S No	RFP/Corrigendum Clause	Query/Concern	Draft reply to bidder
1	Annexure 3 : Deed of Joint Undertaking	While bidder shared its point of view during the pre-bid stage as well - Many global CSPs have an indirect bidding model via channel partners and they do not bid directly or enter into consortium/Joint Undertaking in response to RFPs Hence it is not possible for us to sign the Deed of Joint undertaking which was added in corrigendum dated 22nd April 2021. This clause is **restricting participation** of all cloud providers that participate indirectly irrespective of how good a technology they have	Bid condition shall prevail
2	"The bidder should be certified by SAP to provide SAP operations."	This clause is ambiguous and restricting participation of the bidder as a CSP. We are not aware of any "SAP certification to provide SAP operations" and will be unable to produce this proof. SAP issues a list on their website for "SAP certified hardware"	Bid condition shall prevail
3	Commercial Bid Format for non-prod setup	In a true cloud setup, customers typically run their non-prod SAP environment for only 35% time out of the total contract duration (10 hrs/day x 22 day/months x 60 months). The current commercial bid format is asking for price discovery assuming 100% runtime (24 hrs x 30 days x 60 months) which is not reflecting the actual utilization and **giving disadvantage to true cloud providers** who bill customers on a per minute or per hour basis.	Bid condition shall prevail
4	"The Data Center Facility of the CSP shall at minimum implement the security toolset: Security & Data Privacy (Data & Network Security including Anti-Virus, Virtual Firewall, Multi Factor Authentication, VPN, IPS, Log Analyzer / Syslog, SSL, DDoS Protection, HIDS / NIDS, Rights Management, SIEM, Integrated Vulnerability Assessment, SOC, Private Virtual Zones, Data Privacy, Data Encryption, Authentication & Authorization, and Auditing & Accounting)"	This description of security requirements is ambiguous and will **give advantage to certain CSP** who may have a better understanding of the deliverable and inflate the cost of all other CSPs by a huge margin We request that the need for each of these components be evaluated again and proper specification and mechanism to check during evaluation stage if these components have been incorporated or not is added to the RFP.	RFP specifies the broad level requirements which every CSP needs to comply to meet MeitY guidelines Hence bid condition shall prevail
5	Annexure 1 : Hardware Sizing	There is no mechanism in RFP using which NEEPCO can validate during bid evaluation and during contract execution that the bidder is giving the required number of SAPS at the VM level and required no of IOPS at the storage level. Consequently, certain CSP(s) may do cost-cutting on cloud infrastructure to become L1, creating possible performance issues with cloud at later stage for NEEPCO's SAP. Hence we strongly suggest that– NEEPCO should ask all VM should be SAP Certified & for each VM being quoted in the bid, the SAPS offered by that VM and IOPS offered by that storage are provided along with relevant SAP note from SAP Website.	Bid condition shall prevail
6	Price Schedule	Points of mismatch between BOQ and Price Bid Schedule. Please note that the total no. of VMs which are there in the price bid, it is not matching with the count given in the Final Hardware Sizing document. For instance, for the DC environment, the total no. of VMs given in the Final Hardware Sizing document for the Production environment is 41 whereas in the Price Bid sheet, it is 35 In the DR environment, the total no. of VMs given in the Final Hardware Sizing document is 33 whereas in the Price Bid, it is 27 Further, there is no sandbox environment mentioned in the Price Bid document.	For items for which there is no provision for quoting prices in the line items of the Price Schedules, bidder may quote price of such line items under Additional row as provisioned in the following price Price Schedule 1: F. Any additional items: Sl. No. 1: Additional items Price Schedule 2: C. Any additional items: Sl. No. 1: Additional items Price Schedule 3: C. Any additional items: Sl. No. 1 : Additional items If any additional items are considered by the bidders, unpriced details of such items including description, unit of measurement and quantity should be submitted in the techno-commercial bid. For the additional components, the break-up of prices shall be sought later by NEEPCO, if necessary, after opening of price bids.
7		No. of cores not given in the sizing sheet. In the sizing sheet, for HANA DB, only the RAM count is provided and it is mentioned that "CSP has to propose required SAPs/ vCPUs for HANA DB VM based on HANA DB RAM". This is creating a lot of ambiguity as one CSP might consider different SAPs count and subsequently core count which is not consistent for all the bidders.	The revised final Hardware Sizing is attached as Annexure 1
8		Back up policy & Retention period: In the RFP, it is mentioned "The CSP shall configure, schedule and manage backups of all the data including but not limited to files, folders, images, system state, databases and enterprise applications as per the policy defined by MeitY or NEEPCO." In the corrigendum, it is asked to take the daily full backup There is no consistent & complete backup & retention policy. Now in order to accomplish the above ask, we would need to take the snapshot & flat file backup as it would involve everything from files/ folders etc. to the system state. If we consider the BoQ & the RFP, the daily full snapshot backup with 30 days retention will go into Petabytes which is not the ideal solution We recommend to go with snapshot backup for 2 days and data backup with point in time recovery for 30 days.	SAP recommends daily full database backup and hourly transaction log backup for SAP enviornment. Retention period will be 15 days for Production enviornment and 7 days for Development & Quality/Test enviornment Compressed golden image backup of all non-HANA DB VM's needs to take on quaterly basis with latest copy as retention 8TB storage space required for daily full database & hourly transaction log backup with 30% yearly growth for next 5 years CSP has to consider separate storage space for compressed golden image backup.
9		MPLS: In the corrigendum, it is mentioned that "NEEPCO would be using its own MPLS as its primary connectivity to DC & DR" whereas in the commercial format, it is asked by NEEPCO to provide prices for "50 Mbps MPLS NEEPCO Head Office to CSP DC Location". Please confirm if the CSP has to give the MPLS connectivity If NEEPCO would use its own MPLS, then what does the CSP need to fill in the commercial format?	Bidder may refer Sl. No. 4 of Corrigendum No. 2, dated 22.04.2021

Hardware Sizing - DC

PRODUCTION LANDSCAPE

Sr. No.	System (VM) - DC	QTY	Total SAPS	Year 1	Year 2	Year 3	Year 4	Year 5	SAPS Offered	No. of CPU Cores	CPU Model	Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5	Storage (GB) - OS, SWAP & Application	Storage (GB) - Database (SSD)	Operating System	OS level Cluster	Type	Remarks
	SAP S/4HANA																						
1	SAP S/4 HANA DB - HANA DB - Primary	1	49000	24500	24500	32664	40832	49000				1536	768	768	1024	1280	1536	500	7680	RHEL for HANA / SUSE for HANA	Yes	Dedicated	CSP has to propose required SAPs/vCPUs for HANA DB VM based on HANA DB RAM
2	SAP S/4 HANA DB - HANA DB - Secondary (HA Node)	1	49000	24500	24500	32664	40832	49000				1536	768	768	1024	1280	1536	500	7680	RHEL for HANA / SUSE for HANA		Dedicated	CSP has to propose required SAPs/vCPUs for HANA DB VM based on HANA DB RAM
3	SAP S/4 HANA APP (ASCS)	1	8320	4160	4992	5824	7072	8320				64	32	32	48	64	64	500		RHEL for SAP / SUSE for SAP	Yes	Dedicated	
4	SAP S/4 HANA APP (ASCS)	1	8320	4160	4992	5824	7072	8320				64	32	32	48	64	64	500		RHEL for SAP / SUSE for SAP		Dedicated	
5	SAP S/4 HANA APP (PAS)	1	9984	8320	9984	9984	9984	9984				64	64	64	64	64	64	500		RHEL for SAP / SUSE for SAP		Dedicated	
6	SAP S/4 HANA APP (AAS)	1	9984	8320	9984	9984	9984	9984				64	64	64	64	64	64	500		RHEL for SAP / SUSE for SAP		Dedicated	
7	SAP S/4 HANA APP (AAS)	1	9984			9984	9984	9984				64			64	64	64	500		RHEL for SAP / SUSE for SAP		Dedicated	
8	SAP S/4 HANA APP (AAS)	1	3328					3328				32					32	500		RHEL for SAP / SUSE for SAP		Dedicated	
	SAP FIORI FES																						
9	SAP FIORI (ASCS + ASE DB)	1	1755	1755	1755	1755	1755	1755				16	16	16	16	16	16	500	800	RHEL for SAP / SUSE for SAP	Yes	Dedicated	
10	SAP FIORI (ASCS + ASE DB)	1	1755	1755	1755	1755	1755	1755				16	16	16	16	16	16	500		RHEL for SAP / SUSE for SAP		Dedicated	
11	SAP FIORI (PAS)	1	4095	4095	4095	4095	4095	4095				32	32	32	32	32	32	500		RHEL for SAP / SUSE for SAP		Dedicated	
	SAP NW EP (ESS/MSS) (Year 1 50%, Year 2 60%, Year 3 75%, Year 4 85%, Year 5 100%)																						
12	SAP EP (SCS + ASE DB)	1	4014	2007	2408	3010	3412	4014				32	16	16	24	32	32	500	800	RHEL for SAP / SUSE for SAP	Yes	Dedicated	
13	SAP EP (SCS + ASE DB)	1	4014	2007	2408	3010	3412	4014				32	16	16	24	32	32	500		RHEL for SAP / SUSE for SAP		Dedicated	
14	SAP EP (PAS)	1	9364	4682	5618	7023	7960	9364				76	32	32	64	76	76	500		RHEL for SAP / SUSE for SAP		Dedicated	
	SAP Process Orchestration (PO)																						
15	SAP PO APP + SYBASE DB (SCS + DB + PAS)	1	4 Core	4 Core	4 Core	4 Core	4 Core	4 Core		4 Core		32	32	32	32	32	32	500	800	RHEL for SAP / SUSE for SAP	Yes	Dedicated	
16	SAP PO APP + SYBASE DB (SCS + DB + AAS)	1	4 Core	4 Core	4 Core	4 Core	4 Core	4 Core		4 Core		32	32	32	32	32	32	500		RHEL for SAP / SUSE for SAP		Dedicated	
	SAP Business Objects (Year 1 50%, Year 2 60%, Year 3 75%, Year 4 85%, Year 5 100%)																						
17	SAP Business Objects (BO) - 1 (Database+Intelligence+processing+web)	1	10000	10000	10000	10000	10000	10000				80	80	80	80	80	80	500	400	RHEL for SAP / SUSE for SAP		Dedicated	
18	SAP Business Objects (BO) - 2 (Database+Intelligence+processing+web)	1	8200				8200	8200				64				64	64	500		RHEL for SAP / SUSE for SAP		Dedicated	
	SAP ERP (LSO) (Year 1 80%, Year 2 80%, Year 3 100%, Year 4 100%, Year 5 100%)																						
19	SAP ERP - LSO (ASCS + ASE DB)	1	1794	1435	1435	1794	1794	1794				16	16	16	16	16	16	500	800	RHEL for SAP / SUSE for SAP	Yes	Dedicated	
20	SAP ERP - LSO (ASCS + ASE DB)	1	1794	1435	1435	1794	1794	1794				16	16	16	16	16	16	500		RHEL for SAP / SUSE for SAP		Dedicated	
21	SAP ERP -LSO (PAS)	1	4186	3350	3350	4186	4186	4186				32	24	24	32	32	32	500		RHEL for SAP / SUSE for SAP		Dedicated	
	SAP NW EP (LSO) (Year 1 50%, Year 2 60%, Year 3 75%, Year 4 85%, Year 5 100%)																						
22	SAP NW EP - LSO (SCS + ASE DB)	1	3084	1542	1850	2313	2621	3084				24	16	16	24	24	24	500	800	RHEL for SAP / SUSE for SAP	Yes	Dedicated	
23	SAP NW EP - LSO (SCS + ASE DB)	1	3084	1542	1850	2313	2621	3084				24	16	16	24	24	24	500		RHEL for SAP / SUSE for SAP		Dedicated	
24	SAP NW EP - LSO (PAS)	1	7196	3598	4318	5397	6117	7196				56	32	32	48	56	56	500		RHEL for SAP / SUSE for SAP		Dedicated	
	SAP GRC (AC) (Year 1 50%, Year 2 60%, Year 3 75%, Year 4 85%, Year 5 100%)																						
25	SAP GRC (ASCS + ASE DB)	1	7808	3904	4685	5856	6637	7808				64	32	32	42	64	64	500	800	RHEL for SAP / SUSE for SAP	Yes	Dedicated	
26	SAP GRC (ASCS + ASE DB)	1	7808	3904	4685	5856	6637	7808				64	32	32	42	64	64	500		RHEL for SAP / SUSE for SAP		Dedicated	
27	SAP GRC (PAS)	1	9110	9110	9110	9110	9110	9110				72	72	72	72	72	72	500		RHEL for SAP / SUSE for SAP		Dedicated	
28	SAP GRC (AAS)	1	9110				9110	9110				72				72	72	500		RHEL for SAP / SUSE for SAP		Dedicated	
	SAP NW EP (IDM + SSO) (Year 1 60%, Year 2 70%, Year 3 80%, Year 4 90%, Year 5 100%)																						
29	SAP EP (SCS + ASE DB)	1	3783	2270	2648	3026	3404	3783				32	16	16	24	32	32	500	500	RHEL for SAP / SUSE for SAP	Yes	Dedicated	
30	SAP EP (SCS + ASE DB)	1	3783	2270	2648	3026	3404	3783				32	16	16	24	32	32	500		RHEL for SAP / SUSE for SAP		Dedicated	
31	SAP EP (PAS)	1	8827	5296	6179	7062	7944	8827				72	36	36	48	72	72	500		RHEL for SAP / SUSE for SAP		Dedicated	
	SAP MII (Year 1 80%, Year 2 80%, Year 3 80%, Year 4 90%, Year 5 100%)																						
32	SAP MII (SCS + ASE DB)	1	5215	4172	4172	4172	4694	5215				42	32	32	32	42	42	500	500	RHEL for SAP / SUSE for SAP	Yes	Dedicated	
33	SAP MII (SCS + ASE DB)	1	5215	4172	4172	4172	4694	5215				42	32	32	32	42	42	500		RHEL for SAP / SUSE for SAP		Dedicated	
34	SAP MII (PAS)	1	10000	10000	10000	10000	10000	10000				80	80	80	80	80	80	500		RHEL for SAP / SUSE for SAP		Dedicated	
35	SAP MII (AAS)	1	2168					2168				16					16	500		RHEL for SAP / SUSE for SAP		Dedicated	
	SAP Content Server (Year 1 50%, Year 2 60%, Year 3 75%, Year 4 85%, Year 5 100%)																						
36	SAP DMS (DB + APP)	1	7800	3900	4680	5460	6630	7800				64	32	32	48	48	64	500	1024	RHEL for SAP / SUSE for SAP		Dedicated	
	SAP Solution Manager																						
37	SAP Solution Manager (ABAP+JAVA) - DB	1	3000	3000	3000	3000	3000	3000				24	24	24	24	24	24	500	1024	RHEL for SAP / SUSE for SAP	Yes	Dedicated	
38	SAP Solution Manager (ABAP+JAVA) - APP + Saprouter	1	5000	5000	5000	5000	5000	5000				40	40	40	40	40	40	500		RHEL for SAP / SUSE for SAP		Dedicated	
	SAP WebDispatcher																						
39	SAP Web Dispatcher - FIORI	1	2000	2000	2000	2000	2000	2000				16	16	16	16	16	16	200		RHEL for SAP / SUSE for SAP		Dedicated	
40	SAP Web Dispatcher - EP (ESS/MSS)	1	2000	2000	2000	2000	2000	2000				16	16	16	16	16	16	200		RHEL for SAP / SUSE for SAP		Dedicated	
41	SAP Web Dispatcher - NW EP (LSO)	1	2000	2000	2000	2000	2000	2000				16	16	16	16	16	16	200		RHEL for SAP / SUSE for SAP		Dedicated	
	Total	41											2612	2612	3372	4192	4768	19600	23608				

QUALITY LANDSCAPE

Sr. No.	System (VM) - DC	QTY	Total SAPS	Year 1	Year 2	Year 3	Year 4	Year 5	SAPS Offered	No. of CPU Cores	CPU Model	Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5	Storage (GB) - OS, SWAP & Application	Storage (GB) - Database (SSD)	Operating System	OS level Cluster	Type	Remarks
1	SAP S/4HANA DB - HANA DB	1	49000	24500	24500	32664	40832	49000				1536	768	768	1024	1280	1536	500	7680	RHEL for HANA / SUSE for HANA		Consumption	CSP has to propose required SAPs/vCPUs for HANA DB VM based on HANA DB RAM
2	SAP S/4HANA APP (ASCS + PAS)	1	6400	6400	6400	6400	6400	6400				48	48	48	48	48	48	500		RHEL for SAP / SUSE for SAP		Consumption	
3	SAP FIORI (DB + APP)	1	3150	3150	3150	3150	3150	3150				32	32	32	32	32	32	500	800	RHEL for SAP / SUSE for SAP		Consumption	
4	SAP EP-ESS/MSS (DB + APP)	1	4116	4116	4116	4116	4116	4116				32	32	32	32	32	32	500	800	RHEL for SAP / SUSE for SAP		Consumption	
5	SAP PO (DB + APP)	1	2 Core	2 Core	2 Core	2 Core	2 Core	2 Core		2 Core		24	24	24	24	24	24	500	800	RHEL for SAP / SUSE for SAP		Consumption	
6	SAP Business Objects (BO)	1	7000	7000	7000	7000	7000	7000				56	56	56	56	56	56	500	400	RHEL for SAP / SUSE for SAP		Consumption	

#	Item	Qty	Total SAPS	Year 1	Year 2	Year 3	Year 4	Year 5	Core	Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5	Storage	Storage	OS	Type	Notes
7	SAP ERP - LSO (DB + APP)	1	3220	3220	3220	3220	3220	3220		32	32	32	32	32	32	500	800	RHEL for SAP / SUSE for SAP	Consumption	
8	SAP NW EP - LSO (DB + APP)	1	5535	5535	5535	5535	5535	5535		48	48	48	48	48	48	500	800	RHEL for SAP / SUSE for SAP	Consumption	
9	SAP GRC (DB + APP)	1	6006	6006	6006	6006	6006	6006		48	48	48	48	48	48	500	800	RHEL for SAP / SUSE for SAP	Consumption	
10	SAP NW EP (IDM+SSO) (DB + APP)	1	4850	4850	4850	4850	4850	4850		36	36	36	36	36	36	500	500	RHEL for SAP / SUSE for SAP	Consumption	
11	SAP DMS	1	3000	3000	3000	3000	3000	3000		24	24	24	24	24	24	500	500	RHEL for SAP / SUSE for SAP	Consumption	
12	SAP Web Dispatcher - FIORI	1	2000	2000	2000	2000	2000	2000		16	16	16	16	16	16	200		RHEL for SAP / SUSE for SAP	Consumption	
13	SAP Web Dispatcher - EP (ESS/MSS)	1	2000	2000	2000	2000	2000	2000		16	16	16	16	16	16	200		RHEL for SAP / SUSE for SAP	Consumption	
14	SAP Web Dispatcher - NW EP (LSO)	1	2000	2000	2000	2000	2000	2000		16	16	16	16	16	16	200		RHEL for SAP / SUSE for SAP	Consumption	
	Total	14							2 Core		1196	1196	1452	1708	1964	6100	13880			

DEVELOPMENT LANDSCAPE

#	Item	Qty	Total SAPS	Year 1	Year 2	Year 3	Year 4	Year 5	Core	Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5	Storage	Storage	OS	Type	Notes
1	SAP S/4HANA DB - HANA DB	1	10000	10000	10000	10000	10000	10000		256	256	256	256	256	256	500	1280	RHEL for HANA / SUSE for HANA	Consumption	CSP has to propose required SAPs/vCPUs for HANA DB VM based on HANA DB RAM
2	SAP S/4HANA APP (ASCS + PAS)	1	3840	3840	3840	3840	3840	3840		32	32	32	32	32	32	500		RHEL for SAP / SUSE for SAP	Consumption	
3	SAP FIORI (DB + APP)	1	1800	1800	1800	1800	1800	1800		16	16	16	16	16	16	500	600	RHEL for SAP / SUSE for SAP	Consumption	
4	SAP EP-ESS/MSS (DB + APP)	1	3087	3087	3087	3087	3087	3087		24	24	24	24	24	24	500	600	RHEL for SAP / SUSE for SAP	Consumption	
5	SAP PO (DB + APP)	1	2 Core	2 Core	2 Core	2 Core	2 Core	2 Core	2 Core	16	16	16	16	16	16	500	600	RHEL for SAP / SUSE for SAP	Consumption	
6	SAP Business Objects (BO)	1	2800	2800	2800	2800	2800	2800		24	24	24	24	24	24	500	300	RHEL for SAP / SUSE for SAP	Consumption	
7	SAP ERP - LSO (DB + APP)	1	1840	1840	1840	1840	1840	1840		16	16	16	16	16	16	500	600	RHEL for SAP / SUSE for SAP	Consumption	
8	SAP NW EP - LSO (DB + APP)	1	3163	3163	3163	3163	3163	3163		32	32	32	32	32	32	500	600	RHEL for SAP / SUSE for SAP	Consumption	
9	SAP GRC (DB + APP)	1	4004	4004	4004	4004	4004	4004		32	32	32	32	32	32	500	600	RHEL for SAP / SUSE for SAP	Consumption	
10	SAP NW EP (IDM+SSO) (DB + APP)	1	2910	2910	2910	2910	2910	2910		24	24	24	24	24	24	500	400	RHEL for SAP / SUSE for SAP	Consumption	
11	SAP MII (DB + APP)	1	2674	2674	2674	2674	2674	2674		24	24	24	24	24	24	500	400	RHEL for SAP / SUSE for SAP	Consumption	
12	SAP DMS	1	1800	1800	1800	1800	1800	1800		16	16	16	16	16	16	500	400	RHEL for SAP / SUSE for SAP	Consumption	
13	SAP Web Dispatcher - FIORI	1	2000	2000	2000	2000	2000	2000		16	16	16	16	16	16	200		RHEL for SAP / SUSE for SAP	Consumption	
14	SAP Web Dispatcher - EP (ESS/MSS)	1	2000	2000	2000	2000	2000	2000		16	16	16	16	16	16	200		RHEL for SAP / SUSE for SAP	Consumption	
15	SAP Web Dispatcher - NW EP (LSO)	1	2000	2000	2000	2000	2000	2000		16	16	16	16	16	16	200		RHEL for SAP / SUSE for SAP	Consumption	
16	Landing Machine (Jump Server) - Windows	1	4000	4000	4000	4000	4000	4000		32	32	32	32	32	32	1024		Windows Server 2012 or higher	Dedicated	
	Total	16							2 Core		592	592	592	592	592	7624	6380			

SANDBOX LANDSCAPE

#	Item	Qty	Total SAPS	Year 1	Year 2	Year 3	Year 4	Year 5	Core	Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5	Storage	Storage	OS	Type	Notes
1	SAP S/4HANA DB - HANA DB	1	10000	10000	10000	10000	10000	10000		192	192	192	192	192	192	500	1024	RHEL for HANA / SUSE for HANA	Consumption	CSP has to propose required SAPs/vCPUs for HANA DB VM based on HANA DB RAM
2	SAP S/4HANA APP (ASCS + PAS)	1	3840	3840	3840	3840	3840	3840		16	16	16	16	16	16	500		RHEL for SAP / SUSE for SAP	Consumption	
3	SAP FIORI (DB + APP)	1	1800	1800	1800	1800	1800	1800		16	16	16	16	16	16	500	600	RHEL for SAP / SUSE for SAP	Consumption	
4	SAP EP-ESS/MSS (DB + APP)	1	3087	3087	3087	3087	3087	3087		16	16	16	16	16	16	500	600	RHEL for SAP / SUSE for SAP	Consumption	
5	SAP PO (DB + APP)	1	2 Core	2 Core	2 Core	2 Core	2 Core	2 Core	2 Core	16	16	16	16	16	16	500	600	RHEL for SAP / SUSE for SAP	Consumption	
6	SAP Business Objects (BO)	1	2800	2800	2800	2800	2800	2800		16	16	16	16	16	16	500	300	RHEL for SAP / SUSE for SAP	Consumption	
7	SAP ERP - LSO (DB + APP)	1	1840	1840	1840	1840	1840	1840		16	16	16	16	16	16	500	600	RHEL for SAP / SUSE for SAP	Consumption	
8	SAP NW EP - LSO (DB + APP)	1	3163	3163	3163	3163	3163	3163		16	16	16	16	16	16	500	600	RHEL for SAP / SUSE for SAP	Consumption	
9	SAP GRC (DB + APP)	1	4004	4004	4004	4004	4004	4004		16	16	16	16	16	16	500	600	RHEL for SAP / SUSE for SAP	Consumption	
10	SAP NW EP (IDM+SSO) (DB + APP)	1	2910	2910	2910	2910	2910	2910		16	16	16	16	16	16	500	400	RHEL for SAP / SUSE for SAP	Consumption	
11	SAP MII (DB + APP)	1	2674	2674	2674	2674	2674	2674		16	16	16	16	16	16	500	400	RHEL for SAP / SUSE for SAP	Consumption	
12	SAP DMS	1	1800	1800	1800	1800	1800	1800		16	16	16	16	16	16	500	400	RHEL for SAP / SUSE for SAP	Consumption	
	Total	12							2 Core		368	368	368	368	368	6000	6124			

LOAD & STRESS TESTING INFRA (Only for 3 months)

#	Item	Qty	Total SAPS	Year 1	Year 2	Year 3	Year 4	Year 5		Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5	Storage	Storage	OS	Type	Notes
1	Controller	1		4 Core							4 Core						8	100	Windows Server 2012 or higher	Consumption	
2	Generator Client1	1		8 Core							8 Core						16	100	Windows Server 2012 or higher	Consumption	
3	Generator Client2	1		8 Core							8 Core						16	100	Windows Server 2012 or higher	Consumption	
	Total	3															40	300			

PRODUCTION LANDSCAPE

Third month onwards after Pre-Required activities as mentioned in the Tender and handover of Production landscape to NEEPCO till the contract period

Solution Manager (PRD) - First month onwards after Pre-Required activities as mentioned in the Tender and handover of Solution Manager landscape to NEEPCO till the contract period

QUALITY LANDSCAPE

Second month onwards after Pre-Required activities as mentioned in the Tender and handover of Quality landscape to NEEPCO till the contract period

DEVELOPMENT LANDSCAPE

First month onwards after Pre-Required activities as mentioned in the Tender and handover of Development landscape to NEEPCO till the contract period

Proposed OS needs to be same across all the landscapes i.e. Development, Quality, Production and Sandbox except Jump server

Sr. No.	System (VM) - DC	QTY	SAPS Required						SAPS Offered	No. of CPU Cores	CPU Model	RAM (GB)						Storage (GB) - OS, SWAP & Application	Storage (GB) - Database (SSD)	Operating System	Type	Remarks
			Total SAPS	Year 1	Year 2	Year 3	Year 4	Year 5				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
	PRODUCTION LANDSCAPE																					
	SAP S/4HANA																					
1	SAP S/4 HANA DB - HANA DB - Primary	1	49000	24500	24500	32664	40832	49000				1536	768	768	1024	1280	1536	500	7680	RHEL for HANA / SUSE for HANA	Dedicated	CSP has to propose required SAPs/vCPUs for HANA DB VM based on HANA DB RAM
2	SAP S/4 HANA APP (ASCS)	1	8320	4160	4992	5824	7072	8320				64	32	32	48	64	64	500		RHEL for SAP / SUSE for SAP	Consumption	
3	SAP S/4 HANA APP (PAS)	1	9984	8320	9984	9984	9984	9984				64	64	64	64	64	64	500		RHEL for SAP / SUSE for SAP	Consumption	
4	SAP S/4 HANA APP (AAS)	1	9984	8320	9984	9984	9984	9984				64	64	64	64	64	64	500		RHEL for SAP / SUSE for SAP	Consumption	
5	SAP S/4 HANA APP (AAS)	1	9984			9984	9984	9984				64			64	64	64	500		RHEL for SAP / SUSE for SAP	Consumption	
6	SAP S/4 HANA APP (AAS)	1	3328					3328				32					32	500		RHEL for SAP / SUSE for SAP	Consumption	
	SAP FIORI FES		Total SAPS	Year 1	Year 2	Year 3	Year 4	Year 5				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
7	SAP FIORI (ASCS + ASE DB)	1	1755	1755	1755	1755	1755	1755				16	16	16	16	16	16	500		RHEL for SAP / SUSE for SAP	Dedicated	
8	SAP FIORI (PAS)	1	4095	4095	4095	4095	4095	4095				32	32	32	32	32	32	500		RHEL for SAP / SUSE for SAP	Consumption	
	SAP NW EP (ESS/MSS)		Total SAPS	Year 1 (50%)	Year 2 (60%)	Year 3 (75%)	Year 4 (85%)	Year 5 (100%)				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
9	SAP EP (SCS + ASE DB)	1	4014	2007	2408	3010	3412	4014				32	16	16	24	32	32	500		RHEL for SAP / SUSE for SAP	Dedicated	
10	SAP EP (PAS)	1	9364	4682	5618	7023	7960	9364				76	32	32	64	76	76	500		RHEL for SAP / SUSE for SAP	Consumption	
	SAP Process Orchestration (PO)		Total SAPS	Year 1	Year 2	Year 3	Year 4	Year 5				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
11	SAP PO APP + SYBASE DB (SCS + DB + PAS)	1	4 Core	4 Core	4 Core	4 Core	4 Core	4 Core	4 Core			32	32	32	32	32	32	500	800	RHEL for SAP / SUSE for SAP	Dedicated	
12	SAP PO APP + SYBASE DB (SCS + DB + AAS)	1	4 Core	4 Core	4 Core	4 Core	4 Core	4 Core	4 Core			32	32	32	32	32	32	500		RHEL for SAP / SUSE for SAP	Consumption	
	SAP Business Objects		Total SAPS	Year 1 (50%)	Year 2 (60%)	Year 3 (75%)	Year 4 (85%)	Year 5 (100%)				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
13	SAP Business Objects (BO) - 1 (Database+Intelligence+processing+web)	1	10000	10000	10000	10000	10000	10000				80	80	80	80	80	80	500	400	RHEL for SAP / SUSE for SAP	Dedicated	
14	SAP Business Objects (BO) - 2 (Database+Intelligence+processing+web)	1	8200				8200	8200				64				64	64	500		RHEL for SAP / SUSE for SAP	Consumption	
	SAP ERP (LSO)		Total SAPS	Year 1 (80%)	Year 2 (80%)	Year 3 (100%)	Year 4 (100%)	Year 5 (100%)				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
15	SAP ERP - LSO (ASCS + ASE DB)	1	1794	1435	1435	1794	1794	1794				16	16	16	16	16	16	500		RHEL for SAP / SUSE for SAP	Dedicated	
16	SAP ERP -LSO (PAS)	1	4186	3350	3350	4186	4186	4186				32	24	24	32	32	32	500		RHEL for SAP / SUSE for SAP	Consumption	
	SAP NW EP (LSO)		Total SAPS	Year 1 (50%)	Year 2 (60%)	Year 3 (75%)	Year 4 (85%)	Year 5 (100%)				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
17	SAP NW EP - LSO (SCS + ASE DB)	1	3084	1542	1850	2313	2621	3084				24	16	16	24	24	24	500		RHEL for SAP / SUSE for SAP	Dedicated	
18	SAP NW EP - LSO (PAS)	1	7196	3598	4318	5397	6117	7196				56	32	32	48	56	56	500		RHEL for SAP / SUSE for SAP	Consumption	
	SAP GRC (AC)		Total SAPS	Year 1 (50%)	Year 2 (60%)	Year 3 (75%)	Year 4 (85%)	Year 5 (100%)				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
19	SAP GRC (ASCS + ASE DB)	1	7808	3904	4685	5856	6637	7808				64	32	32	42	64	64	500		RHEL for SAP / SUSE for SAP	Dedicated	
20	SAP GRC (PAS)	1	9110	9110	9110	9110	9110	9110				72	72	72	72	72	72	500		RHEL for SAP / SUSE for SAP	Consumption	
21	SAP GRC (AAS)	1	9110				9110	9110				72				72	72	500		RHEL for SAP / SUSE for SAP	Consumption	
	SAP NW EP (IDM + SSO)		Total SAPS	Year 1 (60%)	Year 2 (70%)	Year 3 (80%)	Year 4 (90%)	Year 5 (100%)				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
22	SAP EP (SCS + ASE DB)	1	3783	2270	2648	3026	3404	3783				32	16	16	24	32	32	500		RHEL for SAP / SUSE for SAP	Dedicated	
23	SAP EP (PAS)	1	8827	5296	6179	7062	7944	8827				72	36	36	48	72	72	500		RHEL for SAP / SUSE for SAP	Consumption	
	SAP MII		Total SAPS	Year 1 (80%)	Year 2 (80%)	Year 3 (80%)	Year 4 (90%)	Year 5 (100%)				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
24	SAP MII (SCS + ASE DB)	1	5215	4172	4172	4172	4694	5215				42	32	32	32	42	42	500		RHEL for SAP / SUSE for SAP	Dedicated	
25	SAP MII (PAS)	1	10000	10000	10000	10000	10000	10000				80	80	80	80	80	80	500		RHEL for SAP / SUSE for SAP	Consumption	
26	SAP MII (AAS)	1	2168					2168				16					16	500		RHEL for SAP / SUSE for SAP	Consumption	
	SAP Content Server		Total SAPS	Year 1 (50%)	Year 2 (60%)	Year 3 (75%)	Year 4 (85%)	Year 5 (100%)				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
27	SAP DMS (DB + APP)	1	7800	3900	4680	5460	6630	7800				64	32	32	48	48	64	500	1024	RHEL for SAP / SUSE for SAP	Dedicated	
	SAP Solution Manager		Total SAPS	Year 1	Year 2	Year 3	Year 4	Year 5				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
28	SAP Solution Manager (ABAP+JAVA) - DB	1	3000	3000	3000	3000	3000	3000				24	24	24	24	24	24	500	1024	RHEL for SAP / SUSE for SAP	Dedicated	
29	SAP Solution Manager (ABAP+JAVA) - App + SAProuter	1	5000	5000	5000	5000	5000	5000				40	40	40	40	40	40	500		RHEL for SAP / SUSE for SAP	Consumption	
	SAP WebDispatcher		Total SAPS	Year 1	Year 2	Year 3	Year 4	Year 5				Total RAM	Year 1	Year 2	Year 3	Year 4	Year 5					
30	SAP Web Dispatcher - FIORI	1	2000	2000	2000	2000	2000	2000				16	16	16	16	16	16	200		RHEL for SAP / SUSE for SAP	Consumption	
31	SAP Web Dispatcher - EP (ESS/MSS)	1	2000	2000	2000	2000	2000	2000				16	16	16	16	16	16	200		RHEL for SAP / SUSE for SAP	Consumption	
32	SAP Web Dispatcher - NW EP (LSO)	1	2000	2000	2000	2000	2000	2000				16	16	16	16	16	16	200		RHEL for SAP / SUSE for SAP	Consumption	
33	Landing Machine (Jump Server) - Windows	1	4000	4000	4000	4000	4000	4000				32	32	32	32	32	32	1024		Windows Server 2012 or higher	Dedicated	
	Total	33											1700	1700	2154	2654	2974	16124	10928			

PRODUCTION LANDSCAPE

Fourth month onwards after Pre-Required activities as mentioned in the Tender and handover of Production landscape to NEEPCO till the contract period

Proposed OS needs to be same across all Production landscapes except Jump server