#### Annexure I (Referred to in Chapter 1)

## Present status of audit findings in CAG report No. 4 of 2002 "Marine Logistic Support in ONGC" and indicated in Follow up Report No. 6 of 2005

C&AG Report No. 6 of 2005 (Follow up of report no. 4 of 2002)-Para no. 2.3.2	Present status as of May 2018
(i) Norms for deployment of OSVs not fixed In spite of in-house efforts as well as reports of external Consultants no norms for deployment of OSVs was fixed.	Norm of 1.4 vessels per duty station was fixed based on past experience. Though norm was further optimized as 1.35 vessels for rig and 1.2 for platforms, there is further scope for optimization of deployment of vessels. Related issues have been discussed in Paras 3.2 and 5.1 of the current report.
<ul> <li>(ii) Rates for long-term charter hire of INSA vessels</li> <li>Ministry had given protection to INSA members for vessels hired by ONGC for charter hire rates which slowly metamorphosed into a cost-based formula with complete protection for operators against market volatility.</li> </ul>	Presently, the Company is hiring the vessels through open competitive bidding and rates are discovered through the bidding process.
(iii) Force majeure clause not included in the contract Contrary to the model contract between ship owners and ONGC prepared by Director General (Shipping) wherein a vessel could be de-hired in the inverse order of their hire dates in the eventuality of vessels being rendered surplus due to substantial reduction in the requirement, no such provision was incorporated in the actual contract signed by ONGC with ship owners. This deprived ONGC of the opportunity to reduce the fleet size in its offshore operations.	Provisions of present contracts allowed the Company to terminate the contract after completion of twelve months without assigning any reasons.
<ul><li>(iv) Excess deployment of vessels on standby duty</li><li>Actual deployment of vessels for standby duty exceeded the norms adopted by the Company.</li></ul>	There is shortfall in deployment of vessels for standby duty. Costlier PSVs meant for supply duty are being deployed for standby duty. Issue has been discussed in at Paras 3.1, 3.2 and 5.2 of the report.
<ul> <li>(v) Higher deployment of vessels on supply duty</li> <li>The quantity of cargo delivered by a vessel trip was below the storage capacity of duty stations and well below the deliverable capacity of vessels. Vessels thus, made more number of trips and resultantly more number of vessels was required.</li> </ul>	The situation still persists. Further, in the absence of fixed scheduling, vessels continue to make more number of trips than required. Issue has been discussed in detail in Paras 5.1, 5.4 and 5.5 of the report.

C&AG Report No. 6 of 2005 (Follow up of report no. 4 of 2002)-Para no. 2.3.2	Present status as of May 2018
(vi) Non-utilisation of water maker In most of the platforms and owned rigs, water makers were either not operational or water generation was insufficient. As a result, the shortage of costlier potable water was made good through supplies delivered by OSVs.	The situation still persists. Around 70 <i>per cent</i> of Potable Water (PW) supplied from NSB is supplied to owned rigs and platforms. Issue has been discussed in detail at Para 6.3.5 of the report.
(vii) Discrepancy in delivery of fuel Discrepancies noticed in the quantity of fuel delivered by vessels and that acknowledged by the installations/rigs.	Discrepancies were noticed during the period under present audit also and discussed in Para 6.4.1.1
(viii) Handling of bulk cargo Bulk cargo consisting of barites and cement was being loaded without regard to specific requirement or requisitions from the offshore rigs resulting in substantial cargo remaining on board (ROB).	The situation still persists. Para 5.5 of the report discusses the present status of undelivered bulk cargo issue.
<b>ix) Consumption of fuel</b> Fuel consumption by owned OSVs was more than that of hired OSVs. Even when the OSVs were berthed at the jetty/port there were wide variations in fuel consumption by owned and hired OSVs.	Fuel consumption by vessels is recorded by balancing the figure arrived at after the vessel has returned from its voyage (i.e. fuel consumption by vessel = fuel loaded on vessels (-) fuel delivered to installations (-) ROB). There is absence of mechanism to monitor fuel consumption by vessels. Para 5.7 brings out the current position.
<ul> <li>(x) Loss due to non-utilisation of Global Positioning System–Assisted Improved Navigation System</li> <li>Global Positioning System-Assisted Improved Navigation System (GAINS) installed (1998) at NSB to improve navigation, reporting position of cargo and traffic management had not been put to effective use.</li> </ul>	SAP system or software is still not used for cargo planning & loading and deployment of vessels and monitoring of functioning of vessels equipment. This is discussed at Paras 5.1 and 7.1 of the report.
<ul> <li>(xi) Non- availability of Offshore Supply Vessels</li> <li>The downtime of owned OSVs was substantially higher than that of hired OSVs.</li> </ul>	The downtime of owned (old and new) vessels was much higher compared to that of charter hire vessels. This is discussed at Paras 5.6 of the report.

C&AG Report No. 6 of 2005 (Follow up of report no. 4 of 2002)-Para no. 2.3.2	Present status as of May 2018
<ul><li>(xii) Poor maintenance of Offshore Supply Vessels by the Operators</li><li>The owned vessels were poorly maintained.</li></ul>	Company continues to hand over all its own vessels for Operation and Maintenance to SCI on short term contracts (without performance linked penalty clauses) leading to profligacy. Paras 5.6 and 5.7 elaborates the present situation of Operation & Maintenance of owned vessels.
(xiii) Avoidable expenditure incurred on repairs of six vessels Due to delay in finalisation of new contracts, ONGC was compelled to extend existing contract though it had noted the unsatisfactory maintenance of vessels on the part of the contractor. ONGC repaired the vessels at its own cost though the contract mandates the operator to repair the vessels at its own cost.	All ONGC's owned vessels are presently under O&M contract with SCI on nomination basis.
(xiv) Introduction of 'Offshore Logistics Module' in SAP system Ministry stated that after introduction of Offshore Logistics Module in SAP system there would be effective control over deployment of OSVs on supply duty, number of trips to various duty stations, fuel consumption, discrepancies in delivery of fuel and the handling of bulk cargo. However, the efficacy of the 'Offshore Logistics Module' in SAP system remained to be tested in Audit.	SAP system or software is still not used for cargo planning and loading and deployment of vessel and monitoring of functioning of vessels equipment. This is discussed at Para 5.1 of the report.

#### Annexure-II (referred to in Para 4.2.2)

# Statement indicating extra expenditure on procurement of costlier HF-HSD from OMCs due to non-availability of tanker B.C.Chatterjee

Sr. No.	Particular	Quantity in KL	Amount In ₹
1	Actual quantity of HFHSD procured from OMCs during November 2015 to December 2016	150810	
2	Quantity of HFHSD required to supplied to offshore from NSB (OCMs) HFHSD supplied through Nhava tanks (OMCs) during voyage of tanker (to & fro) to MRPL -6 days per month* 8( actual number of voyage made dur- ing contract period)* 750 KL per day supplied to offshore through vessels	36000	
3	Time taken for unloading of HFHSD from tanker to char- tered barge -10 days in month *300 KL * total month from November 2015 to December 2016=14 months*3000	42000	
	Sub total	(-)78000	
4	Excess quantity procured from OMCs at Higher rate due to downtime of Tanker	72810	
5	Differential rate ₹22448 per KL [OMC rate (-) MRPL rate i.e ₹ 50340 (-)₹ 31581)]		22448
6	Extra expenditure incurred on HFHSD =Excess qty. pro- cured from OMCs *differential rate in ₹		163,44,38,880
	Barge Standby Charges		
7	Downtime days of Tanker		57 days
8	Hiring charges of Barge per day+ Service Tax 15 <i>per cent</i> + cost of water supplied + HFHSD Supplied to Barge		2,71,189
9	Standing cost of Barge for 57 days		1,54,57,773

Excess trips made by 1575								
Name of rigs	No of times vessels visited rigs	Rig avail- ability 2016- 17	No of weeks rig available	Expected vessel trips considering 2.5 visits/ week in consultant report	Excess trips			
(A)	<b>(B)</b>	(C )	<b>(D</b> )	<b>(E)</b>	( <b>B-E</b> )			
VAL DRILLER	209	365	52	130	79			
PARAMESHWARA	192	365	52	130	62			
MC TOCK	185	365	52	130	55			
VIRTUE-1	179	365	52	130	49			
<b>D VISION</b>	176	365	52	130	46			
H WARD	162	365	52	130	32			
J STAR	157	365	52	130	27			
S/JYOTI	151	365	52	130	21			
ED HOLT	150	365	52	130	20			
S/KIRAN	150	365	52	130	20			
ABAN-3	149	365	52	130	19			
CHITRA	147	365	52	130	17			
S/SHAKTI	145	365	52	130	15			
DS FOSSIL	144	305	44	109	35			
S/GAURAV	144	365	52	130	14			
CHAARU	142	365	52	130	12			
				Total excess trips	523			

# Annexure-III (referred to in Para 5.1) Excess trips made by PSVs

# Annexure-IV (referred to in Para 5.1) Cost of excess trips to the Company

Cost of vessel		
Excess trips	523	Trips
TAT at offshore per trip	8.23	Days
TAT at offshore for all excess trips	4304.29	Days
Avg. day rate of PSV in 2016-17	7592	US\$ per day
Total vessel cost during the excess trips	32678169.68	US\$
Average exchange rate US\$/INR 2016-17- US\$=` 67.09	67.09	
Total vessel cost in ₹	2192378404	₹
	219.24	₹ crore
Cost of Fuel (HFHSD supplied to vessels)		
Average fuel consumption per trip (source: Annual Report of NSB 2016-17)	7.25	KL per day
Average number of days per trip	8.23	Days
Rate of fuel during 2016-17	50267	₹ per KL
No. of excess trips	523	Trips
Fuel cost for excess trips	1568637154	₹
	156.86	₹ crore
Total cost (Vessel cost+Fuel cost)	376.10	₹ crore

### Annexure-V (referred to in Para 5.1) Statement indicating the number of times vessels visited rigs to deliver fuel against holding capacity of rigs

Name of rig	Average quantity that can be stored at time considering per day requirement, operational constraints .(in days)	No. of trips required in a year considering storage capacity of rig	No of times ves- sels visited rigs to deliver fuel and other cargo
VAL DRILLER	30	12	209
VIRTUE-1	31	12	179
M-1161	24	15	170
H WARD	31	12	162
J STAR	20	19	157
S/JYOTI	25	15	151
ED HOLT	25	15	150
S/KIRAN	25	15	150
CHITRA	40	10	147
S/SHAKTI	75	5	145
DS FOSSIL	26	15	144
CHAARU	26	14	142
TR-2	25	15	139
-ABAN-4	30	12	114
S/UDAY	58	6	104
ACTINIA	24	15	94
JT ANGEL	24	15	94
DS FORTUNE	30	12	92
СНААҰА	36	11	86
ABAN ICE	145	3	68
PARAMESHWARA	22	17	78
VIVEK-1	16.66	22	57
VIVEKA-2	28	14	43
TOTAL		301	2875

# Annexure VI (referred to in Para 5.2) Extra logistic operation cost due to deployment of PSVs for standby duty

Sr. No	Particulars	2012-13	2013-14	2014-15	2015-16	2016-17			
1	PSV Day rate in US\$ including Service Tax	11582	14416	15416	11685	7626			
2	Exchange rate	54.45	60.5	61.15	65.46	67.09			
3	PSV Day rate in INR (1) x (2)	630639.9	872168	942688.4	764900.1	511628.34			
4	OSV Day rate in US\$ including Service Tax	7925	7925	7925	9101	5527			
5	Exchange rate	54.45	60.5	61.15	65.46	67.09			
6	OSV Day rate in INR (4) x (5)	431516.25	479462.5	484613.75	595751.46	370806.43			
7	Difference in Day rate of PSV and OSV (3)-(6)	199123.65	392705.5	458074.65	169148.64	140821.91			
8	No. of days PSV available	344	351	339	349	310			
9	Extra payment due to hiring of PSV instead of OSV (7) x (8)	68498535.6	137839630.5	155287306.4	59032875.36	43654792.1			
10	No. of PSVs doing standby duties	3.33	1.69	3.52	7.99	7.74			
	Total in ₹ (9) x (10)	228100123.5	232948975.5	546611318.4	471672674.1	337888090.9			
	Grand total in ` 181,72,21,182								

Year	2012-13	2013-14	2014-15	2015-16	2016-17
Global benchmark (in hrs)	6	6	6	6	6
TAT at NSB excluding pilot (hrs)	11.51	12.45	12.94	13.67	15.58
Extra time over the global benchmark	5.51	6.45	6.94	7.67	9.58
No. of voyages	1372	1264	1327	1422	1360
Extra time in hours for all voyages	7560	8153	9209	10907	13029
Extra days	315	340	384	454	543
PSV rate in US\$	13955	13955	13955	13955	7625
Extra cost in US\$	4395662	4740514	5354871	6341815	4139358
Exchange rate US\$ to INR <sup>1</sup>	54.45	60.49	61.14	65.46	67.08
Extra cost in INR	239343806	286753662	327396797	415135201	277668157
Total extra cost in `	154.63 crore				

#### **Annexure VII A (referred to in Para 6.1.1)** Extra operational cost due to excess TAT at NSB

## Annexure VII B (referred to in Para 6.1.2) Extra operational cost due to excess TAT at KSB

Particulars	2012-13	2013-14	2014-15	2015-16	2016-17		
TAT at KSB excluding Pilotage	19.81	16.81	17.78	16.26	16.11		
(Hrs.)							
Extra time over the global bench-	13.81	10.81	11.78	10.26	10.11		
mark							
No. of voyages	203	228	234	174	193		
Extra time in hours for all voyages	2803.43	2464.68	2756.52	1785.24	1951.23		
Extra days	117	103	115	74	81		
Least Vessel hire rate during the	8202	8202	10416	10568	8050		
year (US\$)							
Extra cost in US\$	958072	842304	1196330	786101	654475		
Exchange rate of US \$ to `	54.45	60.49	61.14	65.46	67.08		
Extra cost in INR	52167031	50950993	73143597	51458150	43902187		
Total Extra Cost in `		27.16 crore					

## Annexure VIII (referred to in Para 6.3.1) Statement indicating supply of Potable Water/Drill Water for offshore operations

Year	Potable Water (PW) Delivered	Drill Water (DW) Delivered	Total Delivered offshore	Vessel consump- tion	Total offshore requirement	PW supplied to owned rigs	PW supplied to platforms	%of PW supplied to own rigs/ platforms to total PW supplied
2012-13	109883	259421	369304	102679	471983	36571	48691	77.59
2013-14	76293	217701	293994	95587	389581	27238	25515	69.15
2014-15	62831	234390	297221	101297	398518	34708	6075	64.91
2015-16	48071	215599	263670	122403	386073	30287	3697	70.70
2016-17	68368	242702	311070.2	102198	413268	33916	9540.7	63.56