay and Allowances of Central Government Civilian Employees 2016-17, Ministry of Finance, December 2017, https://doe.gov.in/sites/default/files/PayAllowance2016-17%28English%29.pdf.

⁶ "32nd Report: Creation of Non-Lapsable Capital Fund Account, Instead of the Present System", Standing Committee on Defence, Lok Sabha, August 4, 2017,

http://164.100.47.193/lsscommittee/Defence/16_Defence_32.pdf.

^{7 &}quot;48th Report: Action Taken by the Government on the Observations/Recommendations contained in the Fortieth Report (16th Lok Sabha) on 'Demands for Grants of the year 2018-19 on Capital Outlay on Defence Services, Procurement Policy and Defence Planning", Standing Committee on Defence, Lok Sabha, January 7, 2019,

http://164.100.47.193/lsscommittee/Defence/16_Defence_48.pdf.

^{8 &}quot;41st Report: Demands for Grants (2018-19) Army, Navy, Air Force", Standing Committee on Defence, March 12, 2018, http://164.100.47.193/lsscommittee/Defence/16 Defence 41.pdf.

⁹ "Report No. 20 of 2017: Union Government (Defence Services) Navy and Coast Guard", Comptroller and Auditor General of India,

¹⁵ Draft Defence Production Policy 2018, Ministry of Defence,

Annexure

Figure 16: Process of procurement for air force equipment

	procurement for air force equipment	
Process	Responsibility centre	
Acquisition planning	-Integrated Defence Staff Headquarters	
	-Acquisition Wing	
Formulation of ASQR	-User Directorates, Directorate of Air Staff Requirements	
Acceptance of Necesity	-User Directorates, Directorate of Air Staff Requirements, Defence Acquisition Council	
Solicitation of offers	-Technical Manager (Air), Ministry of Defence	
	-Air Force Headquarters	
Technical Evaluation	-Technical Evaluation Committee	
Field Evaluation	-Field Evaluation Trials Team	
StaffEvaluation Report	-Deputy Chief of Air Staff (Air Force Heqduarters)	
	-AirAcquisition Wing (Minstry of Defence) (for deviations)	
Technical Oversight (If applicable)	-Technical Oversight Committee	
Commercial Negotiation	- Contract Negotiation Committee	
CFAApproval	-Defence Procurement Board, Defence Acquisition Council, Cabinet Committee on Security	
Award of Contract	-Air Acquisition Wing (Ministry of Defence)	
Implementation and post contract management	-Air Force Headquarters/ Air Acquisition Wing (Minstry of Defence)	
,	-Principal Controller of Defence Accounts	
Receipt, Inspection and	-User Directorate	
Utilisation	-Diretorate General of Aeronautical Quality Assurance	

Source: Report No. 3 of 2019: Performance Audit Report of the Comptroller and Auditor General of Indian on Capital Acquisition in Indian Air Force", Comptroller and Auditor General, February 13, 2019.

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