Demand for Grants 2018-19 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 2018-19, the Ministry of Defence has been allocated Rs 4,04,365 crore (including pensions) for expenditure across the various services, production establishments and research and development organisations. This forms 16.6% of the central government's budget of 2018-19 and 2.2% of India's estimated GDP. The allocation to defence Ministry is the highest allocation among all central ministries.

India's defence budget as a percentage of GDP has declined over the years

India's defence budget for 2018-19 continues to be 2.2% of GDP, which is similar to last year. In the last eight years, defence budget of the country as a proportion of GDP was highest in 2011-12, when it was 2.4% of GDP. The Standing Committee on Defence in its 2014 report had recommended that India's defence budget should be increased to about 3% of GDP. This would ensure adequate preparedness of the defence services.[1]

Table 1: Defence budget as share of GDP and total central government budget

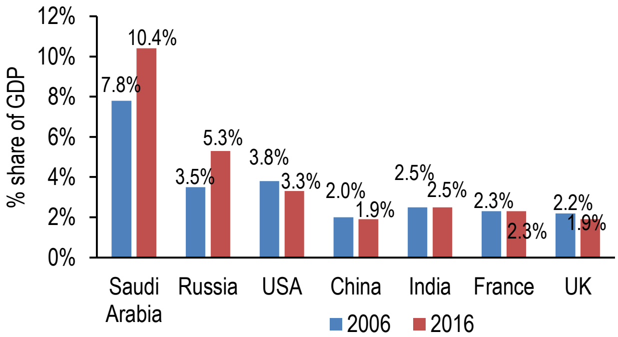
Year	Defence expenditure (Rs crore)	Share of GDP (%)	Share of central government budget (%)
2011-12	2,13,673	2.4%	16.4%
2012-13	2,30,642	2.3%	16.4%
2013-14	2,54,133	2.3%	16.3%
2014-15	2,85,005	2.3%	17.1%
2015-16	2,93,920	2.1%	16.4%
2016-17	3,51,550	2.3%	17.8%
2017-18	3,74,004	2.2%	16.9%
2018-19	4,04,365	2.2%	16.6%

Note: Figures for 2017-18 and 2018-19 are revised estimates and budget estimates, respectively.
Sources: Union Budget Documents; Central Statistics Office; PRS.

As a share of the total central government budget, the defence budget has been around 16%-18% between 2011-12 and 2018-19. However, this year the defence budget as a share of central government budget has seen a decline of 0.3%, from 16.9% last year to 16.6% this year.

According to the Stockholm International Peace Research Institute (SIPRI), India ranks fifth among countries on defence expenditure (in USD as a % of GDP).[2] Figure 1 compares India's defence expenditure with that of the top seven defence spenders (USA, China, Russia, Saudi Arabia, France, and UK). While Saudi Arabia's and Russia's defence expenditure as a share of GDP has increased, that of USA and UK has decreased. While China's defence expenditure as a share of GDP has marginally decreased, that of India and France has remained unchanged.

Figure 1: Defence expenditure as a share of GDP (%) across countries



Note: Includes expenditure on armed forces, central paramilitary forces, defence ministry and defence pensions.
Sources: Trends in World Military Expenditure 2016, Stockholm International Peace Research Institute; PRS.

Growth of 8% over last year's defence budget

The budget of Ministry of Defence is estimated to grow by 8.1% in 2018-19 over revised estimates of 2017-18. In earlier years, defence budget grew at 19% between 2015-16 and 2016-17, and at 4% between 2016-17 and 2017-18.

The 8% growth is primarily because of an increase in pensions and salaries of the defence services, and capital outlay. Pensions are expected to grow at 14.6% and salaries at 5.2%. Capital outlay is expected to grow at 8.7%. Capital outlay includes purchase of defence equipment, weaponry, aircrafts, naval ships and land for defence services, production establishments and research organisations.

Roopal Suhag
roopal@prsindia.org
February 26, 2018

Table 2: Defence Budget Allocation (Rs crore)

Major Head	Actual 16-17	Revised 17-18	Budgeted 18-19	% change (RE to BE)
Salaries	86,945	97,989	1,03,096	5.2%
Capital Outlay	86,357	86,488	93,982	8.7%
Pensions	87,826	95,000	1,08,853	14.6%
Stores	42,633	38,972	40,573	4.1%
Others	47,790	55,555	57,861	4.2%
Total	**3,51,550**	**3,74,004**	**4,04,365**	**8.1%**

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.
Sources: Expenditure Budget, Union Budget 2018-19; PRS.

Revised Estimates of Expenditure in 2017-18 exceed the Budget Estimates by 4%

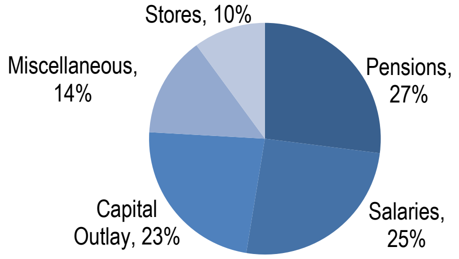
Revised estimates of 2017-18 indicate that the Ministry expects to spend Rs 3,74,004 crore, 4% more than what was budgeted for that year (Rs 3,59,854 crore). This is primarily due to the higher expenditure on salaries and pensions of Army, Navy and Air Force, and other expenses such as construction of roads and bridges in border areas and housing.

However, expenditure on defence stores has seen a decrease of 6%. Stores include ammunition, petrol, oil, rations, and spares that are key in maintaining defence capital, and ensuring preparedness of the defence forces. The expenditure on capital outlay is expected to be 100% according to the revised estimates of 2017-18.

Salaries and pensions comprise 52% of the budget

In 2018-19, salaries and pensions of the defence services form the largest portion of the defence budget (52% of the budget or Rs 2,11,949 crore). This is followed by expenditure on capital outlay (23% or Rs 93,982 crore). The remaining allocation is toward stores, administration of the defence services, construction of roads and bridges, and the Coast Guard organisation.

Figure 2: Composition of expenditure (%)

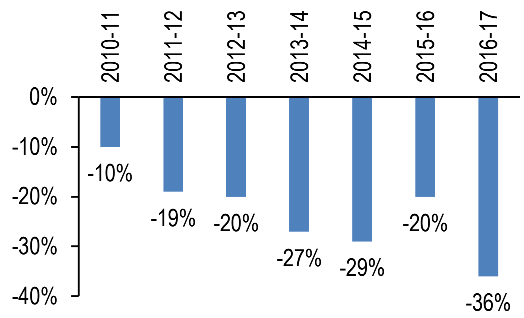


Sources: Expenditure Budget, Union Budget 2018-19; PRS.

Allocations do not meet the projected requirements of the defence services

Expenditure on the defence services is typically lower than the requirements projected by the defence services. For example, for 2015-16, Army, Navy, and Air Force projected their requirement of funds to be Rs 2,62,336 crore. Of this demand, a sum of Rs 2,27,874 crore was allocated, and of this, Rs 2,10,637 crore was spent.[3] This implies a shortfall of 20%.

Figure 3: Expenditure compared with Projected Requirements (% shortfall)



Note: Expenditure for 2016-17 is updated till December 2016.
Sources: 31st Report, Standing Committee on Defence, March 2017; PRS.

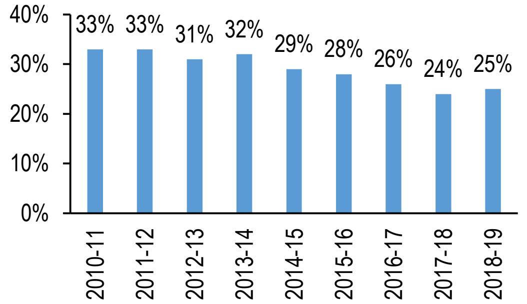
Consequently, the defence services have to reprioritise their activities and purchases according to the funds they receive. The Standing Committee has repeatedly noted that this affects expenses on stores (e.g. ammunition, repairs, fuel), and purchase of new defence machinery and equipment.[3,4,5] This is because other expenses like pays and pensions are committed liabilities of the government that cannot be defaulted upon.

Note that a 2015 CAG audit report has found that 50% of the ammunition stocks with Army were at critically low levels in 2012-13 (i.e., they would last for less than 10 days of intense conflict, while the requirement was to last for 40 days).[6] The situation has worsened since 2008-09, when about 15% of the stocks were at critically low levels.[6] The Standing Committee in 2016 noted poor capacity of shipyards to carry out maintenance of naval fleets. For example, in the case of INS Sindhukirti, one of the oldest operational submarines with Navy, repairs and upgradation took 10 years, from 2006 to 2016.[7]

Declining share of capital expenditure

In 2018-19, capital expenditure is budgeted at Rs 99,564 crore, and it accounts for 25% of the defence budget. Capital outlay includes expenditure on purchasing defence equipment, weaponry, aircrafts, naval ships, land, and construction of roads and bridges in border areas. This is significantly lower as compared to 2010-11 and 2011-12 when it used to be 33% of the defence budget. Note that in 2017-18, share of capital expenditure was the lowest in the last 10 years, at 24% (Rs 91,461 crore) of the defence budget.

Figure 4: Capital expenditure as a % of defence budget



Note: Figures for 2017-18 and 2018-19 are revised estimates and budget estimates, respectively.
Sources: Union Budget Documents 2010-11 to 2018-19; PRS.

The remaining defence expenditure is revenue expenditure which includes expenditure on salaries, pensions, stores required for running the defence services and maintenance of equipment and buildings. Share of revenue expenditure is typically high because the Indian defence forces are personnel-intensive, with a sanctioned strength of 14.8 lakh personnel.[8]

The dip in defence capital expenditure and the simultaneous increase in revenue expenditure from 2016-17 onward may be attributed to the increase in salaries and pensions. This was due to implementation of the One Rank One Pension scheme, and some recommendations of the Seventh Pay Commission (2016-17 onwards).[9]

The Standing Committee on Defence in 2017 noted that progressively, the budget for capital acquisitions for the services is declining in comparison to revenue allocations, thereby adversely affecting the modernisation process of our armed forces.[3]

Table 3: Ratio of revenue and capital expenditure of defence services (%)

	2016-17		2017-18		2018-19	
	Rev	Cap	Rev	Cap	Rev	Cap
Army	87	13	89	11	89	11
Navy	51	49	54	46	54	46
Air Force	49	51	51	49	51	49

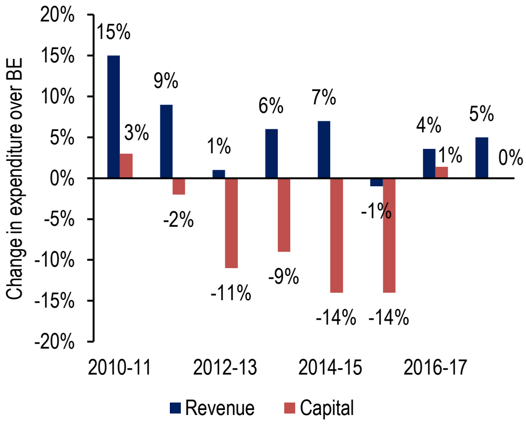
Note: Figures for 2017-18 and 2018-19 are revised estimates and budget estimates, respectively.
Sources: Expenditure Budget, Union Budget 2018-19; PRS.

Among the three defence services, Army's expenditure has the smallest capital component (11% of its expenditure is on capital under Budget 2018-19). The Standing Committee on Defence has noted that Army is operating with large scale vintage equipment.[5] Further, there is shortfall in number of bulletproof jackets, vehicles, small arms, infantry specialist weapons, surveillance equipment, communication equipment, radars and power generators.[5] Given there are ammunition shortfalls in Army as well (as previously mentioned), this may have serious implications for border security and defence preparedness.[6] In this context, the Standing Committee has recommended that it is essential to have a revenue capital ratio in favour of the capital segment to ensure all the services are in a war-ready mode.[10]

Change in spending of capital budget

From 2010-11 to 2015-16, underspending of capital budget has been observed. However, in 2016-17, the Ministry budgeted to spend Rs 90,210 crore and actually spent Rs 91,483 (1% greater than the budget estimate). In 2017-18, no underspending or overspending of capital budget is expected, at the revised estimate stage. However, there has been overspending on revenue items, above the budget estimates.

Figure 5: Difference between actual expenditure and budget estimates



Note: Figure for 2017-18 is revised estimate.
Sources: Union Budget Documents; PRS.

The Standing Committee on Defence has noted two key reasons behind actuals being lower than budget estimates for the capital segment. One, the Ministry of Finance imposes budgetary cuts at the revised estimates stage because of the overall resource constraints of the central government. This affects acquisition of new capital because revenue items like salaries and pensions are committed liabilities of the government. Two, there is an absence of proper planning in defence procurement, and delays in the procurement process, preventing optimum utilisation of the capital budget.[3,5]

In light of these trends, the Standing Committee in several of its reports has recommended the need for a non-lapsable and roll-on capital allocation.[3,10] This will allow unspent balances from a year to be carried over and added to the next year's capital budget. The Committee reiterated this recommendation in its 2017 report on 'Creation of Non-lapsable Capital Fund Account'.[11] Key observations and recommendations of the Committee in this respect include:

- The Committee noted that defence procurement and acquisition is a complex process and takes about five to ten years to materialise. Consequently, funds allocated for it in one financial year may not be completely utilised in that year itself. The Committee recommended that creation of a Non-lapsable Defence Capital Fund Account will ensure that the money allocated for a particular item is spent entirely on the specified item only, if not necessarily in the same financial year.
- It also stated that presently, lack of finance delays the procurement of equipment, and arms and ammunition. These delays affect the operational preparedness of defence forces.
- It also recommended appointment of an expert committee to monitor the progress of defence procurement and ensure compliance with time schedules across procurement contracts.
- Further, the Committee emphasised on need for outcome-oriented planning in defence, under which annual targets must be fixed and implemented for specified categories of defence assets (e.g. artillery and air defence guns, bulletproof jackets, submarines, aircraft, mid-air refuellers).

Note that internationally, defence services endeavour to maintain their capital outlay in the ratio 30:40:30, with 30% for state-of-the-art technology, 40% for current technology and 30% for technology that is becoming obsolete.[12] In India, the Ministry of Defence has stated that the reason behind not meeting this standard ratio is insufficient capital budget.

Significant expenditure on committed liabilities

Payments for purchase of defence assets are generally made over several years, in a phased manner. For example, purchase of defence aircraft may require an upfront payment of about 10%, and the remaining amount may be paid in a phased manner over subsequent years. The upfront payment may be called payment toward a new liability, while payments for contracts from previous years are referred to as committed liabilities. Typically, about 90% of the capital budget is spent on committed liabilities from previous years.

In 2016-17, the government estimated to spend Rs 8,590 crore on purchase of new defence equipment and machinery, i.e., about 12% of the capital budget.

Table 4: Allocation for committed and new liabilities (Rs crore)

Year	Committed Liabilities (CL)	New Liabilities	Total Capital Budget	CL as % of Capital Budget
2014-15	61,158	5,402	66,560	92%
2015-16	71,336	6,071	77,407	92%
2016-17	61,410	8,590	70,000	88%

Note: Capital Budget is a total of committed and new liabilities of the defence services and their joint staff. Data for 2017-18 is not available.

Sources: 22nd Report, Standing Committee on Defence, May 2016; PRS.

Note that there is a significant shortage of certain kinds of defence equipment and machinery. Navy has 138 vessels and 235 aircrafts, against its requirement of 212 vessels and 458 aircrafts.[7] Similarly, against Air Force's requirement of 45 fighter squadrons, it has 33 active fighter squadrons.[7] However, in September 2016, the government finalised an agreement with France for supply of direct flyaway of 36 Rafale aircraft between September 2019 and April 2022.[13] The Defence Minister in an answer to a question in Rajya Sabha stated that due to an inter-governmental agreement between India and France, more details on this deal could not be made available in the public domain.[14]

Further, with regard to Air Force, the Ministry of Defence has admitted that the rate at which the fighter aircrafts are retiring exceeds the rate at which their replacements are being inducted.[7] Old and obsolete equipment may pose a challenge for modernisation of the defence services.

Increasing import bill

India's defence requirements are met through both imports and domestic sources. However, there is greater reliance on imports. Currently, indigenous content in defence acquisition is about 35%.[15] Going forward, the target of the government is to achieve about 70% indigenisation in defence procurement by 2027.[15] It may be noted that India was the world's largest importer of arms between 2010-2014.[15] According to SIPRI, its share of international arms imports was 15% in this period.[15] Some of the countries from which India imports defence equipment are: Russia, USA, Israel and, France.[3] The kind of equipment imported includes aircrafts, unmanned aerial vehicles, helicopters, and ammunition.[3]

The Standing Committee on Defence in 2017 noted that India's defence import bill has been increasing over the years.[3] The Committee also observed that a substantial percentage of raw materials and parts used by Defence Public Sector Undertakings are procured from outside India. For example, the import component of equipment manufactured by

Hindustan Aeronautics Limited ranges from 44% to 60%, and Bharat Electronics Limited ranges from 36% to 44%.

Between 2013-14 and 2015-16, India signed 150 contracts, with a total value of Rs 1,36,664 crore.[3] Of these, 94 contracts worth Rs 82,980 crore were signed with Indian vendors and 56 contracts worth Rs 53,684 crore were signed with foreign vendors (including Russia (12 contracts), USA (13), Israel (10) and France (5)).

In March 2016, the government replaced the earlier guidelines regulating defence procurement with the Defence Procurement Procedure, 2016 to address delays and other issues in defence procurement.[16]

In January 2017, the Defence Acquisition Council cleared an amendment to the Defence Procurement Procedure 2016, related to the 'Make' procedure. Projects under this procedure should be indigenously designed and developed, with a minimum of 40% indigenous content.[17] The amendment, known as 'Make-II', seeks to simplify the procedure for indigenous manufacture and development of defence equipment.[18,19]

Salaries and Pensions

The two significant components of revenue expenditure in the defence budget are: (i) salaries (25% of the defence budget), and (ii) pensions (27%), of the three services. In 2018-19, budget for pensions is higher than that for salaries.

As Army is a personnel-intensive defence service, a significant part of both the salary and pensions budget is spent on its personnel (current and former). In 2018-19, of the salaries budget, 78% will be spent on Army, 6% on Navy and 16% on Air Force. Similarly, of the pensions budget, 88%, 4% and 8% will be spent on Army, Navy and Air Force, respectively.

Table 5: Allocation towards salaries and pensions (Rs crore)

	Actual 16-17	Revised 17-18	Budgeted 18-19	% change (RE to BE)
		Salaries		
Army	70,443	77,005	8,0945	5.1%
Navy	4,987	5,857	6,024	2.8%
Air Force	11,515	15,126	16,127	6.6%
Total	**86,945**	**97,989**	**1,03,096**	**5.2%**
		Pensions		
Army	77,658	83,722	95,949	14.6%
Navy	3,575	4,172	4,836	15.9%
Air Force	6,581	7,070	8,032	13.6%
Total	**87,814**	**94,964**	**1,08,818**	**14.6%**

Note: RE is revised estimate and BE is budget estimate.
Sources: Expenditure Budget, Union Budget 2018-19; PRS.

Salaries: In 2018-19, Rs 1,03,096 crore has been allocated for pays and allowances of the servicemen and servicewomen. This is an increase of 5.2% over the revised estimates of last year. The government accepted recommendations of the Seventh Pay Commission regarding increase in salaries and allowances for defence personnel in 2016.[9] However, it is unclear how much has been allocated for implementation of these recommendations so far.

As of August 2016, the sanctioned strength of the defence services is 14.8 lakh personnel.[8] However, there are 5% vacancies (73,402 vacancies) within the forces, with the Navy having maximum vacancies at 14%.

Table 6: Strength of defence services (2016)

	Authorised	Actual	Vacancies	% Vacancies
Army	12,52,090	12,00,255	51,835	4%
Navy	79,023	67,865	11,158	14%
Air Force	1,50,840	1,40,431	10,409	7%
Total	**14,81,953**	**14,08,551**	**73,402**	**5%**

Sources: Unstarred Question No. 4484, Lok Sabha, August 12, 2016; PRS.

Pensions: In 2018-19, Rs 1,08,818 crore has been allocated for pensions of ex-servicemen, an increase of 15% over the revised estimates of 2017-18. The increase in pensions is greater than the increase in salaries. This increase is due to the implementation of the One Rank One Pension Rule (OROP) being implemented by the government.

Under OROP, uniform pensions are being paid to armed forces personnel retiring at the same rank with the same length of service, irrespective of the date of retirement. Further, future increases in rates of pension will be automatically passed on to existing pensioners through a revision carried out every five years.

OROP is being implemented retrospectively from July 1, 2014. It covers 20,63,529 beneficiary pensioners. Upto September 2017, Rs 10,722 crores has been released to 20,42,892 defence forces pensioners / family pensioners on account of OROP in four instalments.[20]

Note that ex-servicemen associations have been demanding changes to the methodology of calculating pension, periodicity of its revision, coverage of ex-servicemen who take premature retirement under OROP, etc. The government had set up a judicial committee under Justice L. Narasimha Reddy to inquire into some of these anomalies of implementation. The committee submitted its report on October 26, 2016, but the report is not yet in the public domain.[21] The government constituted an internal Committee in July 2017 to examine the recommendations of the judicial committee with respect to feasibility and financial aspects.[20]

The CAG undertook an audit of disbursement of defence pensions. It submitted its report in July 2017 and observed certain deficiencies in the Pension Disbursement System.[22] These include: (i) incomplete accounting of pension expenditure; and (ii) inefficiencies in the pension authorisation process. It noted that transmission errors as well as other mistakes in banks, which account for nearly 75% of the pension disbursements, had resulted in numerous cases of underpayments and overpayments.

It recommended that Pension Payment Orders should be sent by the Pension Sanctioning Authorities directly to the Pension Disbursement Agencies, in electronic form.

Resettlement of Ex-Serviceman

The Standing Committee on Defence examined the issue of rehabilitation and welfare of ex-servicemen.[23] It noted that every year, nearly 60,000 armed forces personnel retire or are released from active service, and most of them are in the age bracket of 35-45 years. It highlighted that Directorate General Resettlement (DGR) under the Ministry of Defence currently does not have any powers to ensure that central government organisations that have not prescribed a certain percentage of vacancies for ex-servicemen do so. This was because directions of DGR are presently only executive in nature. It noted that reservations made for SCs, STs, OBCs, and Persons with Disability (PWD) are statutorily backed and consequently, implemented by all central government organisations.

The Committee recommended that the DGR should be re-structured and granted statutory powers. It also gave recommendations to increase: (i) percentage of reservation in specific grade services in central government jobs and (ii) re-settlement of ex-servicemen through skill development courses.

---

1 "2nd Report: Demand for Grants (2014-15) General Defence Budget", Standing Committee on Defence, December 22, 2014, http://164.100.47.193/lsscommittee/Defence/16_Defence_2.pdf.

2 Trends in World Military Expenditure 2015, Stockholm International Peace Research Institute, 2017, https://www.sipri.org/sites/default/files/Milex-share-of-GDP.pdf.

3 "31st Report: Demand for Grants (2017-18) Capital Outlay on Defence Services, Procurement Policy and Defence Planning", Standing Committee on Defence, March 2017.

4 "19th Report: Demand for Grants (2016-17) General Defence Budget, Civil Expenditure and Defence Pensions", Standing Committee on Defence, May 3, 2016, http://164.100.47.193/lsscommittee/Defence/16_Defence_19.pdf .

5 "29th Report: Demand for Grants (2017-18) Army, Navy and Air Force", Standing Committee on Defence, March 2017.

6 "Report of the Comptroller and Auditor General of India on Ammunition Management in Army", Performance Audit 19 of 2015, http://www.saiindia.gov.in/english/home/Our_Products/Audit_Report/Government_Wise/union_audit/recent_reports/union_performance/2015/Defence/Report_19/Report_19.html.

7 "20th Report: Demand for Grants (2016-17) Army Navy and Air Force", Standing Committee on Defence, May 3, 2016, "http://164.100.47.193/lsscommittee/Defence/16_Defence_20.pdf.

8 Unstarred Question No. 4484, Lok Sabha, August 12, 2016, http://164.100.47.190/loksabhaquestions/annex/9/AU4484.pdf.

9 Seventh Central Pay Commission Report, November 2015, http://7cpc.india.gov.in/pdf/sevencpcreport.pdf.

10 "22nd Report: Demand for Grants (2016-17) Capital Outlay on Defence Services, Procurement Policy and Defence Planning", Standing Committee on Defence, May 3, 2016, http://164.100.47.193/lsscommittee/Defence/16_Defence_22.pdf .

11 "32nd Report: Creation of Non-Lapsable Capital Fund Account, Instead of The Present System", Ministry of Defence, August 2017; http://164.100.47.193/lsscommittee/Defence/16_Defence_32.pdf .

12 "6th Report: Demand for Grants (2015-16) Civil Expenditure of the Ministry of Defence and Capital Outlay on Defence Services", Standing Committee on Defence, April 27, 2015, http://164.100.47.193/lsscommittee/Defence/16_Defence_6.pdf.

13 Starred Question No. 225, Rajya Sabha, December 6, 2016.

14 Unstarred Question No. 168, Rajya Sabha, February 5, 2018.

15 "Report of the Experts Committee for Amendments to DPP 2013 including Formulation of Policy Framework", Ministry of Defence, July 2015, http://mod.nic.in/writereaddata/Reportddp.pdf.

16 Defence Procurement Procedure, 2016, March 2016, http://mod.nic.in/writereaddata/dppm.pdf.pdf.

17 Defence Procurement Procedure 2016 (Chapters I to V), Ministry of Defence, https://mod.gov.in/sites/default/files/DPP-2016.pdf.

18 "Simplified 'Make-II': Major Steps Towards 'Make in India' in Defence Production", Press Information Bureau, Ministry of Defence, January 17, 2018.

19 "DAC simplifies procedure to develop defence equipment through Indian industry; clears procurements of assault rifles and carbines worth Rs 3,547 crore", Press Information Bureau, Ministry of Defence, January 16, 2018.

20 Unstarred Question No. 211, Rajya Sabha, December 18, 2017.

21 "Protest by ex-servicemen over OROP", Press Information Bureau, Ministry of Defence, November 29, 2016.

22 "Report of the Comptroller and Auditor General of India on Disbursement of Defence Pension", Performance Audit 26 of 2017, July 2017, http://cag.gov.in/content/report-no26-2017-performance-audit-union-government-disbursement-defence-pension-reports.

23 "33rd Report: Resettlement of Ex-servicemen", Ministry of Defence, August 2017; http://164.100.47.193/lsscommittee/Defence/16_Defence_33.pdf .