

## **Demand for Grants 2017-18 Analysis**

### **Defence**

The Ministry of Defence's role is to frame policy 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 (ex. 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 2017-18, the Ministry of Defence has been allocated Rs 3,59,854 crore (including pensions) for expenditure across the various services, production establishments and research and development organisations. This forms 16.8% of the central government's budget of 2017-18 and 2.1% of India's estimated GDP. Note that this is the highest allocation among all central ministries.

### India's defence budget decreasing as a percentage of GDP

India's defence budget 2017-18 has decreased from 2.4% of GDP in 2011-12 to 2.1% of GDP in 2017-18. This year's allocation is also the lowest allocation as a share of GDP since 2011-12. It has been recommended that India's defence budget should be about 3% of GDP to ensure adequate preparedness of the defence services. <sup>1</sup>

As a share of the total central government budget, the defence budget has been about 16%-17% every year between 2011-12 and 2017-18. However, there has been a decrease from last year's 17.1% to this year's 16.8%.

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

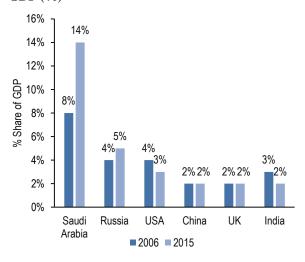
Year	Defence expenditure (Rs crore)	Share of GDP (%)	Share of central government budget(%)
2011-12	2,13,673	2.4	16.4
2012-13	2,30,642	2.3	16.4
2013-14	2,54,133	2.3	16.3
2014-15	2,85,005	2.3	17.1
2015-16	2,93,920	2.1	16.4
2016-17*	3,45,106	2.3	17.1
2017-18**	3,59,854	2.1	16.8

<sup>\*</sup>Revised Estimates \*\* Budget Estimates

Sources: Union Budget Documents; Central Statistics Office; PRS.

According to the Stockholm International Peace Research Institute (SIPRI), India ranks sixth among countries with the highest defence expenditure.<sup>2</sup> Figure 1 compares India's defence expenditure with that of the top five defence spenders (United States of America (USA), China, Saudi Arabia, Russia and United Kingdom (UK)). Note that while other countries' defence expenditure as a share of GDP has remained the same or has increased in the last decade (except USA), India's share has decreased.

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



Note: Includes expenditure on armed forces, central paramilitary forces, defence ministry and defence pensions.

Sources: Trends in World Military Expenditure 2015,

Stockholm International Peace Research Institute; PRS.

### Growth of 4% over last year's defence budget

Table 2: Defence budget allocation (in Rs crore)

	Actuals 2015-16	RE 2016-17	BE 2017-18	BE 2017-18/ RE 2016-17
Salaries	74,200	88,423	95,117	8%
Capital Outlay	79,950	79,327	86,488	9%
Pensions	60,201	85,592	85,705	0%
Stores	37,780	41,685	41,452	-1%
Others	41,788	50,079	51,092	2%
Total	2,93,920	3,45,106	3,59,854	4%

BE: Budget Estimates; RE: Revised Estimates.

Note: Salaries and pensions are of the three services; Pensions do not 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.

Sources: Expenditure Budget, Union Budget 2017-18; PRS.

February 27, 2017

Anviti Chaturvedi anviti@prsindia.org

The Ministry of Defence's budget is estimated to grow by 4% in 2017-18 over revised estimates 2016-17. This is low compared to the 19% growth between 2015-16 and 2016-17.

The 4% growth is primarily because of an increase in salaries of the defence services and capital outlay. Capital outlay includes purchase of defence equipment, weaponry, aircrafts, naval ships and land for the defence services, production establishments and research organisations.

However, note that allocation for defence stores is 1% less than last year's expenditure on the same. Stores include ammunition, petrol, oil, rations and spares that are key in maintaining defence capital, and ensuring preparedness of the defence forces.

# Expenditure in 2016-17 overshot the Budget Estimates, but capital allocation underspent

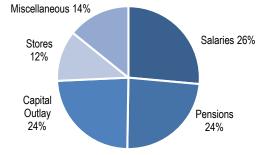
In 2016-17, Ministry of Defence spent Rs 3,45,106 crore according to the revised estimates, 1% more than the budget estimates (Rs 3,40,922 crore). This was primarily due to higher expenditure on salaries and pensions of Army, Navy and Air Force.

On the other hand, the expenditure on capital outlay was 8% below the budget estimates 2016-17. The government had budgeted to spend Rs 86,298 crore on purchase of defence capital, but revised estimates provide that Rs 79,327 crore have been spent. Among the three services, the capital outlay on Army, Navy and Air Force was 11%, 11% and 5% lower than Budget Estimates 2016-17 respectively.

### Salaries and pensions comprise half the budget

In 2017-18, salaries and pensions of the defence services form the largest portion of the defence budget (50% of the budget or Rs 1,80,823 crore). This is followed by capital outlay (24% or Rs 86,488 crore), i.e. expenditure on defence equipment, weaponry, aircrafts, naval ships, land, etc. The remaining allocation is toward stores (includes ammunition, spares and other items required for maintenance of defence equipment), administration of the defence services, construction of roads and bridges, the Coast Guard, etc.

Figure 2: Composition of Expenditure (%)

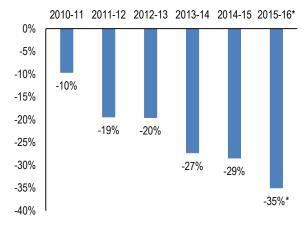


Sources: Expenditure Budget, Union Budget 2017-18; PRS.

## 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, the Ministry of Defence deposed before the Standing Committee on Defence that in 2014-15, Army, Navy and Air Force projected their requirement of funds to be Rs 2,84,080 crore.<sup>3</sup> However, they were allocated Rs 2,10,404 crore, and of this Rs 1,70,373 crore was ultimately spent. This implies a shortfall of 29% (see Figure 3). Note that projected requirements of the defence services in 2017-18 and comparable revised expenditure in 2016-17 are unavailable in the public domain as of February 2017.

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



■ % Shortfall between Projected Requirements and Expenditure

\* Expenditure is till January 2016. Sources: 19<sup>th</sup> Report, Standing Committee on Defence, May 2016: PRS.

Consequently, the defence services have to reprioritise their activities and purchases according to the funds they receive. The Standing Committee has noted that this affects expenses on stores (ex. ammunition, repairs, fuel), and purchase of new defence machinery and equipment.<sup>3,4,5</sup> 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).<sup>6</sup> The situation has worsened since 2008-09, when about 15% of the stocks were at critically low levels.<sup>6</sup> Even with regard to repairs and refits, the Standing Committee has 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.<sup>4</sup>

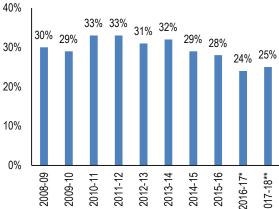
February 27, 2017 - 2 -

### Declining share of capital expenditure

In 2017-18, defence capital expenditure is budgeted at Rs 91,580 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 2016-17, share of capital expenditure was the lowest in the last 10 years, at 24% (Rs 84,460 crore) of the defence budget.

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.<sup>7</sup>

Figure 4: Capital expenditure as % of defence budget



\* Revised Estimates \*\* Budget Estimates Sources: Union Budget Documents; PRS.

The dip in defence capital expenditure and the simultaneous increase in revenue expenditure in 2016-17 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).<sup>8,3</sup>

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

emperioritate of defence services (70)						
	2015-16		2016-17		2017-18	
	Rev	Сар	Rev	Сар	Rev	Сар
Army	86	14	87	13	87	13
Navy	37	63	42	58	43	57
Air Force	40	60	49	51	44	56

Note: 2015-16 refers to Actuals, 2016-17 to Revised Estimates and 2017-18 to Budget Estimates; Revenue expenditure includes salaries, pensions and stores.

Sources: Union Budget Documents; PRS.

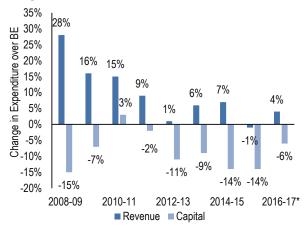
Among the three defence services, Army's expenditure has the smallest capital component (13% of its expenditure is on capital under Budget 2017-18). The Standing Committee on Defence has noted that Army is operating with large scale vintage equipment.<sup>4</sup> Further, there is shortfall in number of bulletproof jackets, vehicles, small arms, infantry specialist weapons, surveillance equipment, communication equipment, radars and power generators.<sup>4</sup> Given there are ammunition shortfalls in Army as well (as mentioned on Pg. 2), this may have serious implications for border security and defence preparedness.<sup>6</sup>

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.<sup>5</sup>

#### **Underspending of capital budget**

In 2016-17, the Ministry of Defence is estimated to have spent Rs 79,327 crore on capital assets, which is 8% lower than its budget estimates (Rs 86,298 crore). In the last decade, in most years there has been similar underspending of the capital budget. However, there has been overspending on revenue items, above budget estimates (Figure 5).

Figure 5: Difference between Expenditure and Budget Estimates (BE) (%)



\* Revised Estimates used instead of Actuals. 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. <sup>4,5</sup> Note that in March 2016, the government replaced the earlier guidelines

February 27, 2017 - 3 -

regulating defence procurement with the Defence Procurement Procedure, 2016 to address delays and other issues in defence procurement.<sup>9</sup>

In light of these trends, the Standing Committee has recommended need for a non-lapsable and roll-on capital allocation.<sup>5</sup> This will allow unspent balances from a year to be carried over and added to the next year's capital budget. It has also recommended appointment of an expert committee to monitor the progress of defence procurement and ensure compliance with time schedules across procurement contracts.<sup>5</sup> Further, the Committee has emphasised on need for outcome-oriented planning in defence, under which annual targets must be fixed and implemented for specified categories of defence assets (ex. artillery and air defence guns, bulletproof jackets, submarines, aircraft, mid-air refuellers).<sup>5</sup>

It may be noted 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. In India, the Ministry of Defence has stated that the reason behind not meeting this standard ratio is insufficient capital budget.<sup>5</sup>

#### **Defence Procurement Procedure 2016**

Defence procurement refers to acquisition of military equipment, systems and platforms required by the defence services from domestic and foreign vendors. Detailed guidelines regulating how defence procurement takes place were issued in 2016 as the Defence Procurement Procedure (DPP) 2016. These guidelines replaced the earlier DPP 2013 from April 1, 2016.

Under the DPP 2013, there were five methods of capital acquisition. The DPP 2016 has added one more category, 'Buy (Indian- Indigenously Designed, Developed and Manufactured), as the most preferred route of capital acquisition. This means, purchasing from an Indian vendor, products that have either: (i) been indigenously designed, developed and manufactured with minimum 40% indigenous content, or (ii) not been indigenously designed or developed but have at least 60% indigenous content. Further, it has also allowed for streamlining of the procurement process, by mandating changes to defence acquisitions planning, the bidding process and criteria for disqualifying vendors.

DPP 2016 has seven chapters, six of which have been released. The chapter of the DPP 2016 that has not been released will outline how long term strategic partners in the private sector will be selected to manufacture some complex military platforms, like aircrafts and submarines.

Sources: Defence Procurement Procedure 2016; PRS.

### 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 (see Table 4).

In 2016-17, government was 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: Allocations for committed and new liabilities (in 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.

Sources: 22<sup>nd</sup> Report, Standing Committee on Defence, May 2016: PRS.

Note that there is a significant shortage of certain kinds of defence equipment and machinery. For example, the Standing Committee has noted that Navy has 138 vessels and 235 aircrafts, against its requirement of 212 vessels and 458 aircrafts.<sup>4</sup> Similarly, against Air Force's requirement of 45 fighter squadrons, it has 33 active fighter squadrons.<sup>4</sup> However, recently the government finalised an agreement with France to induct 36 Rafale aircraft (about 2 squadrons) between September 2019 and April 2022.<sup>10</sup>

Further, some of the current equipment is old and needs to be de-commissioned. For example, INS Viraat, one of the two aircraft carriers in India, is being decommissioned.<sup>4</sup> With regard to Air Force, the Ministry of Defence has admitted that the rate at which the fighter aircraft are retiring exceeds the rate at which their replacements are being inducted.<sup>4</sup> This 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%.<sup>11</sup> Going forward, the target of the government is to achieve about 70% indigenisation in defence procurement by 2027.<sup>11</sup>

It may be noted that India was the world's largest importer of arms between 2010-2014.<sup>11</sup> According to SIPRI, its share of international arms imports was 15% in this period.<sup>11</sup> Some of the countries from which India imports defence equipment are: Russia, USA, Israel and France.<sup>12</sup> The kind of

February 27, 2017 - 4 -

equipment imported includes aircrafts, unmanned aerial vehicles, helicopters and ammunition.<sup>13</sup>

The Standing Committee on Defence noted that India's defence import bill has been increasing over the years. The Committee also observed that a substantial percentage of raw materials and parts used by local production establishments are procured from outside India. For example, the import component of equipment manufactured by Hindustan Aeronautics Limited ranges from 44%-60%, and Bharat Electronics Limited ranges from 41%-49%. 5

Between 2012-13 to 2014-15, India signed 162 contracts with Indian and foreign vendors, with a total value of Rs 1,33,093 crore.<sup>14</sup> Of these, 95 contracts were signed with Indian vendors and 67 with foreign vendors (including Russia (18 contracts), USA (17), Israel (13) and France (6)). Note that the impact of Make in India on India's defence sector is unclear.

#### **Salaries and Pensions**

The two significant components of revenue expenditure in the defence budget are: (i) salaries (26% of the defence budget), and (ii) pensions (24%), of the three services.

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 2017-18, of the salaries budget 80% will be spent on Army, 6% on Navy and 14% on Air Force. Similarly, of the pensions budget, 90%, 4% and 6% will be spent on Army, Navy and Air Force respectively.

Table 5: Allocations toward salaries and pensions (in Rs crore)

•	Actuals 2015-16	RE 2016-17	BE 2017-18	BE 2017- 18/ RE 2016-17
		Salaries	3	
Army	59,656	70,703	75,882	7%
Navy	4,373	5,495	5,980	9%
Air Force	10,172	12,224	13,255	8%
Total	74,200	88,423	95,117	8%
		Pension	S	
Army	54,116	75,682	77,106	2%
Navy	2,311	3,489	3,304	-5%
Air Force	3,774	6,422	5,296	-18%
Total	60,201	85,592	85,705	0%

BE: Budget Estimates; RE: Revised Estimates. Sources: Expenditure Budget, Union Budget 2017-18; PRS.

Salaries: In 2017-18, Rs 95,117 crore has been allocated for pays and allowances of the servicemen and servicewomen. Between 2015-16 (actuals) and 2016-17 (revised estimates), there was an increase of 19% in the salaries budget of the defence services. Note that the government accepted recommendations of the Seventh Pay

Commission regarding increase in salaries and allowances for defence personnel in 2016.<sup>8</sup> However, it is unclear how much has been allocated for implementation of these recommendations in 2016-17 and 2017-18.

Currently the sanctioned strength of the defence services is 14.8 lakh personnel. 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 2017-18, Rs 85,705 crore has been allocated for pensions of ex-servicemen, roughly equivalent to the expenditure on it last year. There was a substantial increase in defence pensions between 2015-16 (actuals) and 2016-17 (revised estimates) of 42% (Rs 22,095 crore), from Rs 60,201 crore to Rs 85,592 crore. This was because of implementation of the One Rank One Pension (OROP) scheme by the government in 2016-17.

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. According to the Defence Ministry, as of November 2016, 1,27,561 pensioners had not received the benefits of OROP. 15 Details of allocation and utilisation of funds under OROP are provided in Table 7 (as of November 12, 2016).

Table 7: Funds utilised under OROP (till November 12, 2016) (in Rs crore)

	Allocation	Utilisation
2015-16	No separate allocation	3,000
2016-17	12,456	3,021 (till November 12, 2016)

Sources: "One Rank One Pension", Press Information Bureau, Ministry of Defence, November 25, 2016; PRS.

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.

February 27, 2017 - 5 -

Narasimha Reddy to inquire into some of these anomalies of implementation. The committee

http://164.100.47.193/lsscommittee/Defence/16\_Defence\_19.pdf

submitted its report on October 26, 2016, but the report is not yet in the public domain. <sup>16</sup>

between military and civilian personnel", Press Information Bureau, Ministry of Defence, November 25, 2016.

- <sup>9</sup> Defence Procurement Procedure, 2016, March 2016, http://mod.nic.in/writereaddata/dppm.pdf.pdf.
- <sup>10</sup> Starred Question No. 225, Rajya Sabha, December 6, 2016.
- <sup>11</sup> "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.

<sup>12</sup> "Demand for Grants (2016-17): Capital Outlay on Defence Services, Procurement Policy and Defence Planning", Standing Committee on Defence, May 2016,

http://164.100.47.134/lsscommittee/Defence/16\_Defence\_22.pdf

- <sup>13</sup> Unstarred Question No. 975, Lok Sabha, July 22, 2016.
- <sup>14</sup> Unstarred Question No. 593, Lok Sabha, February 26, 2016.
- <sup>15</sup> "One Rank One Pension", Press Information Bureau, Ministry of Defence, November 18, 2016.
- <sup>16</sup> "Protest by ex-servicemen over OROP", Press Information Bureau, Ministry of Defence, November 29, 2016.

DISCLAIMER: This document is being furnished to you for your information. You may choose to reproduce or redistribute this report for non-commercial purposes in part or in full to any other person with due acknowledgement of PRS Legislative Research ("PRS"). The opinions expressed herein are entirely those of the author(s). PRS makes every effort to use reliable and comprehensive information, but PRS does not represent that the contents of the report are accurate or complete. PRS is an independent, not-for-profit group. This document has been prepared without regard to the objectives or opinions of those who may receive it.

February 27, 2017 - 6 -

<sup>&</sup>lt;sup>1</sup> "2<sup>nd</sup> Report: Demand for Grants (2014-15) General Defence Budget", Standing Committee on Defence, December 22, 2014, <a href="http://164.100.47.193/lsscommittee/Defence/16\_Defence\_2.pdf">http://164.100.47.193/lsscommittee/Defence/16\_Defence\_2.pdf</a>; "14<sup>th</sup> Report: Action taken by the Government on Observations/ Recommendations contained in the Second Report", Standing Committee on Defence, February 26, 2016, <a href="http://164.100.47.193/lsscommittee/Defence/16\_Defence\_14.pdf">http://164.100.47.193/lsscommittee/Defence/16\_Defence\_14.pdf</a>
<sup>2</sup> Trends in World Military Expenditure 2015, Stockholm International Peace Research Institute, April 5, 2016, <a href="https://www.sipri.org/sites/default/files/EMBARGO%20FS1604%20Milex%202015.pdf">https://www.sipri.org/sites/default/files/EMBARGO%20FS1604%20Milex%202015.pdf</a>.

<sup>&</sup>lt;sup>3</sup> "19<sup>th</sup> Report: Demand for Grants (2016-17) General Defence Budget, Civil Expenditure and Defence Pensions", Standing Committee on Defence, May 3, 2016,

<sup>&</sup>lt;sup>4</sup> "20<sup>th</sup> 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 <sup>5</sup> "22<sup>nd</sup> 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 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.

<sup>&</sup>lt;sup>7</sup> Unstarred Question No. 4484, Lok Sabha, August 12, 2016.

<sup>&</sup>lt;sup>8</sup> Seventh Central Pay Commission Report, November 2015, http://7cpc.india.gov.in/pdf/sevencpcreport.pdf; "Pay parity