



SAP HANA Enterprise Cloud

Project Cloud - Roles & Responsibilities

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FIVE CATEGORIES: For avoidance of doubt, all of the tasks and services itemized in this Roles & Responsibilities document are provided as a catalog of services. However, the relevance and necessity of each individual task or service will be unique to each customer's HEC Computing Environment. Customers are responsible to review and analyze these tasks and make the selection of such tasks/services in collaboration with the assigned SAP HEC Cloud Architect Advisor ("CAA"), or with their SAP Client Delivery Manager ("CDM").

HEC Standard Services	All tasks/services that are included as part of the standard HEC Services, covered by the HEC Service Fee and performed by SAP ² , as applicable to customer.
HEC Optional Services	HEC Optional Services: these tasks/services are not covered in the standard HEC Services, and are not and cannot be covered by the HEC Enhanced Managed Services ¹ ("EMS"). These tasks/services <ul style="list-style-type: none"> • may be elected by customer. • are subject to additional service fees. • must be specifically contracted for and itemized in the customer's contract (original HEC contract or via a change request), and • can only be performed by SAP².
HEC Enhanced Managed Services ¹ ("EMS") that can be performed by customer	HEC Enhanced Managed Services ¹ include tasks/services that a customer can perform, but the customer may elect to have SAP ² deliver.
HEC Enhanced Managed Services ¹ ("EMS") that <u>cannot</u> be performed by customer	HEC Enhanced Managed Services ¹ include tasks/services that are not required for the HEC Computing Environment, but that the customer may elect to have performed. These tasks/services can only be performed by SAP ² . Note: Ongoing improvements to automated service delivery may eventually allow customers to perform certain tasks and services on their own and will be communicated as available.
HEC Excluded Tasks	HEC Excluded Tasks are those tasks/services that can only be performed by the customer and are excluded from HEC Standard Services, HEC Optional Services and HEC EMS Services.

¹ **HEC Enhanced Managed Services ("EMS")** is a category of supplementary services identified as HEC Enhanced Managed Services ("EMS") in this document. HEC-EMS is subject to additional service fees as agreed in a customer's HEC contract. HEC-EMS excludes all services involving the extension, reduction, or change of the customer's existing HEC landscape, e.g. provisioning additional infrastructure resources. The customer is required to submit HEC-EMS service requests to SAP via the HEC ticketing/service request system made available to customer for such purpose.

² The term "SAP" when used herein refers to SAP as defined in the customer Order Form, and means either SAP or the relevant SAP third party provider or subcontractor.

Not all tasks or services listed in the HEC R&R are relevant to all customer environments. **Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).** Certain tasks or services may not be available from SAP or certain SAP third party providers, and may not be available in certain regions. The availability of a specific service may also depend on characteristics of the specific customer situation (e. g. system size, solution scope etc.) and must be individually checked and confirmed with the SAP HEC Cloud Architect Advisor ("CAA"), or with their SAP Client Delivery Manager ("CDM").

All tasks and work efforts not purchased by customer or not provided SAP as part of the HEC standard service but applicable to customer and its HEC Computing Environment are the responsibility of customer.

The PDF version of this **SAP HANA Enterprise Cloud, Production Cloud – Roles & Responsibilities** document made available by SAP at <http://www.sap.com/corporate-en/about/our-company/policies/cloud/hec-roles-and-responsibilities.html> is the Documentation of record. Customer acknowledges that a non-pdf version of this Roles & Responsibilities document may be made available for task analysis, task planning and overall customer task management purposes, but such version shall not be considered Documentation.

D	meaning
=	task is identical between HEC Production and HEC Project
<>	task is different between HEC Production and HEC Project; this may be that it is relevant only for one of the two HEC Services or that it is defined in a different way for each type of HEC Service



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
			All task descriptions exclusively refer to the execution of the respective task and are exclusive of potentially required hardware or infrastructure capacities (e.g. compute, storage, network connectivity etc.). Any extension to such entities is required to be processed via a contractual change request (CR) and is subject to additional HEC service fees. Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).	
1		A - Service Management	For accounts delivered by a HEC premium partner, certain tasks in chapter "A - Service Management" are a joint effort between SAP and that HEC Premium Partner	
2		Account Management		
3	SM_1.1.01	Conduct Delivery & Operations Kick-Off -Review HEC Support Manual -Schedule Landscape Review and Scope Alignment -Detailed Engagement & Operations Review	HEC Standard Services	
4	SM_1.1.02	Capacity Management Review: Quarterly review of systems within landscape, monitoring, and reporting of resource usage (e.g. storage capacity, memory and CPU) to prevent operational issues. Review need for service changes and extensions based on technical resource consumption trends.	HEC Standard Services	
5	SM_1.1.03	Capacity Management Planning: Develop quarterly capacity plan based on technical capacity management review.	HEC Standard Services	
6	SM_1.1.04	System outage notification and escalation management	HEC Standard Services	Handling of critical service situations aiming to bring the service back to targeted quality and standards.
7	SM_1.1.05	Service Performance Review & Report – Monthly - Provide review and suggestions if a high volume of HEC support requests occurs - Service availability and KPIs	HEC Standard Services	
8		Service Request Management - Technical Support		
9	SM_1.2.01	Use defined tracking system to enter and update technical requests	HEC Excluded Tasks	Change Requests (CR) or Change Orders subject to process defined in Agreement.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
10	SM_1.2.09	Service Request Management - Receive and acknowledge requests in SAP defined request tracking system - Assess criticality/priority of request, effort and approvals required - Coordinate request approval - Notify requester of approval or rejection - Coordinate request scheduling - Notification of request completion	HEC Standard Services	Handling of Service Requests which require commercial change requests (CR) or need to be planned and coordinated only during customer business hours.
11	SM_1.2.10	Services and support required due to customer non-compliance with contractual obligations	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	HEC customers have contractual obligations including those specified in the HEC contract and this Roles and Responsibilities document. Non-compliance with these obligations can significantly impact system operations and service quality. Extra efforts expended by HEC staff to remedy these situations is the responsibility of the customer. Charges for these efforts will be documented and discussed with customer prior to billing..
12	SM_1.2.11	Create service plan for reoccurring and proactive HEC EMS tasks / Create and maintain service plan for reoccurring and proactive HEC services	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
13		HEC Services to support industry regulations	This section does not define a fixed-scope service package but represents an open list of possible services that can be offered to support specific compliance needs; a detailed service scope must be specified in the HEC contract; examples for industry standards that may be addressed with these services are GxP or HIPAA	
14		Qualifications Services		
15	SM_1.6.02	Qualification deliverables (project and lifecycle documentation)	not offered	
16	SM_1.6.03	Personnel qualification and training as mandatory requirement for administrator access to regulated industries systems	not offered	
17	SM_1.6.04	Onboarding / system setup with additional Installation Qualification	not offered	
18		Process Services		
19	SM_1.6.06	Documents and records management for regulated industries	not offered	
20	SM_1.6.07	Change & Configuration Management for regulated industries	not offered	
21	SM_1.6.08	Problem Management for regulated industries	not offered	
22	SM_1.6.09	Audits and Periodic Review	not offered	
23	SM_1.6.10	System Decommissioning for regulated industries	not offered	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
24		B - Infrastructure	Section B - Infrastructure describes the infrastructure services provided for components used as part of HEC managed systems; services around "Server Provisioning" (aka IaaS) are described in detail in the respective section. Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).	
25		Data Center Management		
26	INFRA_1.1.01	Data Center Management	HEC Standard Services	HEC is operated either in DC facilities owned by the respective HEC service provider, in rented co-location facilities, public cloud, or on hyperscaler infrastructure platforms.
27		Network Management		
28	INFRA_1.2.01	Manage remote connection between the hosted system landscape and SAPs support infrastructure	HEC Standard Services	Service initiated after formal transition to HEC service provider.
29	INFRA_1.2.03	Separation of systems in HEC customer landscape into more than one network segment	not offered	
30	INFRA_1.2.04	Modification to existing customer connectivity (VPN, MPLS, Cloud Peering etc.)	HEC Standard Services	One (1) ticket per each feature change is required (after initial connectivity is established).
31	INFRA_1.2.05	Add additional VPN or MPLS or Cloud Peering	HEC Optional Services	Requires new VPN questionnaire to be completed.
32	INFRA_1.2.06	IP address migration - Change IP addressing of existing network segment to new IP addressing	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Used for cases where the original IP range of a network segment (including delivered systems) needs to be changed.
33	INFRA_1.2.07	Enable DNS integration of an on-premise customer domains into customer DNS servers in HEC to resolve on-premise host names	HEC Standard Services	Supported through DNS forwarding on the DNS server. This task does not add /etc/hosts file entries on individual HEC servers.
34	INFRA_1.2.08	Migrate SAP domain (hec.sap.biz) to customer domain or customer domain migration	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Used in case customer wants to change from HEC internal domain to customer domain or want to migrate existing domain to new domain due to organizational change.
35		Hardware Operations	Applies to equipment managed by HEC service provider	
36	INFRA_1.4.03	Plan and conduct HEC infrastructure maintenance	HEC Standard Services	
37	INFRA_1.4.05	Monitor critical operations parameters of HEC computing environment	HEC Standard Services	
38	INFRA_1.4.06	Monitor disk capacity	HEC Standard Services	Subject to additional fees for additional capacity.
39	INFRA_1.4.07	Monitor server capacity	HEC Standard Services	Subject to additional fees for additional capacity.
40	INFRA_1.4.08	Monitor network utilization	HEC Standard Services	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
41	INFRA_1.4.09	Infrastructure/hardware/system requests; Process commercial change requests as required for hardware upgrades, additions etc.	HEC Standard Services	Subject to reasonable lead time, customer to provide request via tracking system with sufficient detail; additional fees apply; service provided only during office hours (referring only to the commercial part, technical implementation timing will be scheduled based on contractual specifications).
42	INFRA_1.4.11	Scale compute capacity (memory & CPU)	HEC Optional Services	
43		Storage Management		
44	INFRA_1.5.01	Manage data files, file systems and disks per HEC standards and practices	HEC Standard Services	
45	INFRA_1.5.02	Scale storage capacity	HEC Optional Services	
46	INFRA_1.5.03	Enable SnapLock/WORM/Immutability capability for archiving use cases	not offered	
47		Operating System		
48	INFRA_1.6.01	Create and maintain OS users and groups	HEC Standard Services	HEC service provider access only, no privileged access to operating system by customer.
49	INFRA_1.6.04	Inform customer regarding security incidents	HEC Standard Services	
50	INFRA_1.6.05	Configure OS parameters	HEC Standard Services	
51	INFRA_1.6.06	Troubleshoot operating system problems, monitor system log and file systems	HEC Standard Services	
52	INFRA_1.6.07	Work with vendor to resolve operating system issues	HEC Standard Services	
53	INFRA_1.6.08	Monitoring of swap and page areas	HEC Standard Services	
54	INFRA_1.6.09	Monitoring of memory load	HEC Standard Services	
55	INFRA_1.6.12	Software Lifecycle Management of operating system	HEC Standard Services	
56		System Startup/Shutdown		
57	INFRA_1.7.01	Perform scheduled startup/shutdown of computing environment	HEC Standard Services	
58	INFRA_1.7.03	Restart computing environment after failure	HEC Standard Services	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
59		Backup/Restore		
60	INFRA_1.8.01	Perform standard file system and database backups	HEC Standard Services	Per HEC standards, or according to specific terms of the HEC Agreement.
61	INFRA_1.8.10	Perform exceptional ad-hoc backup upon request	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Lead time for backup to be aligned in advance.
62	INFRA_1.8.09	Provide non-standard backup services (e.g. extended retention period for long-term backups)	not offered	
63	INFRA_1.8.11	Monitor backup processes	HEC Standard Services	
64	INFRA_1.8.07	Test backup/restore procedures periodically	HEC Standard Services	Verify procedures used in HEC and operational readiness; testing is not performed for each individual system but for representative scenarios
65	INFRA_1.8.03	Perform data restore and recovery (file system, database) as required after system failures	HEC Standard Services	Extra charges apply for restores if caused by customer error.
66	INFRA_1.8.02	Perform data restore and recovery (file system, database) on customer request (other reasons than as a response to system failures)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Additional charges apply.
67	INFRA_1.8.06	Validate logical integrity and consistency of restored information	HEC Excluded Tasks	
68		Infrastructure integration		
69	INFRA_1.9.02	Integration of customer Active Directory	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.
70	INFRA_1.9.04	Provide access to systems/resources within customer infrastructure	HEC Excluded Tasks	If required to fulfil agreed contractual obligations.
71		File transfer capabilities: CIFS shares		
72	INFRA_1.10.01	Provide CIFS (aka Samba) share on LINUX	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Within contractually agreed infrastructure capacity
73	INFRA_1.10.03	User and access management	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Once/initially when share is created.
74	INFRA_1.10.04	Creation and maintenance of folder structure on shares	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
75	INFRA_1.10.05	Ensure up-to-date anti-virus protection on end user equipment connecting to the provided shares	HEC Excluded Tasks	
76	INFRA_1.10.06	Implement virus protection on server	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
77	INFRA_1.10.07	Backup of data uploaded to shares to ensure data integrity	HEC Excluded Tasks	Customer must ensure that data which get uploaded to the CIFS shares are kept properly secured at customer end; the shares themselves are only backed up via standard file system backups not allowing point-in-time recovery.
78		Managed SFTP Server	To be installed on existing application server in HEC landscape	
79	INFRA_1.11.01	Configuration of sftp daemon	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Only available on Linux.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
80	INFRA_1.11.02	Create and maintain sftp user accounts and groups	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
81	INFRA_1.11.03	Manage file systems	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Within contractually agreed infrastructure capacity
82	INFRA_1.11.04	Provide user list	HEC Excluded Tasks	
83	INFRA_1.11.05	Creation and deletion of files	HEC Excluded Tasks	
84		Management of Wide Area Network		
85	INFRA_1.12.01	Provide network infrastructure at customer data center/site	HEC Excluded Tasks	
86	INFRA_1.12.02	Provide network switching and ports at SAP/Partner data center to customer to connect telco equipment.	HEC Standard Services	Per SAP Guidelines, customer must ensure compatible network infrastructure at own site. Note: does not include infrastructure such as rackspace for MPLS or other devices.
87	INFRA_1.12.03	Determine appropriate size and purchase network connection between customer and HEC sites; manage telecommunication provider/ISP	HEC Excluded Tasks	
88	INFRA_1.12.04	SAP Cloud Peering: Establish a virtual connection to an SAP datacenter via a customer's interconnection provider to access multiple clouds through one connection.	not offered	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
89		C1 - Database Management SAP HANA		
90		SAP HANA (general database operations)	The HEC services, specified by this version of the HEC Roles and Responsibilities, include as a baseline the features and functionalities which are part of SAP HANA 1.0 SPS08. That means, that higher releases of SAP HANA are supported in HEC, but only regarding those features, which have been already available with SAP HANA 1.0 SPS08. Any HEC support of additional SAP HANA features and functionalities above the SAP HANA 1.0 SPS08 release are not covered by the HEC standard service. Additional and extended services to support such features and the availability of those services in HEC will be evaluated and determined by SAP on a case-by-case basis, including the assessment of associated efforts and costs. The respective services are shown in separate sections of this document.	
91	HANA_1.1.31	Provide recommendations on database release management	HEC Standard Services	HEC will provide guidance on recommended database releases based on operational experience in HEC and information given by SAP Product Development.
92	HANA_1.1.01	Plan and perform file system extensions for e.g. backup activities	HEC Standard Services	Additional infrastructure consumption requires a CR.
93	HANA_1.1.02	Monitor database resource consumption to detect issues in technical operations	HEC Standard Services	Task output feeds into capacity management; recommendations for optimization may also be provided via SAP Enterprise Support services.
94	HANA_1.1.03	Monitor table growth to proactively prevent operational issues and ensure that the service stays within the contractual sizing boundaries	HEC Standard Services	Recommendations for limitation of data growth could may also be provided via SAP Enterprise Support services.
95	HANA_1.1.25	Design table partitioning strategy/architecture	HEC Excluded Tasks	Customer may engage SAP Consulting for designing table partitioning strategy and architecture.
96	HANA_1.1.04	Partition tables (technical execution)	HEC Standard Services	If required as a consequence of extensive table growth; one (1) execution per year included; any further requests will be charged via EMS.
97	HANA_1.1.35	Partition tables (technical execution) - additional requests	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Efforts for additional table partition requests.
98	HANA_1.1.36	Database table redistribution based on the table placement rules (Technical Execution)	HEC Standard Services	For requirements involving application dependency (e.g. Moving tables and table partitions manually from one host to another).
99	HANA_1.1.05	Perform rowstore / column store migration: technical execution only	HEC Standard Services	Per customer request. Executing party to be mutually agreed between HEC and customer; migration of larger SAP tables to be done by HEC; customer should perform task on own tables if desired; additional downtime required per customer approval.
100	HANA_1.1.37	Database Defragmentation (Data Volume Reclamation)	HEC Standard Services	
101	HANA_1.1.38	Database Row Store Fragmentation	HEC Standard Services	
102	HANA_1.1.06	Monitor database for technical issues; analyze and resolve technical database failures	HEC Standard Services	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
103	HANA_1.1.07	Clean-up HANA log and trace files (traces, statistic files etc.) to free up capacity and keep HANA system clean and healthy	HEC Standard Services	
104	HANA_1.1.08	Maintain technical configuration parameters for SAP HANA and SAP HANA XS based on SAP and HEC standards and recommendations	HEC Standard Services	
105	HANA_1.1.09	Start/stop database	HEC Standard Services	
106	HANA_1.1.10	Add/remove SAP HANA node to adjust SAP HANA capacity	HEC Optional Services	For HANA scale-out configurations only
107	HANA_1.1.28	Creation of additional schema for existing SAP HANA datamart	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
108	HANA_1.1.29	Change of SAP HANA database ID and instance number	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
109	HANA_1.1.26	Change SAP HANA database architecture (single node to multi node or vice versa)	HEC Optional Services	
110	HANA_1.1.11	Management of standby databases (HANA System Replication) for high availability	not offered	
111	HANA_1.1.34	Test standby databases (HANA System Replication) for high availability at customer request	not offered	
112	HANA_1.1.12	Update SAP HANA database software and update of DB client	HEC Standard Services	Additional downtime for maintenance required; this task does not include the usage of advanced update approaches such as ZDO/Downtime Minimization, etc. The term "update" denotes the change to a new minor release of the hosted SAP software, typically focused on bug fixes and small enhancements.
113	HANA_1.1.33	SAP HANA version upgrade and update of DB Client	HEC Standard Services	HANA systems to HANA MDC system with latest support pack levels, and with replication mode set to CLR. The term "version upgrade" denotes the change to a new major release of the hosted SAP software, typically including functional enhancements.
114	HANA_1.1.27	Implement updates to the managed SAP HANA database using advanced tools and methods which are part of the HEC Maintenance Downtime Minimization Service to minimize required downtime	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Available from SAP HANA SPS 12 onwards.
115	HANA_1.1.22	SAP HANA Transports Management Setup	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
116	HANA_1.1.14	Implement / maintain additional SAP tools (e.g. SAP HANA Analytics Foundation Browser)	HEC Standard Services	Depending on customer requirements; only for tools in the HANA context delivered by SAP, 3rd party tools not covered.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
117	HANA_1.1.15	Identify, analyze and optimize expensive SQL-statements to improve application performance	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
118	HANA_1.1.16	System troubleshooting, e.g. blocked transactions, to overcome issues and bring SAP HANA back to normal state of operations	HEC Standard Services	
119	HANA_1.1.17	Create/modify users for HANA modelling in the SAP HANA Studio	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
120	HANA_1.1.18	User, roles, and permissions management for non-technical users	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Customer has ownership and responsibility for SAP HANA role CUST_USER_ROLE_ADMIN.
121	HANA_1.1.19	User, roles and permissions management for technical and administration users	HEC Standard Services	Technical users: e.g. users delivered and used by SAP HANA. This service is only for internal Users created by HEC e.g. SAPSID / SAPABAP1 / SAPHANADB.
122	HANA_1.1.20	Perform database backups (regular full backups and log backups)	HEC Standard Services	Per HEC backup policy.
123	HANA_1.1.21	Restore and recover SAP HANA after technical issues	HEC Standard Services	Restores on customer request provided at additional costs.
124	HANA_1.1.30	dbcc (database consistency check)	HEC Standard Services	
125	HANA_1.1.32	Export/Import of database schema	HEC Excluded Tasks	
126	HANA_1.1.23	Setup and operate encrypted HANA database	not offered	
127	HANA_1.1.24	Implement SAP HANA database encryption on SAP HANA database already installed in HEC	not offered	
128	HANA_1.1.39	Implement SAP HANA log encryption on SAP HANA database already installed in HEC	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
129	HANA_1.1.40	Configure Secure Communication on SAP HANA System Replication (HSR)	HEC Standard Services	Available by default in HANA 2.0. Explicitly required only for HANA 1.0 where EarlyWatch Alert recommends to secure System Replication communication or a Tenant needs to be moved to another system.
130		SAP HANA XS		
131	HANA_1.2.01	Maintain technical configuration parameters for SAP HANA XS based on SAP and HEC standards and recommendations	HEC Standard Services	
132	HANA_1.2.02	Maintain Application Runtime Configurations	HEC Standard Services	
133	HANA_1.2.03	Manage Trust Relationships	HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
134	HANA_1.2.04	Maintain SAML Providers	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
135	HANA_1.2.05	Maintain SMTP Server Configurations	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
136	HANA_1.2.06	Maintain HTTP Access to SAP HANA	HEC Standard Services	
137	HANA_1.2.08	Maintain User Self Service Tools	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
138	HANA_1.2.09	Schedule XS Jobs	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
139	HANA_1.2.11	Maintain HTTP Traces for SAP HANA XS Applications	HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
140		SAP HANA XSA	SAP HANA XSA is a separate technical component and not part of a standard installation of an SAP HANA database; SAP HANA XSA needs to be explicitly included/scoped in the initial contract or subsequent Change Request (CR).	
141	HANA_1.9.01	Installation along with HANA Server	HEC Standard Services	
142	HANA_1.9.02	Install XSA Components as an add-on for already installed HANA Server	HEC Standard Services	
143	HANA_1.9.04	Setup/Configuration of XSA for HANA Development at customer side	HEC Excluded Tasks	
144	HANA_1.9.05	Configuration of XS-CLI Tool for HANA Development	HEC Excluded Tasks	
145	HANA_1.9.06	User management for HANA Development	HEC Excluded Tasks	
146	HANA_1.9.07	Monitoring of XSA services and its applications	HEC Optional Services	Super set will be included in monitoring if selected
147	HANA_1.9.08	Setup Logical database (Register Tenant Database)	HEC Optional Services	
148	HANA_1.9.09	Set up initial admin users for XSA	HEC Optional Services	
149	HANA_1.9.10	Backup and restore of XSA specific files	HEC Optional Services	Requires Disaster Recovery service package.
150	HANA_1.9.11	Web Dispatcher configuration for the applications installed by HEC and built by customers	HEC Optional Services	
151	HANA_1.9.13	Support customer built applications	HEC Excluded Tasks	
152	HANA_1.9.14	Availability monitoring of customer built applications	HEC Excluded Tasks	
153	HANA_1.9.15	Backup of custom applications if using file system storage	HEC Standard Services	
154	HANA_1.9.16	Restore of customer built applications using file system storage provided the backup has been enabled prior	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
155	HANA_1.9.17	Post-restore task checking and connection of custom applications	HEC Excluded Tasks	
156		SAP HANA: Smart Data Integration (Formerly Enterprise Information Management - EIM)	Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0	
157		Setup - Technical Set Up Only - Does Not Include Application Set Up		
158	TO_HANA_SDI_1.1.01	Enable Data Provisioning Server	HEC Optional Services	The Data Provisioning Server is a native SAP HANA process. It is built as an index server variant, runs in the SAP HANA cluster, and is managed and monitored just like other SAP HANA services. The Data Provisioning Server is installed with, but must be enabled in, the SAP HANA Server
159	TO_HANA_SDI_1.1.02	Install, configure, and register Data Provisioning Agent	HEC Optional Services	One (1) agent is included. Additional Data Provisioning Agents can be provided as an EMS service.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
160	TO_HANA_SDI_1.1.03	Install, configure, and register additional Data Provisioning Agents	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
161	TO_HANA_SDI_1.1.04	Setup Smart Data Quality (SDQ)	HEC Optional Services	Deploy SDQ, download Address and Data Cleansing package from the SAP Service Market Place and configuration from SAP HANA Server. SFTP access will be setup for the customer so that the customer may upload the address directories on their own.
162	TO_HANA_SDI_1.1.05	Setup Agile Data Preparation (ADP)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	ADP requires SDQ, ESS and HRF be deployed and setup with related users and authorizations
163	TO_HANA_SDI_1.1.06	Administration of Agile Data Preparation (ADP)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Setting Export Options, worksheet expiration, password features, warehouse workspace, and size and policy for queues.
164	TO_HANA_SDI_1.1.07	Set up replications, federation and transformations	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
165	TO_HANA_SDI_1.1.08	FlowGraph jobs backup	HEC Excluded Tasks	
166	TO_HANA_SDI_1.1.09	Replication task backup	HEC Excluded Tasks	
167	TO_HANA_SDI_1.1.10	DP Agent - High Availability setup	HEC Optional Services	DP Agent can be setup in High Availability setup by provisioning shadow instances on additional nodes; included only if explicitly mentioned in the contract.
168	TO_HANA_SDI_1.1.11	Deploy standard adapters with SAP HANA	HEC Enhanced Managed Services ("EMS") that can be performed by customer	See the SDI guide on the SAP Help Portal for a list of standard and custom adapters
169	TO_HANA_SDI_1.1.12	Deploy custom adapters with SAP HANA	HEC Optional Services	See the SDI guide on the SAP Help Portal for a list of standard and custom adapters.
170	TO_HANA_SDI_1.1.13	Monitor Data Provisioning tasks and remote subscriptions	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
171	TO_HANA_SDI_1.1.14	Process remote subscription exceptions	HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
172		SAP HANA: Dynamic Tiering (DT)	Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0	
173		Operational Setup		
174	TO_HANA_DT_1.1.01	HANA-DT operational setup: Install and technically configure HANA DT, add DT Host, Import DT delivery units, maintain technical authorizations	HEC Optional Services	
175		Optional Services		
176	TO_HANA_DT_1.2.01	Manage extended storage DB spaces (add extended storage to each ES host)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Increased storage consumption is subject to a Change Request (CR) and additional cost.
177	TO_HANA_DT_1.2.02	Manage extended storage tables: Create, move or drop ES Tables on each ES storage	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
178		SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)	Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0	
179		Operational Setup		
180	TO_HANA_SA_1.0.01	Install Streaming Analytics option package	HEC Optional Services	SAO package is installed on the SAP HANA DB node/MDC Tenant.
181	TO_HANA_SA_1.0.02	Add Streaming Analytics option host	HEC Optional Services	A maximum of Two (2) SAO host can be provided. Additional SAO hosts can be provided as an EMS service.
182	TO_HANA_SA_1.0.03	Add additional Streaming Analytics option host	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	A maximum of Two (2) SAO host can be provided. Additional SAO hosts can be provided as an EMS service.
183	TO_HANA_SA_1.0.04	Configure data source on Streaming Analytics option host	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Configure odbc.ini for SAP HANA connection from each of the SAO hosts.
184	TO_HANA_SA_1.0.05	Setup streaming authorization	HEC Optional Services	Activate smart data streaming roles, privileges and object access for monitoring and operations.
185	TO_HANA_SA_1.0.06	Activate SAP HANA Cockpit	HEC Optional Services	Execute tasks for SAP HANA Cockpit activation for SAO operations and monitoring.
186	TO_HANA_SA_1.0.07	Configure Streaming Cluster - High Availability setup	HEC Optional Services	Configure for high availability by adding multiple nodes. Additional Infrastructure required.
187	TO_HANA_SA_1.0.08	Provision of Disaster Recovery (Streaming Analytics option nodes)	HEC Optional Services	Provisioning of identical number of nodes at a secondary site to mirror primary site using provisioning tool
188	TO_HANA_SA_1.0.09	Streaming Lite setup	HEC Excluded Tasks	Streaming Lite is optional and not required as part of a standard SAO installation. The Streaming Lite package is downloadable as a separate component only. Streaming Lite is designed to deploy streaming projects on remote gateway devices
189	TO_HANA_SA_1.0.10	Create and deploy Streaming Analytics option streaming projects	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Using SAP HANA Studio, create and deploy project for data streaming to SAP HANA and other external sources.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
190	TO_HANA_SA_1.0.11	Monitor Streaming Analytics option objects and projects	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Monitoring SAO objects and projects using SAP HANA/ESP Cockpits



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
191		SAP HANA: Multiple Database Containers (MDC)	Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0	
192		Operational Setup		
193	TO_HANA_MDC_1.1.01	Install HANA MDC (HANA server, Client, AFL, Runtime Libraries and Studio)	HEC Optional Services (SAP HANA 1.0) / HEC Standard Services (SAP HANA 2.0)	MDC is default in SAP HANA 2.0.
194	TO_HANA_MDC_1.1.06	Creation of technical users	HEC Enhanced Managed Services ("EMS") that can be performed by customer	MDC is default in SAP HANA 2.0. Customer responsible for user management using CUST_USER_ROLE_ADMIN
195	TO_HANA_MDC_1.1.02	Convert an SAP HANA System to support Multitenant Database Containers	not offered	
196	TO_HANA_MDC_1.1.07	Creation of additional tenants for datamart scenarios on existing infrastructure	HEC Optional Services	For use on existing infrastructure. A change request (CR) is required for backup retention requirements and the setup of new continuous monitoring.
197	TO_HANA_MDC_1.1.08	Creation of additional tenants for datamart scenarios on new infrastructure	HEC Optional Services	Additional infrastructure consumption requires a change request (CR).
198	TO_HANA_MDC_1.1.04	Install additional services for tenant DB containers	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Additional services such as dp server, index server, XS engine. By default one of each comes automatically upon creation of a tenant; installation of additional services required for certain use cases is covered under this line item.
199	TO_HANA_MDC_1.1.05	Scale out of tenant database	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	SAP BW systems only.
200	TO_HANA_MDC_1.2.16	Tenant Copy/Move Preparation, Checks, Certificates, Pre-Steps, Move/Copy via replication, post processing steps - No additional infrastructure required	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Move will drop the source database after the task is complete. Copy will keep the source after the task is complete.
201	TO_HANA_MDC_1.2.17	Tenant Copy/Move Preparation, Checks, Certificates, Pre-Steps, Move/Copy via replication, post processing steps - Additional infrastructure required	HEC Optional Services	Move will drop the source database after the task is complete. Copy will keep the source after the task is complete.
202	TO_HANA_MDC_1.2.01	Network: Reserve additional ports to one instance to adjust tenant overhead per instance	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
203	TO_HANA_MDC_1.2.02	Cross-Database authorization in MDC databases to facilitate cross-DB queries	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
204	TO_HANA_MDC_1.2.03	Auditing: Creating and enabling audit policies for systemdb and each tenant db	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
205	TO_HANA_MDC_1.2.04	Data storage: DB-specific encryption keys	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	SSFS Master Key Change.
206	TO_HANA_MDC_1.2.08	Data storage: DB-specific encryption keys (SSFS Master Key) Change	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
207	TO_HANA_MDC_1.2.06	Backup of individual tenants	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	As per HEC standard, backups are performed for the entire database. However, a tenant-individual backup - as a file based dump - is possible on individual request.
208	TO_HANA_MDC_1.2.07	Restore of individual tenant	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
209	TO_HANA_MDC_1.2.10	Authorization: Management of system privileges and tenant DB privileges	HEC Optional Services (SAP HANA 1.0) / HEC Standard Services (SAP HANA 2.0)	
210		Active-Active Read Enabled Setup	Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0	
211	TO_HANA_AAR_1.1.01	Install primary and secondary SAP HANA system	HEC Optional Services	Import delivery units, setup users and roles.
212	TO_HANA_AAR_1.1.03	Establish log replay between both SAP HANA instances	HEC Optional Services	Import delivery units, setup users and roles.
213	TO_HANA_AAR_1.1.04	Establish monitoring for secondary system	HEC Optional Services	
214		Remote Data Sync (RDS)	Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0	
215		Setup and Configuration		
216	TO_HANA_RDS_1.1.01	Install Remote Data Sync component on SAP HANA	HEC Optional Services	RDS package is installed on the SAP HANA DB node. It can be installed at the same time as the SAP HANA install or can be installed independently.
217	TO_HANA_RDS_1.1.02	Add Remote Data Sync Host	HEC Optional Services	
218	TO_HANA_RDS_1.1.03	Activate RDS roles, privileges and object access for monitoring and operations	HEC Optional Services	
219	TO_HANA_RDS_1.1.04	Import of RDS delivery units	HEC Optional Services	This task is required only in MDC setups.
220	TO_HANA_RDS_1.1.05	Setup and configure RDS nodes for each tenant DB including service initialization, cockpit access, delivery units and verification	HEC Optional Services	This task is required only in MDC setups.
221	TO_HANA_RDS_1.1.06	RDS cockpit - Setup and Configuration	HEC Optional Services	Execute tasks for HANA Cockpit activation for RDS operations and monitoring.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
222		High Availability Setup		
223	TO_HANA_RDS_1.2.01	Setup of additional hosts for high availability	HEC Optional Services	Add and setup RDS for additional nodes, including configuration of single or multi-tenant databases and group setup. For Multi-tenant setup, only a single stand-by node serves all tenant DB(s). For RDS load balancer setup, check R&R Section "LoadBalancer".
224	TO_HANA_RDS_1.2.02	High availability configuration	HEC Optional Services	
225	TO_HANA_RDS_1.2.03	Setup and configure LoadBalancer for High Availability support	HEC Optional Services	
226		Other Services		
227	TO_HANA_RDS_1.3.01	Setup and configure synchronization scripts	HEC Excluded Tasks	Configure synchronization script for upload and download of data between remote and consolidate databases.
228	TO_HANA_RDS_1.3.02	Monitor synchronization requests, process and status	HEC Excluded Tasks	Monitoring sync status, request and availability using RDS cockpits.
229		Capture and Replay	Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0	
230	TO_HANA_CR_1.1.01	Prepare capture in source system	HEC Optional Services	Import Delivery units, setup users and roles.
231	TO_HANA_CR_1.1.02	Start capture	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Customer must ensure sufficient capacity to store capture of workload; capacity extension requires change request (CR).
232	TO_HANA_CR_1.1.03	Setup replay in target system	HEC Optional Services	Import Delivery units, setup users and roles.
233	TO_HANA_CR_1.1.04	Configure replayer service	HEC Optional Services	Configure replayer service.
234	TO_HANA_CR_1.1.05	Preprocess and replay in target system	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
235		SAP HANA: Accelerator for SAP ASE (AFA)		
236		Operational Setup		
237	TO_AFA_1.1.01	Installing Accelerator for SAP ASE Package	HEC Standard Services	HANA - AFA package is installed on the SAP HANA DB node.
238	TO_AFA_1.1.02	Adding Accelerator for ASE Host	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Adding Accelerator for ASE host. For multi-tenant setups, AFA nodes are added exclusively to each tenant DB.
239	TO_AFA_1.1.03	Install and configure SAP Replication Server	HEC Standard Services	SAP Replication server is required when data is replicated from existing SAP ASE OLTP source server to SAP HANA target server. Depending on SAP ASE OLTP server installed location i.e. on on-premise or HEC landscape, replication server can be installed as managed server.
240	TO_AFA_1.1.04	Authorization - Setup	HEC Standard Services	Activate accelerator for ASE roles, privileges and object access for monitoring and operations. Provision HEC specific user and roles.
241	TO_AFA_1.1.05	Enable Pushdown Optimization	HEC Standard Services	AFA pushdown optimization is enabled on AFA nodes
242	TO_AFA_1.1.06	Import Delivery Units	HEC Standard Services	Import of AFA Delivery units in HANA multi-container scenarios. This task is required only in MDC setup.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
243	TO_AFA_1.1.07	Multitenant Setup	HEC Standard Services	Configure and setup AFA nodes for each tenant DB including, service initialization, cockpit access, delivery units and verification.
244	TO_AFA_1.1.08	Configure HTTP Access for Multi Database Containers (MDC)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Configure HTTP Access for Multitenant Database Containers for HANA Cockpit Access and monitoring. Note: This task is not required if HTTP Access is already configured for existing MDC setup.
245	TO_AFA_1.1.09	High availability setup and configuration	HEC Optional Services	High Availability setup and configuration involving single or multi-tenant DB setups including ETS group setup; only if standby nodes are part of the contractual landscape design.
246		Other Services		
247	TO_AFA_1.2.01	Pushdown Analysis Tool Setup	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Simulation tool to evaluate pushdown optimization. This is carried out prior to AFA Deployment.
248	TO_AFA_1.2.02	Data Replication for Accelerated Reporting	HEC Excluded Tasks	Setup ASE OLTP data replication to HANA DB. Identify and setup DB objects to be replicated.
249	TO_AFA_1.2.03	Monitor Accelerator for ASE Pushdown Statements	HEC Excluded Tasks	Monitoring Accelerator for ASE objects including pushdown statements using HANA Cockpits.
250		SAP HANA Cockpit 2.0		
251		Installation and Configuration		
252	TO_HANA_CP_1.1.01	Install cockpit on new SAP HANA database	HEC Optional Services	Import delivery units, setup users and roles.
253	TO_HANA_CP_1.1.02	Install cockpit on new SAP HANA database on new tenant	HEC Optional Services	Import delivery units, setup users and roles.
254	TO_HANA_CP_1.1.03	Setup/Configure for SAP HANA system on customer side	HEC Excluded Tasks	Customer can perform this task with user provided by HEC.
255	TO_HANA_CP_1.1.04	Monitoring	HEC Optional Services	
256	TO_HANA_CP_1.1.05	User management	HEC Excluded Tasks	Customer must maintain users.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
257		C2 - Database Management	Excluding SAP HANA and Sybase IQ which are described in the respective sections	
258		Database operations		
259	DB_1.1.17	Provide recommendations on database release management	HEC Standard Services	HEC will provide guidance on recommended database releases based on operational experience in HEC and information given by SAP Product Development.
260	DB_1.1.19	Monitor database resource consumption (memory, CPU, storage) to detect issues in technical operations	HEC Standard Services	Task output feeds into capacity management; recommendations for optimization may also be provided via SAP Enterprise Support services.
261	DB_1.1.02	Perform database extensions to increase database capacity	HEC Standard Services	Increased consumption will be charged according to contractual Agreement.
262	DB_1.1.03	Monitor table extension parameters to avoid issues	HEC Standard Services	
263	DB_1.1.20	Monitor database for technical issues; analyze and resolve technical database failures	HEC Standard Services	
264	DB_1.1.24	System troubleshooting, e.g. blocked transactions to overcome issues and bring database back to normal state of operations	HEC Standard Services	
265	DB_1.1.05	Schedule periodic statistical database collectors to generate statistical performance data	HEC Standard Services	
266	DB_1.1.06	Perform reorganization to remove database fragmentation	HEC Standard Services	
267	DB_1.1.07	Maintain/change database parameters	HEC Standard Services	Based on vendor recommendations and HEC standards.
268	DB_1.1.21	Start/stop database	HEC Standard Services	
269	DB_1.1.10	Create and check optimizer statistics to maintain database performance	HEC Standard Services	
270	DB_1.1.11	Perform upgrades of database software	HEC Standard Services	
271	DB_1.1.12	Apply database patches	HEC Standard Services	
272	DB_1.1.13	Perform database backups (regular database and log backups)	HEC Standard Services	Per HEC backup policy.
273	DB_1.1.14	Restore and recover database after technical issues	HEC Standard Services	For technical issues. Restores on customer request provided at additional costs.
274	DB_1.1.22	Perform dbcc (database consistency check)	HEC Standard Services	
275	DB_1.1.23	Export/Import of database schema	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
276	DB_1.1.18	Implement SAP ASE database encryption on SAP ASE database already installed in HEC.	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	No downtime required.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
277	DB_1.1.16	Assist customer in optimizing SQL statements (indexes, selects etc.) for application improvements	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
278	DB_1.1.25	Create indexes for application tables	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
279	DB_1.126	Shrink database	HEC Excluded Tasks	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
280		D - Core Technical Operations		
281		System Installation		
282	BASIC_1.8.01	Installation of HEC solution landscape as specified in the HEC contract, based on SAP and HEC standards and HEC best-practices	HEC Standard Services	If an entirely new customer system is set up as a homogenous copy (no change of database platform) of a customer system already residing in HEC, the respective effort and costs are covered by the general setup and there will be no additional charge for a "system copy". Source systems not residing inside HEC is not addressed by this comment and is covered by the separately contracted HEC onboarding and migration service.
283	BASIC_1.8.25	System Rebuild	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Customer may request a system rebuild on existing infrastructure only. This service is for effort only and does not include any required infrastructure change. This service is not applicable if new or changed infrastructure is required as new or changed infrastructure requires a Change Request.
284	BASIC_1.8.02	Technical configuration (installation post-processing) of installed systems (e.g. scheduling of standard batch jobs, backup etc.)	HEC Standard Services	Scope is determined by this Roles & Responsibilities document.
285	BASIC_1.8.15	Basic Technical Configuration of SAP BW and SAP BW/4HANA Systems	HEC Optional Services	For ABAP Greenfield setups only
286	BASIC_1.8.23	Install a preconfigured system from an SAP delivered template solution in a cloud skeleton system	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Optional part for installation of systems of customer's solution landscape. Customer needs to have an applicable SAP Professional Services contract for the relevant SAP delivered template. Service must be requested during the initial provisioning phase. Template solution requests coming after the initial delivery of systems require additional service costs. Validation of the compatibility of different SAP delivered templates is not included in this service.
287	BASIC_1.5.01	Application customizing and configuration, application maintenance, application support and application troubleshooting	HEC Excluded Tasks	HEC delivers systems which are technically configured on technical platform (e. g. SAP NetWeaver) level and ready to be operated. Any solution (e.g. SAP BW, SAP CRM, SAP EP) or customer specific configuration task is not included and must be performed by the customer.
288	BASIC_1.8.03	Integration of installed systems into SAP HEC operations environment	HEC Standard Services	
289	BASIC_1.8.04	Enablement of HEC system monitoring	HEC Standard Services	
290	BASIC_1.8.22	Data transfer to HEC during HEC onboarding	HEC Optional Services	One-time service fee. Approach depends on chosen onboarding scenario and individual requirements, either using network connection or physical and encrypted media; shipment of physical media done at customers risk.
291	BASIC_1.8.20	Provide special support to customer during HEC onboarding	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Depending on scope and approach of HEC onboarding project customers may require technical assistance, e.g. whenever OS access is required; this type of onboarding support can be provided under this line item.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
292	BASIC_1.8.05	Integration of system with other systems and applications	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Create RFC and/or JAVA connections to satellite systems.
293	BASIC_1.8.07	Setup monitoring with Customer Solution Manager located in HEC: Installation of additional Diagnostics Agent on customer systems	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Connecting an SAP Solution Manager system owned by the customer operated in HEC (not the central SAP Solution Manager system owned by HEC); EMS effort is calculated per server.
294	BASIC_1.8.18	Setup monitoring with Customer Solution Manager located in HEC: Configuration of monitoring within the customers SAP Solution Manager system	HEC Enhanced Managed Services ("EMS") that can be performed by customer	EMS effort is calculated per server; monitoring setup is done using only SAP Solution manager standard templates, no customer specific settings and adjustments included.
295	BASIC_1.8.26	Configure Solution Manager: Focused Insight standard dashboard	HEC Enhanced Managed Services ("EMS") that can be performed by customer	EMS effort is calculated per Solution Manager - no customer specific settings and adjustments included.
296	BASIC_1.8.11	Implementation of SAP Rapid Deployment Solutions (RDS)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Due to the large variety of SAP RDS solutions and other packages this must be checked individually to determine whether SAP HEC can implement a particular entity or whether it must be covered by the customer or a consulting party.
297	BASIC_1.8.14	Implementation of SAP Best Practices and similar packages	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Customer to inform SAP of the Best Practice activation requirement during initial provisioning, otherwise existing business client will be overwritten by the new client copy issued from Best Practices activation. Customer is responsible for defining/selecting Best Practice business content and country versions. All customizing that may be required after activation of the Best Practices content in order to meet requirements that differ from Best Practice scenarios is not part of this service. The implementation of "Best Practices for SAP S/4HANA" includes the activation of required business functions in client 000 and the provisioning of a client with the desired client setup alternative.
298	BASIC_1.8.24	Implement a preconfigured system from SAP Cloud Appliance Library (CAL) solution in an HEC skeleton system	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Optional part for installation of systems of customer's cloud solution landscape. The CAL image can only be used to setup the sandbox system. Service must be requested during the initial provisioning phase. All CAL image deployment requests coming after the initial delivery of systems will generate additional service costs. Validation of the compatibility of different Model Companies is not included in this service.
299	BASIC_1.8.19	Configuration of SAP online help (local installation)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Once (1) per system; subject to contractual change request (CR) to cover increased infrastructure consumption and additional administrative efforts.
300	BASIC_1.8.21	Install ODBC Drivers to connect to external databases	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	On SLT/HANA SDS/BOBJ; customer needs to provide required software including appropriate usage rights for an installation in HEC; customer needs to provide specification for required connection (e. g. SSL/TLS).
301	BASIC_1.8.12	Increase system capacity by adding additional components (nodes, application servers etc.) or moving existing system to larger infrastructure (e.g. larger database server)	HEC Optional Services	Contractual change request (CR) required to reflect higher infrastructure consumption, subject to additional service fees.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
302	BASIC_1.8.10	Data handover from HEC to customer - one time	HEC Standard Services	Efforts for a one-time data handover (creation of export and transfer to media) as part of a contract or system termination are included in the HEC service. Planning, coordination, media and logistics of shipment as well as all associated costs are customer responsibility. Any other occurrence of data handover is a billable EMS service.
303	BASIC_1.8.13	Data handover from HEC to customer - additional requests	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Efforts for additional data handover (creation of export and transfer to media). Planning, coordination, media and logistics of shipment as well as all associated costs are customer responsibility.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
304		Incident Management		
305	BASIC_1.16.01	Operate Call Center receiving incidents 24x7x365	HEC Standard Services	24x7 support only in English language, local languages where available during business hours and explicitly agreed with the customer.
306	BASIC_1.16.02	Incident processing - Qualification and prioritization of the incidents - Initiate incident resolution - Track incident resolution progress - Incident escalation as defined by escalation process - Determine incident resolution or workaround - Implement solution or workaround - Verify incident resolution - Inform customer about incident resolution	HEC Standard Services	
307	BASIC_1.16.03	Sign-off/Approve solution and confirm incident resolution	HEC Excluded Tasks	
308		Event detection and notification ("monitoring")		
309	BASIC_1.8.17	Monitoring and event detection of SAP system availability and critical system states	HEC Standard Services	Monitoring requirements are defined based on HEC Roles & Responsibilities and SLAs; activated monitoring metrics and used thresholds are subject to constant change and tuning.
310	BASIC_1.7.07	Monitor critical business transactions	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.
311		General Operations		
312	BASIC_1.8.08	Start/Stop HEC managed systems	HEC Standard Services	
313	BASIC_1.1.15	Troubleshooting of technical issues in HEC managed systems	HEC Standard Services	For technical issues only; application related problems must be resolved by the customer.
314	BASIC_1.1.14	Assist customers with tasks in their area of responsibility, if OS access is required	HEC Enhanced Managed Services ("EMS") that <u>cannot</u> be performed by the customer	In cases where the execution of tasks requires activities to be performed within the OS level and for which the customer is responsible according to this document. Customers will not get OS access to managed servers within HEC. The HEC Service provider will support the customer, e.g. by taking over the tasks or by providing other methods to execute tasks. This line item only applies to infrequent/occasional assistance; projects requiring regular, longer and more general OS access for implementation, development and support cannot be supported via this line item. EMS effort is calculated per server.
315	BASIC_1.1.16	Regular analysis and maintenance of SAP system profile parameters	HEC Standard Services	HEC is responsible for executing this task as it can have an impact on system performance and availability. HEC will provide recommendations for technical system parameters; HEC will also adjust parameters by customer request except for certain standardized settings required to maintain system stability or security.
316		SAP Security Management		
317	BASIC_1.2.22	Define and implement security concept for application	HEC Excluded Tasks	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
318	BASIC_1.2.23	Define and implement infrastructure security concept	HEC Standard Services	Special rules apply for HEC Server Provisioning; please refer to the respective section for details.
319	BASIC_1.2.19	Customer specific Security Audit Log analysis	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
320	BASIC_1.2.20	Analyze the SAP system and identify relevant SAP security notes	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
321	BASIC_1.2.27	Implement relevant SAP security notes	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
322	BASIC_1.2.17	Definition, maintenance, review and audit of roles, profiles, authorizations etc.	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
323	BASIC_1.2.18	Administration of customer users (e.g. user creation, change, deletion, maintenance of user profiles, roles, authorizations, master data and passwords)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
324	BASIC_1.2.15	Maintain user profiles, roles, authorizations, master data and passwords in client 000	HEC Standard Services	
325	BASIC_1.2.16	Provide access to client 000 for customer	HEC Standard Services	Restricted, predefined profile only; limited set of users provided; service provided on request only.
326	BASIC_1.2.25	Design / Architecture of Single Sign On (SSO) for systems in HEC landscape	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.
327	BASIC_1.2.24	Implementation of Single Sign On (SSO) for systems in HEC landscape	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.
328	BASIC_1.2.21	Provide audit log information to customers	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	By request only to support incident investigations, but not on a regular basis e.g. to monitor administrative activities. Format, content and procedure used will be determined by SAP and by general security and data protection policies.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
329		Homogeneous system copy (aka System refresh)	A homogenous system copy is defined either as 1) a new system which is built as copy from an existing system in a landscape within the same data center or hyperscaler platform or 2) a "data refresh" overwriting the database of an already existing system in the landscape within the same data center or hyperscaler platform. Copies for non-NetWeaver systems need to be evaluated on a case by case basis and is not possible in all cases.	
330	BASIC_1.3.11	Pre-processing tasks, i.e. export tables with 'old' configuration	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
331	BASIC_1.3.10	Homogeneous system copy (Planning, preparations, checks, database backup, database restore, technical post processing tasks, test of technical system functionality)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
332	BASIC_1.3.07	Post processing tasks e.g. Embedded Search, BDLS	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
333	BASIC_1.3.09	Test of application	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
334		Heterogeneous system copy (aka System migration)	A heterogeneous system copy is defined as a new system which is built as copy from an existing system in the landscape within the same data center or hyperscaler platform. Copies for non-NetWeaver systems need to be evaluated on a case by case basis and is not possible in all cases.	
335	BASIC_1.14.01	Heterogeneous system copy	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Scope, approach and price subject to individual planning depending on circumstances and requirements; change request (CR) required for infrastructure changes.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
336		Release Management		
337	BASIC_1.5.13	Installation of new entities in the system after initial customer handover during HEC Onboarding (applies to e.g. add-ons and other sorts of additional solution packages, languages, content packages etc.)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Contractual Change Request (CR) required in case of changed managed service scope or increased infrastructure consumption.
338	BASIC_1.5.13A	Installation of new software entities in the system after initial customer handover during HEC Onboarding (applies to e.g. add-ons and other sorts of additional solution packages)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Contractual Change Request (CR) required in case of changed managed service scope or increased infrastructure consumption.
339	BASIC_1.5.13B	Installation of new content in the system after initial customer handover during HEC Onboarding (applies to e.g. languages, content packages etc.)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Contractual Change Request (CR) required in case of changed managed service scope or increased infrastructure consumption.
340	BASIC_1.5.03	Implement SAP Notes and other types of manual corrections (corrections not provided as software correction package) in managed system (notes and corrections required to fix application related issues)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Delineation between "application" and "technical" is defined by this HEC Roles & Responsibilities document; fixing issues that fall into the responsibility of HEC per the R&R are considered "technical" and notes would be applied as defined in the respective task. The topic area of the respective note can only serve as a rough indicator, since only a subset of BC-* topic areas are covered by the HEC standard service. The two areas, where the HEC service mostly applies are BC-CST and BC-DB
341	BASIC_1.5.04	Implement SAP Notes and other types of manual corrections (corrections not provided as software correction package) in managed system (notes required to fix issues related to technical SAP components)	HEC Standard Services	Dependent on criticality of repair and only if no appropriate Support Package is available; delineation between "application" and "technical" is defined by the HEC Roles & Responsibilities document; fixing issues that fall into the responsibility of HEC per the R&R are considered "technical" and notes would be applied as defined in the respective task. The topic area of the respective note can only serve as a rough indicator, since only a subset of BC-* topic areas are covered by the HEC standard service. The two areas, where the HEC service mostly applies are BC-CST and BC-DB. Any post installation tasks required as per the SAP note in question which is not technical in nature (e.g. application related settings/manual code creation in customer namespace or manual activities required in SAP namespace) need to be performed by the customer.
342	BASIC_1.5.12	Check for SAP software updates (SAP Support Packages, SAP kernel updates)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	SAP will review system software versions and provide recommendations on newer releases, e.g. SAP kernel and SAP Support Packages.
343	BASIC_1.5.06	Implementation of patches for system software running on OS level, e.g. SAP kernel	HEC Standard Services	May require additional system downtime.
344	BASIC_1.5.21	Implementation of kernel patches using rolling kernel update mechanism	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	To keep any adverse effects on business operations to a minimum when importing a new kernel version, instances are restarted one after the other. This means that during the Rolling Kernel Switch (RKS) procedure at least one application server instance is always available for business operations.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
345	BASIC_1.5.09	Implement updates to the managed SAP solution using standard tools and methods	HEC Standard Services	The term "update" denotes the change to a new minor release of the hosted SAP software, typically focused on bug fixes and small enhancements. The terminology for such events differs within the SAP portfolio, however frequently used terms in this context are "patch", "Support Package" and the like; this line item also includes the implementation of S/4HANA Feature Pack Stacks (FPS) but does not include the upgrade of S/4HANA to the next major release; the release sequence and the categorization of versions for each SAP product is available in the Product Availability Matrix (PAM) in SAP Service Marketplace; this line item does not include the usage of more sophisticated update approaches like nZDT/ZDO/Downtime Minimization etc.; Requires standard scheduled downtime to implement. Any post installation tasks required which is not technical in nature (e.g. application related settings/manual code creation in customer namespace or manual activities required in SAP namespace) need to be performed by the customer.
346	BASIC_1.5.11	Implement updates to the managed SAP solution using advanced tools and methods which are part of the HEC Maintenance Downtime Minimization Service to minimize required downtime	HEC Enhanced Managed Services ("EMS") that <u>cannot</u> be performed by the customer	The term "update" denotes the change to a new minor release of the hosted SAP software, typically focused on bug fixes and small enhancements. The terminology for such events differs within the SAP portfolio, however frequently used terms in this context are "patch", "Support Package" and the like; this line item also includes the implementation of S/4HANA Feature Pack Stacks (FPS), but does not include the upgrade of S/4HANA to the next major release; the release sequence and the categorization of versions for each SAP product is available in the Product Availability Matrix (PAM) in SAP Service Marketplace; Note: any implementation of updates may require additional system downtime or pre-requisites for system resources to include but not limited to additional memory, CPU, and a QA or Pre-production system to perform testing and validation. System resources not available in the existing customer landscape need to be provided via a change request (CR) and may result in additional service fees. Requires minimal scheduled downtime to implement. Any post installation tasks required which is not technical in nature (e.g. application related settings/manual code creation in customer namespace or manual activities required in SAP namespace) need to be performed by the customer.
347	BASIC_1.5.10	Ongoing maintenance of system languages, e.g. performing language fill-up	HEC Enhanced Managed Services ("EMS") that can be performed by customer	EMS fee based per system.
348	BASIC_1.1.01	Version upgrade of SAP Software: Upgrade planning and coordination	HEC Enhanced Managed Services ("EMS") that can be performed by customer	The term "version upgrade" denotes the change to a new major release of the hosted SAP software, typically including functional enhancements; besides upgrades this also includes the implementation of SAP Enhancement Packages; the release sequence and the categorization of versions for each SAP product is available in the Product Availability Matrix (PAM) in SAP Service Marketplace.
349	BASIC_1.5.07	Version upgrade of SAP Software: Execute technical upgrade tasks	HEC Enhanced Managed Services ("EMS") that <u>cannot</u> be performed by the customer	The term "version upgrade" denotes the change to a new major release of the hosted SAP software, typically including functional enhancements; besides upgrades this also includes the implementation of SAP Enhancement Packages; the release sequence and the categorization of versions for each SAP product is available in the Product Availability Matrix (PAM) in SAP Service Marketplace; EMS pricing per system.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
350	BASIC_1.5.22	Version upgrade/update of SAP Software: Pre- and Post BASIS Tasks	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Examples for this service include, run simplification check; unlock objects; remove inactive objects; implement upgrade related notes; run modification adjustment for technical issues. The term "version upgrade" denotes the change to a new major release of the hosted SAP software, typically including functional enhancements; besides upgrades this also includes the implementation of SAP Enhancement Packages; the release sequence and the categorization of versions for each SAP product is available in the Product Availability Matrix (PAM) in SAP Service Marketplace.
351	BASIC_1.5.08	Execute application related technical tasks as part of the continuous Release and Change Management (e.g. implementing adjustments, content/functional activation, testing of new customizing or activated programs/content)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
352	BASIC_1.5.20	Conversion of SAP ERP and SAP BW systems to SAP S/4HANA and SAP BW4/HANA	not offered	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
353		Proactive services		
354	BASIC_1.7.02	Prepare SAP service sessions session by maintaining RTCCTOOL	not offered	
355	BASIC_1.7.03	Analysis of SAP Service Session reports (incl. EarlyWatch Alert) for systems operated in SAP HEC for findings and recommendations regarding aspects within the service scope of SAP HEC (technical operations)	not offered	
356	BASIC_1.7.09	Analysis of SAP Service Session reports (incl. EarlyWatch Alert) for systems operated in SAP HEC. Provide recommendations for changes related to SAP application (outside technical operations scope of HEC standard service)	not offered	
357		System performance management		
358	BASIC_1.12.01	Initial assessment of system performance issues	not offered	
359	BASIC_1.12.03	Troubleshoot SAP system performance issues (technical root causes within HEC service scope)	not offered	
360	BASIC_1.12.02	Performance and Benchmark Service	not offered	
361	BASIC_1.7.06	Analyze and troubleshoot performance issues (root causes outside HEC service scope and application related root causes)	HEC Excluded Tasks	In some situations HEC might be able to support the customer using an HEC Application Management service under EMS, however due to the large variety of possible scenarios and root causes this item has been generally excluded from the HEC service; customers should seek assistance via SAP Support or SAP Consulting for application performance problems.
362	BASIC_1.12.04	Execute performance tuning	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Improve the performance of a system; tuning activities can result in service requests related to other line items in this document, e.g. parameter changes, which are partly covered by the HEC standard service. Performed only for productive systems.
363	BASIC_1.7.08	Review and optimize customer code to improve system performance and stability	HEC Excluded Tasks	
364		Certificate Handling		



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
365	BASIC_1.11.01	Generate Certificate Signing Request (CSR)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Except LoadBalancers, Web Dispatchers, Data Services, SAP Cloud Platform Integration - Data Services Agent, BO and other systems; for these systems HEC will generate the CSR and hand it over to the customer for further processing.
366	BASIC_1.11.09	Generate Certificate Signing Request (CSR) for LoadBalancers, Web Dispatchers, Data Services and BO systems	HEC Standard Services	
367	BASIC_1.11.02	Send request to Certificate Authority	HEC Excluded Tasks	
368	BASIC_1.11.08	Creating SSL server / client identity with key pair	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
369	BASIC_1.11.04	System (OS Level) configuration to enable SSL/TLS	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	EMS effort is calculated per server.
370	BASIC_1.11.05	System (Application Level) configuration to enable SSL/TLS	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
371	BASIC_1.11.07	Implement signed certificate for LoadBalancers, Web Dispatchers, Data Services, SAP Cloud Platform Integration - Data Services Agent and BO systems	HEC Standard Services	
372	BASIC_1.11.10	Implement other signed certificate to managed system	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Other than LoadBalancers, Web Dispatchers, Data Services, SAP Cloud Platform Integration - Data Services Agent, BO, and other systems.
373	BASIC_1.11.06	Monitor validity period of certificates	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Customer to provide URL for certificate check (e.g. FLP). Manual monitoring; effort based per execution.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
374		Disaster Recovery		
375	BASIC_1.9.01	Implement disaster recovery setup according to architecture blueprint and contractual specifications. Test HEC internal data center and technical system infrastructure	not offered	
376	BASIC_1.9.02	Develop and use disaster recovery procedures for database and file system replication only.	not offered	
377	BASIC_1.9.03	Ongoing management of disaster recovery architecture: monitoring of data replication to secondary site including troubleshooting	not offered	
378	BASIC_1.9.04	Ongoing management of disaster recovery architecture: maintenance and change management for systems at secondary site to ensure system consistency including troubleshooting	not offered	
379	BASIC_1.9.05	Develop and maintain disaster recovery procedures for those areas and aspects of the service which are in customer responsibility	not offered	
380	BASIC_1.9.06	Execute failover during disaster recovery test (DB, application and cnames)	not offered	
381	BASIC_1.9.10	Execute failover during disaster recovery test (DB, application and cnames) - additional test	not offered	
382	BASIC_1.9.09	Execute online disaster recovery tests (data center and technical system infrastructure only); primary systems remain accessible	not offered	
383	BASIC_1.9.07	Execute productive failover in case of an officially declared disaster by HEC provider - all HA/DR architecture scenarios.	not offered	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
384	BASIC_1.9.11	Mixed HA/DR: Execute productive failover for a specific SID and invert replication vector	not offered	
385	BASIC_1.9.12	Mixed HA/DR: Execute productive failover for a specific SID and invert replication vector - additional customer requests	not offered	
386		Operations Extension	These services provide possible extensions to areas of Incident, Change and Event Management beyond the standard scope of HEC services	
387	BASIC_1.15.01	Incident Management: Troubleshooting of technical/non-functional incidents not included in HEC Standard Services as per R&R Definition	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Only available for managed systems.
388	BASIC_1.15.02	Change Management: Changes of technical system configuration not included in HEC Standard Services as per R&R Definition	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Only available for managed systems.
389	BASIC_1.15.03	Event management: Monitor technical/non-functional event types not included in HEC Standard Service as per R&R Definition	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Only available for managed systems.
390	BASIC_1.15.04	Service Request Fulfillment: Perform Service Request Fulfillment for technical/non-functional task not included in HEC Standard Service as per R&R Definition	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Only available for managed systems.
391	BASIC_1.15.05	System Provisioning: Extension to contractually agreed provisioning scope - example: additional clients, languages, and/or software components.	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Changes to infrastructure require a change request



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
392		E - NetWeaver Operations (ABAP and JAVA)	Depending on technical conditions some tasks listed in this section are applicable to only one of the two platforms (NW ABAP or NW JAVA)	
393		General NetWeaver Operations		
394	TO_NWABAP_1.1.04	Analyze SAP system log and fix technical failures included in scope of services	HEC Standard Services	May require customer assistance
395	TO_NWABAP_1.1.06	Monitor update processes within SAP software to avoid system operations issues	HEC Standard Services	HEC informs customer of update process problems; RCA methods provided by SAP Enterprise Support may be used to find application related root causes for updates.
396	TO_NWABAP_1.1.07	Analyze update terminations, determine business impact and appropriate action	HEC Enhanced Managed Services ("EMS") that can be performed by customer	With regards to application issues and impact.
397	TO_NWABAP_1.1.08	Clean up terminated updates	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
398	TO_NWABAP_1.1.10	Analyze lock entries, determine business impact and appropriate action	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
399	TO_NWABAP_1.1.11	Check/clear lock entries	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
400	TO_NWABAP_1.1.12	Check for ABAP dumps to detect serious system issues	not offered	
401	TO_NWABAP_1.1.22	Regular ABAP dump check and classification	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Including application related dumps.
402	TO_NWABAP_1.1.23	Analyze SAP application log and provide recommendations on fixing failures	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
403	TO_NWABAP_1.1.24	Reorganize qRFC/tRFC queues	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
404	TO_NWABAP_1.1.25	Regularly check fastest growing tables in the SAP system and provide recommendations for archiving or reorganization	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
405	TO_NWABAP_1.1.13	Administer SAP Logon Groups	HEC Standard Services	The customer may perform this activity; if HEC is requested to perform the task, the design/definition must be provided by customer.
406	TO_NWABAP_1.1.26	Creation/Update/Change of the System-PSE (Personal Security Environment)	HEC Standard Services	Customers may decide to perform this task themselves for convenience.
407	TO_NWABAP_1.1.16	Implement/update tools to ensure readiness for SAP support services	HEC Standard Services	
408	TO_NWABAP_1.1.20	Definition of archiving strategy	HEC Excluded Tasks	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
409	TO_NWABAP_1.1.21	Execution and monitoring of archiving process	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Increased infrastructure consumption is subject to a CR and additional service fees. Manual monitoring; effort based per execution. This task is only for execution of the archiving programs. The archiving setup, retention configuration, investigate / troubleshooting of the unarchivable documents/objects is customer's responsibility.
410	TO_NWABAP_1.1.17	Management of Web Service Runtime (WSRT)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Activation of WSRT in client 000 is done by HEC on request and free of charge
411	TO_NWABAP_1.1.18	Configure technical RFC connections (TA SM59) to central systems managed by SAP used for system operations	HEC Standard Services	Technical RFC connection = generic RFC connection required for all HEC based systems the same way, e.g. for HEC monitoring configuration.
412	TO_NWABAP_1.1.19	Configure RFC connections (TA SM59) to technical systems managed by the customer and any application related RFC connection	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
413	TO_J2EE_1.1.01	Troubleshooting of SAP J2EE in case of technical issues	HEC Standard Services	For technical issues only; application related problems must be resolved by the customer.
414	TO_J2EE_1.1.02	SAP J2EE: adjust/configure Java applications	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
415		SAP Client Operations		
416	TO_NWABAP_1.2.01	Copy client within one SAP System (including analysis and resolution of technical issues)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	500GB upper limit, above that threshold, only system copies are performed because of technical restrictions.
417	TO_NWABAP_1.2.06	Delete client within one SAP System (including analysis and resolution of technical issues)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
418	TO_NWABAP_1.2.02	Perform client export/import or remote client copy between SAP systems (including analysis and resolution of technical issues)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	500GB upper limit, above that threshold, only system copies are performed because of technical restrictions.
419	TO_NWABAP_1.2.07	Pre-processing tasks, i.e. suspend jobs, lock users, export tables with 'old' configuration	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
420	TO_NWABAP_1.2.08	Post processing tasks, i.e. Enterprise Search, Fiori Launchpad, unlock user, release jobs)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
421	TO_NWABAP_1.2.05	Investigate and resolve application related issues (e.g. with certain database tables and fields)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
422		Interface Administration		
423	TO_NWABAP_1.3.24	Creation, execution, monitoring and troubleshooting of batch input sessions	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.
424	TO_NWABAP_1.3.25	Configuration of interface related functions (e.g. IDOCs, interface scripts and jobs, qRFC/trFC/bgRFC, ALE scenarios etc.)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
425	TO_NWABAP_1.3.26	Monitoring of interfaces and interface related functions	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.
426	TO_NWABAP_1.6.03	Establish trust relationships between SAP NW ABAP systems	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
427		Job Scheduling		
428	TO_NWABAP_1.4.09	Schedule (via SM36 --> standard jobs), check and monitor standard SAP system batch jobs to facilitate best-practice housekeeping of SAP system	HEC Standard Services	Per SAP guidelines as defined in SAP Note 16083; additional SAP standard jobs to be reviewed and agreed with customer.
429	TO_NWABAP_1.4.14	Define production job schedule and dependencies based on business requirements	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
430	TO_NWABAP_1.4.15	Administration of application batch jobs: - Job monitoring - Troubleshooting according to troubleshooting handbook	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.
431		Transport Management		
432	TO_NWABAP_1.5.10	Create and maintain transport domain in client 000 and transport directory	HEC Standard Services	Migrating the transport method from HTC to HTA is not included in this task.
433	TO_NWABAP_1.5.11	Maintain SAP transport management system and configure transport routes and any further configuration (automatic import, scheduled import etc.)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
434	TO_NWABAP_1.5.12	Initial configuration of Transport-based correction instructions (TCI) in client 000	HEC Standard Services	
435	TO_NWABAP_1.5.13	Implement SAP Note Transport-based correction instructions (TCI)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
436	TO_NWABAP_1.5.01	Setup of CTS+	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	OS access required.
437	TO_NWABAP_1.5.02	Transfer and release of transport orders	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Before importing critical transports the customer should inform HEC and perform the transport as a scheduled activity.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
438	TO_NWABAP_1.5.03	Execute transports to move objects between SAP systems	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
439	TO_NWABAP_1.5.04	Troubleshooting SAP Transport Management System	HEC Standard Services	Only for technical transport problems, not related to problems due to the content of the transports, e.g. locked objects.
440	TO_NWABAP_1.5.08	Adjustment of repository objects as part of software changes	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Execution of adjustments in SPDD/SPAU for SAP objects. Customer objects in SPDD/SPAU require customers decision during execution.
441	TO_NWABAP_1.5.14	Setup and configuration of CHaRM	HEC Excluded Tasks	
442	TO_NWABAP_1.5.09	Testing and acceptance of object changes	HEC Excluded Tasks	
443		Output Management		
444	TO_NWABAP_1.7.01	Create, change and delete printers within SAP solution	HEC Enhanced Managed Services ("EMS") that can be performed by customer	HEC would only support printer types contained in SAP published guidelines.
445	TO_NWABAP_1.7.02	Analyze faulty output requests (transaction SP01)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
446	TO_NWABAP_1.7.03	Reorganize SAP spool system to keep system clean	HEC Standard Services	Via SAP standard batch job.
447	TO_NWABAP_1.7.04	Design and implementation of print forms	HEC Excluded Tasks	
448	TO_NWABAP_1.7.05	Lock/unlock SAP printers	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
449	TO_NWABAP_1.7.06	Check spooler table consistency to prevent printing issues	HEC Standard Services	Via SAP standard batch job.
450	TO_NWABAP_1.7.07	Configuration of virtual spool (load balancing between spool processes)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
451	TO_NWABAP_1.7.08	Troubleshooting technical spool- and print-problems (within the SAP system)	HEC Standard Services	Problems caused outside the SAP system/solution scope must be solved by the customer.
452	TO_NWABAP_1.7.09	Local printing and support	not offered	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
453		F - Server Provisioning (aka IaaS)	Service to provide server platform, e.g. to install and run non-SAP applications (IaaS); this section does not apply to server infrastructure used to run the managed SAP system landscape. Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).	
454		Security Planning		
455	TO_SPROV_1.4.01	Provide application communication requirements	HEC Excluded Tasks	
456	TO_SPROV_1.4.02	Determine communication and security requirements	HEC Excluded Tasks	
457	TO_SPROV_1.4.03	Create and maintain security policies	HEC Excluded Tasks	
458	TO_SPROV_1.4.04	Determine security strategy and implementation plans	HEC Excluded Tasks	
459	TO_SPROV_1.4.05	Monitor and assess security strategies	HEC Excluded Tasks	
460		Hardware Operations		
461	TO_SPROV_1.5.03	Plan and conduct HEC infrastructure maintenance	HEC Standard Services	
462		Server Management		
463	TO_SPROV_1.6.11	Sizing of server infrastructure	HEC Excluded Tasks	Virtual machines provided as specified in the SOW/Order Form; customer must ensure that sizing is accurate and provided VMs fulfil the requirements of the intended use case.
464	TO_SPROV_1.6.01	Provide server infrastructure	HEC Standard Services	
465	TO_SPROV_1.6.02	Provide licenses for OS	HEC Standard Services	Licenses will be provided and charged by HEC.
466	TO_SPROV_1.6.03	Basic operating system installation	HEC Standard Services	Supported OS: SUSE LINUX and MS Windows Server (most up-to-date HEC versions).
467	TO_SPROV_1.6.04	Installation of OS patches and security updates	HEC Excluded Tasks	Server will be shipped with the latest available security patch level, after hand over customer is responsible for updates.
468	TO_SPROV_1.6.05	Installation of antivirus software and patterns updates	HEC Excluded Tasks	Customer is responsible for Antivirus installation and virus pattern updates on a daily basis.
469	TO_SPROV_1.6.06	Antivirus software licenses	HEC Excluded Tasks	
470	TO_SPROV_1.6.07	Perform scheduled startup/shutdown of hardware	HEC Standard Services	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).
471	TO_SPROV_1.6.08	Restart the hardware after failure	HEC Standard Services	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).
472	TO_SPROV_1.6.09	Monitoring of hardware on hypervisor level	HEC Standard Services	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).
473	TO_SPROV_1.6.10	Monitoring of operating system of provided OS instances	HEC Excluded Tasks	
474		Storage Management		



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
475	TO_SPROV_1.7.01	Initial setup and ongoing management of storage	HEC Standard Services	Storage capacity will be provided as contracted based on customer specifications; technical limitations for storage volume that can be provided under this service apply (details specified in the respective service description).
476	TO_SPROV_1.7.02	Manage data files/file systems	HEC Excluded Tasks	
477	TO_SPROV_1.7.03	Request storage area size/ size extensions for the backup storage area. Select and execute backup according to application/ customer needs and store backup data into the designated backup storage area. Ensure housekeeping of the backup storage area.	HEC Excluded Tasks	
478	TO_SPROV_1.7.04	Provide an NFS or SMB share as backup storage area to allow storage of customer defined backups. Backup storage area sizing is done based on customer input as contracted.	HEC Standard Services	
479	TO_SPROV_1.7.06	Mount of file system from managed server to an IaaS server	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler). Applicability to a given customer landscape needs to be checked with the respective HEC Account Manager; customers must not execute tasks using this mount that put a risk to performance or stability of the managed HEC infrastructure (e. g. network services, large volume data syncs etc.).
480	TO_SPROV_1.7.05	Scale storage capacity	HEC Optional Services	
481		Application Management		
482	TO_SPROV_1.8.01	Define application requirements	HEC Excluded Tasks	
483	TO_SPROV_1.8.02	Provide customer specific software licenses	HEC Excluded Tasks	Customer must make sure that they hold valid licenses to run the installed software in an environment such as SAP HEC
484	TO_SPROV_1.8.03	Application installation	HEC Excluded Tasks	
485	TO_SPROV_1.8.04	Application operations	HEC Excluded Tasks	
486	TO_SPROV_1.8.05	Installation of patches and security updates	HEC Excluded Tasks	Customer is responsible for software lifecycle management
487	TO_SPROV_1.8.06	Application monitoring	HEC Excluded Tasks	
488		IaaS VM Snapshot (offline image backup)		
489	TO_SPROV_1.10.01	Service Setup	HEC Optional Services	
490	TO_SPROV_1.10.02	Request additional storage for copy of block device	HEC Excluded Tasks	This Volume (additional storage) needs to be provisioned to accommodate the block device backup temporarily before moving it to the standard backup solution.
491	TO_SPROV_1.10.04	Snapshot of IaaS	HEC Optional Services	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler). Performed on customer request only; shutdown, rsync block device and copy to the standard backup solution. Maximum of two (2) snapshots per month. Minimum duration of three (3) months required for snapshot service and storage (if required). Any storage required can be extended through the contract duration.
492	TO_SPROV_1.10.05	Restart server and inform customer	HEC Optional Services	After successful restart of VM, inform customer and update the ticket.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
493	TO_SPROV_1.10.06	Start required applications on server	HEC Excluded Tasks	Customer needs to make sure that applications are started after the snapshot operation.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
494		Disaster Recovery		
495	TO_SPROV_1.9.01	Provide VM and related storage in the secondary data center	not offered	
496	TO_SPROV_1.9.02	Setup application on the dedicated VM in the secondary data center. Configure file system replication between primary and the secondary data center across the customer WAN network. Monitor the replication status and perform necessary operation activities.	not offered	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
497		X1 - 3rd Party Software		
498		3rd Party Software (e.g. partner add-ons, libraries, client software; not applicable to solutions explicitly shown as managed service in other sections of this document and the HEC contract for the customer)	Customer must ensure proper licensing of the respective 3rd party software allowing its usage in HEC; 3rd party software in the context of HEC is defined as any software solution for which the intellectual property is not owned by SAP; the technical and operational compatibility of every 3rd Party Solution with HEC has to be individually checked by the customer; HEC will not take responsibility for negative effects on the underlying system and infrastructure platform managed by HEC which are caused by any such 3rd Party Solution	
499		Managed 3rd Party ABAP add-ons	For selected 3rd party NW ABAP add-ons which are listed on the SAP license price list HEC offers a lightweight managed service, which only includes installation of the add-on and subsequent updates; the list of supported solutions is subject to change; supported add-on needs to be explicitly specified in the HEC contract	
500	TO_PA_1.1.01	Installation	HEC Standard Services	
501	TO_PA_1.1.02	Configuration	HEC Excluded Tasks	
502	TO_PA_1.1.03	Application monitoring	HEC Excluded Tasks	
503	TO_PA_1.1.04	Apply updates	HEC Standard Services	
504	TO_PA_1.1.05	Application troubleshooting including engagement with the partners support organization	HEC Excluded Tasks	
505	TO_PA_1.1.06	Uninstallation of ABAP Add-ons	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
506		Unmanaged 3rd Party ABAP add-ons		
507	TO_PA_1.2.01	Installation	HEC Excluded Tasks	
508	TO_PA_1.2.02	Configuration	HEC Excluded Tasks	
509	TO_PA_1.2.03	Application monitoring	HEC Excluded Tasks	
510	TO_PA_1.2.04	Apply updates	HEC Excluded Tasks	
511	TO_PA_1.2.05	Application troubleshooting including engagement with the partners support organization	HEC Excluded Tasks	
512		Other unmanaged 3rd Party Software	Any type of 3rd party software which is requested to be installed in total or in parts on the managed HEC infrastructure is subject to prior evaluation by HEC. Details of this process and conditions are documented in the respective HEC 3rd party software policies.	
513	TO_PA_1.3.01	3rd party software evaluation	HEC Standard Services	This task can take several weeks to be completed. Results of previously completed evaluations will be reused and lead to lower process runtimes.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
514		X2 - Business Connector		
515		Operations		
516	TO_BC_1.1.04	Reorganization of Message Store	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
517		X3 - SAP CO-PA Accelerator		
518		Operations		
519	TO_CO-PA_1.1.01	Determine initial data load procedure	HEC Excluded Tasks	
520	TO_CO-PA_1.1.02	Perform initial data load procedure	HEC Excluded Tasks	
521	TO_CO-PA_1.1.03	CO-PA customizing	HEC Excluded Tasks	
522	TO_CO-PA_1.1.04	Setup DB connection to HANA	HEC Excluded Tasks	
523	TO_CO-PA_1.1.05	Setup CO-PA Jobs for data replication	HEC Excluded Tasks	
524	TO_CO-PA_1.1.06	Monitor CO-PA Jobs for data replication	HEC Excluded Tasks	
525		X4 - SAP Data Services (DS)		
526		Operations		
527	TO_DS_1.1.22	Authorization - Users and Rights Management	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
528	TO_DS_1.1.06	Create/Modify Data Services jobs	HEC Excluded Tasks	
529	TO_DS_1.1.07	Schedule Data Services jobs	HEC Excluded Tasks	
530	TO_DS_1.1.08	Configure database connections	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
531	TO_DS_1.1.09	Monitor jobs	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.
532	TO_DS_1.1.10	Repository backup DS & BOE	HEC Standard Services	
533	TO_DS_1.1.11	Delete batch job history	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
534	TO_DS_1.1.12	Verify that job and access servers are running	HEC Standard Services	
535	TO_DS_1.1.13	Remove obsolete repository contents	HEC Standard Services	
536	TO_DS_1.1.14	Troubleshooting issues with DS Jobs	HEC Excluded Tasks	
537	TO_DS_1.1.23	Create/Manage additional repositories	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	System comes with default repositories, if more repositories are requested, these will be delivered via EMS.
538	TO_DS_1.1.26	Backup: On-Demand - BI Database and File Repo Sync	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
539	TO_DS_1.1.27	Restore: On-Demand - BI Database and File Repo Sync	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
540	TO_DS_1.1.28	Authentication setup and Single Sign On (SSO) configuration	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.
541	TO_DS_1.1.29	Installation and Configuration of Data Services Adapters	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
542	TO_DS_1.1.30	Add and configure additional Job Servers/ Job Groups for load balancing	HEC Optional Services	Depending on sizing, additional infrastructure may be required.
543	TO_DS_1.1.31	Configure Runtime Resources	HEC Standard Services	
544	TO_DS_1.1.32	Configure SMTP Email	HEC Standard Services	
545	TO_DS_1.1.33	Starting and Stopping Services	HEC Standard Services	
546	TO_DS_1.1.34	Enhanced Change and Transport System (CTS+) Integration Setup	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
547	TO_DS_1.1.35	Configure transports via Data Services (DS) Object Promotion Management	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
548	TO_DS_1.1.36	Backup Data Services Repository using Import/Export Tool	HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
549		X5 - SCIC Operations		
550		Operations		
551	TO_SCIC_1.1.03	Setup initial SCIC of source system	HEC Enhanced Managed Services ("EMS") that can be performed by customer	e.g. setup of secondary database connection / RFC.
552	TO_SCIC_1.1.04	Setup LiveCache replication jobs in source system	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
553	TO_SCIC_1.1.06	Monitor LiveCache replication jobs in customer system	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.
554	TO_SCIC_1.1.09	Manage end users with HANA Studio	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
555		X6 - SAP BusinessObjects Business Intelligence (BI)		
556		Operations		
557	TO_BI_1.1.06	Backup (Full content backup / BIAR backup)	HEC Standard Services	
558	TO_BI_1.1.07	Scan / Repair and compact all repository errors	HEC Standard Services	
559	TO_BI_1.1.11	Clean-up empty directories created for Repository Diagnostic Tool	HEC Standard Services	
560	TO_BI_1.1.26	Cache Clean-up and Maintenance - Tomcat, Web Intelligence, Log Files	HEC Standard Services	
561	TO_BI_1.1.17	Program Object Actions: Import and Execution	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
562	TO_BI_1.1.18	Promote/deploy BI objects between environments	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
563	TO_BI_1.1.19	Create, rename, remove connections and Universes	HEC Excluded Tasks	
564	TO_BI_1.1.21	Provide user access and maintain authorizations	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
565	TO_BI_1.1.47	SAML configuration	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
566	TO_BI_1.1.27	Deploy templates and system configurations for hardware changes	HEC Standard Services	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
567	TO_BI_1.1.29	Auditing/Monitoring Driver Setup and configuration for Audit reporting	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
568	TO_BI_1.1.30	Perform ERP Integration Setup and Configuration	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
569	TO_BI_1.1.33	Backup: On-Demand - BI Database and File Repo Sync	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
570	TO_BI_1.1.34	Restore: On-Demand - BI Database and File Repo Sync	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
571	TO_BI_1.1.35	Authentication setup and Single Sign On SSO configuration	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.
572	TO_BI_1.1.36	Configure Cryptography Settings	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
573	TO_BI_1.1.37	Configure Web Application - Reverse Proxy Settings	HEC Standard Services	
574	TO_BI_1.1.38	Add and configure additional BI servers for load balancing	HEC Optional Services	Additional infrastructure may be required.
575	TO_BI_1.1.39	Manage Server Process and Server Groups	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
576	TO_BI_1.1.40	Setup/Support technical tasks for BI Report Version Management	HEC Standard Services	Customer responsible for maintaining report versions.
577	TO_BI_1.1.41	Enhanced Change and Transport System (CTS+) Integration Setup	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
578		X7 - SAP PI		
579		SAP PI Implementation		
580	TO_PI_1.1.01	Installation of adapters and software components provided by SAP	HEC Standard Services	Included only for items explicitly specified in the HEC contract/Order Form. This is valid also for additional offerings from SAP such as: ADAPTERS for SAP NW PI 1.1, SAP NW Process Integration, business-to-business add-on 1.0, SAP NW Process Integration Secure Connectivity Add-on 1.0. This does not include efforts for content handling like the import of TPZ files into the ESR.
581	TO_PI_1.1.02	Installation of adapters provided by external partners	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Must provide adapter software and licenses. This does not include efforts for content handling like the import of TPZ files into the ESR.
582	TO_PI_1.1.03	Configuration of the required system connections to partner systems	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Time & material basis for changes in network setup (routers, firewalls access lists). Customer must provide network connections to target systems.
583	TO_PI_1.1.04	Creation of SSL views and PSEs	HEC Excluded Tasks	
584		SAP PI Operations		
585	TO_PI_2.1.02	Monitor application-specific PI functions, e.g. messaging, queues etc.	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.
586	TO_PI_2.1.03	Monitor the message processing in PI (success & performance)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.
587	TO_PI_2.1.04	Monitor communication channels, queues, backlogs of PI (AEX)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.
588	TO_PI_2.1.05	Monitor BPM processes (success & performance)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.
589	TO_PI_2.1.06	Configure adapters	HEC Excluded Tasks	
590	TO_PI_2.1.07	Deal with incorrect messages	HEC Excluded Tasks	
591	TO_PI_2.1.08	Configure message archiving	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
592	TO_PI_2.1.27	Execute and monitor message archiving	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.
593	TO_PI_2.1.11	Role/authorization maintenance (except SAP & initial customer administrator role)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
594	TO_PI_2.1.16	Maintain users (except for the SAP and initial customer administrator role)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
595	TO_PI_2.1.17	Setup of PI / BPM / AEX housekeeping	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
596	TO_PI_2.1.28	Monitor housekeeping activities of PI / BPM / AEX	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
597	TO_PI_2.1.19	Adjust PO/PI /AEX parameterization and configuration	HEC Enhanced Managed Services ("EMS") that can be performed by customer	The configuration doesn't cover the realization of integration scenarios (content development).
598	TO_PI_2.1.21	Maintain the system landscape directory (SLD)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Related to PI scenarios.
599	TO_PI_2.1.22	Apply SAP basic application content update to the Enterprise Service Repository (ESR)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
600	TO_PI_2.1.23	Handle errors and analyze root cause for incorrect message processing in PI (AEX)	HEC Excluded Tasks	
601	TO_PI_2.1.24	Check PI / PO / AEX readiness after changes (upgrades, patches, notes)	HEC Excluded Tasks	
602	TO_PI_2.1.25	Configure the required system connections to partner systems	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
603	TO_PI_2.1.26	Transport management of PI objects	HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
604		X8 - Enterprise Portal		
605		Operations		
606	TO_EP_1.1.01	Monitoring of application services for Portal, Unifiers, Unification Server, PCD, and CM	HEC Standard Services	Monitors application services only; customer responsible to monitor portal content.
607	TO_EP_1.1.03	Maintain LDAP (Novell, ADS, iPlanet and others)	HEC Excluded Tasks	
608	TO_EP_1.1.04	Analyze Portal System logs and revise failures occurred	HEC Standard Services	Provider to inform customer of required assistance.
609	TO_EP_1.1.05	System landscape maintenance, connection of external systems – e.g. SAP	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Port connection required.
610	TO_EP_1.1.07	User mapping	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
611	TO_EP_1.1.08	Role/Channel/iPanel allocation	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
612	TO_EP_1.1.09	Content administration	HEC Excluded Tasks	
613	TO_EP_1.1.10	Set-up and maintain Portal user master data	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
614	TO_EP_1.1.11	Lock and delete portal user master data	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
615	TO_EP_1.1.12	Release locked portal users	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
616	TO_EP_1.1.13	Define and change Customer specific portal authorization profiles	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
617	TO_EP_1.1.14	Administer Content Repository	HEC Excluded Tasks	
618	TO_EP_1.1.20	Customize, upgrade POE including all components	HEC Excluded Tasks	Set J2EE passwords, configure Java port, add service packs.
619	TO_EP_1.1.22	Upgrade of pages, roles, static html content	HEC Excluded Tasks	
620	TO_EP_1.1.23	Maintenance of Java services	HEC Standard Services	Customer responsible to develop new Java services, and to customize existing java services.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
621		X9 - Sybase IQ (used as data persistency for NLS or 3rd party archiving solutions)		
622		Database Installation/Configuration		
623	TO_SIQ_1.1.01	Checking/preparing system requirements (BW Release, SAP Notes, Source/target setup)	HEC Excluded Tasks	
624	TO_SIQ_1.1.03	Initial configuration / parameter settings	HEC Standard Services	
625	TO_SIQ_1.1.06	Initialize connection between BW/NLS and Sybase IQ	HEC Standard Services	Provider will perform required setup. Customer must configure the NLS connection from the BW side.
626		Database Operations		
627	TO_SIQ_1.2.02	Database capacity management	HEC Standard Services	
628	TO_SIQ_1.2.03	Reorg/Statistic update	HEC Standard Services	
629	TO_SIQ_1.2.04	dbcc (database consistency check)	HEC Standard Services	
630	TO_SIQ_1.2.05	Troubleshooting of technical database issues	HEC Standard Services	
631	TO_SIQ_1.2.06	Setup backup	HEC Standard Services	
632	TO_SIQ_1.2.07	Restore backup	HEC Standard Services	
633	TO_SIQ_1.2.08	Monitor database connection	HEC Standard Services	Customer must check connection from BW side.
634		Application		
635	TO_SIQ_1.4.01	Create/schedule/restore data archiving requests	HEC Excluded Tasks	
636	TO_SIQ_1.4.02	Query handling	HEC Excluded Tasks	
637	TO_SIQ_1.4.03	Installing partner add-ons in backend systems	HEC Excluded Tasks	
638	TO_SIQ_1.5.01	Server provisioning for the archiving solution server	HEC Optional Services	If partner solution requires extra server; refer to Server Provisioning section in this document for details.
639	TO_SIQ_1.4.04	Installation of archiving partner software	HEC Excluded Tasks	Customer must make sure, that they hold valid licenses to run the installed software in the cloud environment
640	TO_SIQ_1.4.05	Configuration of archiving partner software	HEC Excluded Tasks	
641	TO_SIQ_1.4.06	Managed services for archiving partner software (issue handling)	HEC Excluded Tasks	
642		SAP Information Lifecycle Management (ILM) for Sybase IQ		
643	TO_SIQ_1.6.01	Check and prepare system requirements (Sizing, SAP Notes)	HEC Excluded Tasks	
644	TO_SIQ_1.6.02	Activate of ILM Store in NetWeaver	HEC Standard Services	
645	TO_SIQ_1.6.03	Set parameters in SAP IQ for ILM Store	HEC Standard Services	
646	TO_SIQ_1.6.05	Setup ILM Store Authorizations	HEC Excluded Tasks	
647	TO_SIQ_1.6.06	Integrate ILM Store to Archiving Process	HEC Excluded Tasks	
648	TO_SIQ_1.6.07	Configure of ArchiveLink connection to ILM Store	HEC Excluded Tasks	
649	TO_SIQ_1.6.08	Configure of Storage Connections	HEC Excluded Tasks	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
650	TO_SIQ_1.6.09	Check ICM Parameters	HEC Standard Services	
651	TO_SIQ_1.6.10	Setup Clients and Origins in the ILM Store	HEC Excluded Tasks	
652	TO_SIQ_1.6.11	Integration to OpenText Storage	HEC Excluded Tasks	
653	TO_SIQ_1.6.12	Integration to other ILM Certified Storage	HEC Excluded Tasks	
654	TO_SIQ_1.6.13	Data destruction and data compliance	HEC Excluded Tasks	
655	TO_SIQ_1.6.14	License generation and deployment for Live Systems	HEC Standard Services	
656		X11 - SAP Cloud Connector		
657		Installation and Configuration		
658	TO_SCC_1.1.02	Configuration - Enable outbound connection via LoadBalancer to connect with SAP Cloud Platform (SCP)	HEC Standard Services	
659	TO_SCC_1.1.03	Configuration - Establish connection to customer's cloud account	HEC Standard Services	
660	TO_SCC_1.1.04	Configuration - On-premise resources (OData services) customer wants to use in SAP Cloud Platform (SCP)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
661	TO_SCC_1.1.05	Monitoring - SCC service monitoring (Linux / Windows Services)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Can be done in Administrator UI or by executing a manual status check command or via HCP Administrator Cockpit. Manual monitoring; effort based per execution.
662	TO_SCC_1.1.06	Define and provide two user groups (Cloud Portal Admin, Cloud Portal User)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
663	TO_SCC_1.1.07	Tunnel Availability monitoring	HEC Standard Services	For version 2.12 and higher only. HEC can monitor tunnel availability for informational purposes only but is not covered under the Service Level Agreement.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
664		X12 - SAP Cloud Platform Integration - Data Services Agent (CPI-DS) (Formerly HCI-DS)		
665		Installation and Configuration		
666	TO_CPIDS_1.1.01	Installation of SAP CPI - Data Service agent	HEC Standard Services	
667	TO_CPIDS_1.1.02	Configuration - Enable outbound connection via LoadBalancer to connect with CPI	HEC Standard Services	
668	TO_CPIDS_1.1.03	Configuration - Establish connection to customer's cloud account	HEC Standard Services	Need access to CPI portal or HEC will request the configuration file from customer. Configuration performed at OS level. HEC will verify that agent status is green in CPI portal.
669	TO_CPIDS_1.1.04	Configuration - Business backend preparation steps for CPI consumption	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
670		Monitoring Setup		
671	TO_CPIDS_1.2.01	Monitoring setup for process level availability - Nagios	HEC Standard Services	
672		Data Handling and Data Services		
673	TO_CPIDS_1.3.01	Migrating or replicating data between data stores	HEC Excluded Tasks	
674		X13 - SAP Fiori		
675		Installation and Configuration		
676	TO_FIORI_1.1.01	Installation of application specific packages in respective SAP Systems	HEC Standard Services	Initial setup in HEC.
677	TO_FIORI_1.1.03	Configuration - Web Dispatcher Fiori App redirects	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	SSL is a prerequisite for this task. Scope during Initial Provisioning includes all systems defined in the initial contract. If more systems are added a Change Request (CR) is required and additional EMS efforts may apply.
678	TO_FIORI_1.1.05	Configuration - HANA XS Engine Web Dispatcher	HEC Enhanced Managed Services ("EMS") that can be performed by customer	SSL is a prerequisite for this task. Scope during Initial Provisioning includes all systems defined in the initial contract. If more systems are added a Change Request (CR) is required and additional EMS efforts may apply.
679	TO_FIORI_1.1.09	Initial enablement of Fiori launchpad including all required connectivity setup	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Includes the activation of predefined sample SAP Fiori apps to validate SAP Fiori Launchpad enablement. For systems migrated to HEC, It is customer's responsibility to enable existing SAP Fiori app(s) and is covered by a separately contracted cloud onboarding and migration service.
680	TO_FIORI_1.1.06	Re-enable Fiori launchpad including all required connectivity setup	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Covers additional charge for re-enablement



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
681	TO_FIORI_1.1.07	Configuration - Fiori applications	HEC Excluded Tasks	In some situations HEC might be able to support the customer using a HEC Application Management service under EMS, however due to the large variety of possible scenarios this item has been generally excluded from the HEC service; customers should seek assistance via SAP Consulting.
682	TO_FIORI_1.1.08	Establish trusted connections from Web Dispatcher to Gateway, backend system (e.g. S/4 HANA) and HANA XS engine of backend system	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Access to customer client required.
683		X15 - Web Dispatcher		
684		Web Dispatcher Operations		
685	TO_WD_1.1.01	Register/Remove Systems in Web Dispatcher and their options regarding SSL	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Scope during initial provisioning includes all systems defined in the initial contract. If more systems are added a Change Request (CR) is required and additional EMS efforts may apply.
686	TO_WD_1.1.02	General memory management definition	HEC Standard Services	
687	TO_WD_1.1.03	General security parameter definition	HEC Standard Services	
688	TO_WD_1.1.04	General Configuration for Support SSL in Parameter File or PSE Maintenance Tool in Admintool (Handling HTTPS Requests)	HEC Standard Services	
689	TO_WD_1.1.05	Communication with the message server / application server using SSL	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
690	TO_WD_1.1.06	Modification of HTTP requests	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
691	TO_WD_1.1.07	Setting up error handling	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
692	TO_WD_1.1.08	Maintaining the authentication File	HEC Standard Services	
693	TO_WD_1.1.09	Changes in client 000 of the backend systems related to Web Dispatcher (HTTPURLLC)	HEC Standard Services	
694	TO_WD_1.1.10	Log and trace strategy	HEC Standard Services	
695	TO_WD_1.1.11	Encryption policy (protocols, ciphersuites, key length)	HEC Standard Services	
696	TO_WD_1.1.12	Connection counts	HEC Standard Services	
697	TO_WD_1.1.13	Metadata Exchange Using SSL	HEC Standard Services	
698	TO_WD_1.1.14	Definition of port ranges	HEC Standard Services	
699	TO_WD_1.1.15	LoadBalancer configuration for Web Dispatcher	HEC Standard Services	Configuration details (routing rules, redirection information, backend system details etc.) must be provided by customer. HEC will be update the Load Balancer and Web Dispatcher accordingly.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
700	TO_WD_1.1.16	DNS Changes for Web Dispatcher Service	HEC Excluded Tasks	There are no options to have personalized DNS



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
701		X16 - LoadBalancer		
702		LoadBalancer operation		
703	TO_LRP_1.1.01	Setup LoadBalancer instance	HEC Standard Services	
704	TO_LRP_1.1.02	Register/Remove Systems in LoadBalancer	HEC Standard Services	
705	TO_LRP_1.1.03	Configure load distribution to application servers	HEC Standard Services	
706	TO_LRP_1.1.04	Provide external IP for Internet facing scenarios	HEC Standard Services	
707	TO_LRP_1.1.05	Configure SSL offloading (Encryption)	HEC Standard Services	
708	TO_LRP_1.1.07	Perform DNS handling for customer own Domain	HEC Excluded Tasks	
709	TO_LRP_1.1.08	Provide X.509 certificate for customer domain to enable SSL	HEC Excluded Tasks	
710	TO_LRP_1.1.09	Provide X.509 certificate for SAP own URL like *.hec.ondemand.com domain	HEC Standard Services	
711	TO_LRP_1.1.10	Install customer X.509 certificate	HEC Standard Services	
712	TO_LRP_1.1.11	Configure Web Application Firewall	HEC Standard Services	
713	TO_LRP_1.1.12	Configure persistence handling	HEC Standard Services	
714	TO_LRP_1.1.14	Configure health checks	HEC Standard Services	
715	TO_LRP_1.1.15	Configure URL/IP based blocklist and allowlist filtering	HEC Standard Services	
716	TO_LRP_1.1.16	Configure sorry page function	HEC Standard Services	
717	TO_LRP_1.1.17	Configure outgoing connections to Internet	HEC Standard Services	
718	TO_LRP_1.1.18	Enable access from HEC to internet/public domain	HEC Optional Services	Supported using outbound LoadBalancer. Used to integrate HEC with other clouds or customer public services etc.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
719		X17 - OpenText Solutions		
720		Data archiving and document access: ERP + archive + storage		
721		ERP part		
722	TO_OT_1.1.01	Setup connection to archive server	HEC Standard Services	
723	TO_OT_1.1.02	Customizing of archiving solution	HEC Excluded Tasks	
724		Archive server part (content repository)		
725	TO_OT_1.2.01	Archive server DB installation	HEC Standard Services	
726	TO_OT_1.2.02	Archive server installation	HEC Standard Services	
727	TO_OT_1.2.03	Configuration of the archive storage	HEC Standard Services	
728	TO_OT_1.2.04	Attaching storage to the Archive server	HEC Standard Services	
729	TO_OT_1.2.05	Configuration of the archive server	HEC Standard Services	
730		Migration of existing archives to HEC		
731	TO_OT_1.6.01	Data migration of archived data of OpenText archive system	HEC Excluded Tasks	Consulting project required.
732	TO_OT_1.6.02	Data migration of archived data of Non-OpenText archive system	HEC Excluded Tasks	Consulting project required.
733		Admin Tasks Archive Server		
734	TO_OT_1.7.01	Standard backup (storage handling)	HEC Standard Services	
735	TO_OT_1.7.02	Standard monitoring	HEC Standard Services	
736	TO_OT_1.7.03	Administrative tasks (create new archives)	HEC Standard Services	On customer request.
737		Archiving: application management		
738	TO_OT_1.8.01	Authorization concept	HEC Excluded Tasks	
739	TO_OT_1.8.02	Archiving concept	HEC Excluded Tasks	
740	TO_OT_1.8.03	Archiving of data	HEC Excluded Tasks	
741	TO_OT_1.8.04	Deletion of data	HEC Excluded Tasks	
742		Scanning and Pipeline		
743	TO_OT_1.3.01	Installation on premise (scan client)	HEC Excluded Tasks	
744	TO_OT_1.3.02	Scan Configuration	HEC Excluded Tasks	
745	TO_OT_1.3.03	Pipeline installation on premise	HEC Excluded Tasks	
746	TO_OT_1.3.04	Pipeline configuration on premise	HEC Excluded Tasks	
747		VIM: SAP Component Installation in SAP ERP	In case VIM is part of solution scope in HEC	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
748	TO_OT_1.4.01	Add-On installation for VIM	HEC Standard Services	
749	TO_OT_1.4.02	SAP Business Workflow Engine enabling (Basic configuration)	HEC Standard Services	
750	TO_OT_1.4.03	Business Configuration	HEC Excluded Tasks	RDS available.
751	TO_OT_1.4.04	ArchiveLink customizing	HEC Standard Services	
752		VIM: Invoice Capture Center (ICC)	In case VIM is part of solution scope in HEC	
753	TO_OT_1.5.01	Installation VIM server	HEC Standard Services	
754	TO_OT_1.5.02	Basic configuration and connectivity	HEC Standard Services	
755	TO_OT_1.5.03	Basic business configuration	HEC Excluded Tasks	RDS available.
756	TO_OT_1.5.04	Customer specific enhancements	HEC Excluded Tasks	
757		StreamServe	In case StreamServe is part of solution scope in HEC	
758	TO_OT_1.9.01	Installation of StreamServe	HEC Standard Services	To be done on OS-level.
759	TO_OT_1.9.02	Setup connection to StreamServe server	HEC Standard Services	
760	TO_OT_1.9.03	StreamServe base configuration	HEC Standard Services	Customer to provide FQDN of OpenText Server.
761	TO_OT_1.9.04	Configure output management	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Real output management; logical output management; output device; RFC destination
762	TO_OT_1.9.05	Application specific configuration	HEC Excluded Tasks	e.g. Adjust print forms, BAPI functions, etc.
763		Cloud Editions		
764		SAP S/4HANA Common Tasks		
765	TO_OT_1.10.1	Install OpenText Cloud Edition Add-On	HEC Standard Services	ADA, VIM, and xECM Add-On covered
766	TO_OT_1.10.2	Activate/Maintain ICF nodes required for Apps to be enabled/updated	HEC Standard Services	
767	TO_OT_1.10.3	Activate/Maintain OData Services required for Apps to be enabled/updated	HEC Standard Services	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
768		Vendor Invoice Management for SAP Solutions (VIM)		
769	TO_OT_1.11.1	Establish/Maintain secure connection to OpenText Core Capture for SAP Solutions (IES Cloud)/OT2	HEC Standard Services	Create and maintain connections from S/4HANA SM59. Client ID and secret password from Admin Center need to be provided to HEC
770		Extended ECM for SAP Solutions (xECM)		
771	TO_OT_1.12.1	Establish/Maintain secure connection to OpenText Cloud (OTK)	HEC Standard Services	Create and maintain connections from S/4HANA SM59, STRUST and in xECM's IMG hierarchy "Create HTTP Connections"
772		Archiving and Document Access for SAP Solutions (ADA)		
773		OpenText Core Archive Connector		
774		Operations		
775	TO_OT_1.13.1	Install OpenText Core Archive Connector and Document Pipelines	HEC Standard Services	Application installation only
776	TO_OT_1.13.2	Establish/Maintain secure connection to OpenText Core Archive for SAP Solutions (ADA Cloud)/OT2	HEC Standard Services	Initial configuration and customer tenant registration
777	TO_OT_1.13.3	Add/Maintain SAP S/4HANA systems connection	HEC Standard Services	
778	TO_OT_1.13.4	Administration of Collections and Data Sources	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
779	TO_OT_1.13.5	Configure scan host and profile	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
780	TO_OT_1.13.6	Configure/Maintain file archive job	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
781	TO_OT_1.13.7	Maintain Core Archive Connector setting	HEC Standard Services	Activity includes replacing/generating certificate and private key
782	TO_OT_1.13.8	User Administration	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
783		Software Lifecycle Management		
784	TO_OT_1.14.1	Implement customer specific updates to the managed OT Core Archive Connector solution (software packages not commonly available via the SAP Service Marketplace)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
785		X18 - SAP Information Steward		
786		Operations		
787	TO_IS_1.1.02	Adding additional IS job servers for load balancing on existing infrastructure.	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Adding additional server on existing infrastructure. A Change Request (CR) is required if additional infrastructure needs to be deployed.
788	TO_IS_1.1.13	Adding additional IS job servers for load balancing on new infrastructure	HEC Optional Services	Adding additional server on new infrastructure. A Change Request (CR) is required.
789	TO_IS_1.1.03	User and access management	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
790	TO_IS_1.1.04	Create and manage IS application jobs	HEC Excluded Tasks	
791	TO_IS_1.1.05	Executing Information Steward utilities	HEC Excluded Tasks	
792	TO_IS_1.1.06	Data Insight, Metadata, Cleansing Package and Match Review administration	HEC Excluded Tasks	
793	TO_IS_1.1.08	IS repository and file system backup	HEC Standard Services	
794	TO_IS_1.1.09	IS job server and services monitoring	HEC Standard Services	
795	TO_IS_1.1.10	IS repository management	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
796	TO_IS_1.1.11	Troubleshooting issues with IS jobs and utilities (Data Insight, Rule Tasks, Metadata Management, Data Cleansing)	HEC Excluded Tasks	
797	TO_IS_1.1.12	Execute performance tuning for Data Insight, Data Cleansing, Metadata Management, Metapedia and Match Review	HEC Excluded Tasks	
798		X19 - SAP Policy Management	This section represents an extension of the standard service as described in the Roles & Responsibilities. It applies only to customers using SAP Policy Management in the cloud environment in combination with the full managed service including the components pm.msg and TomatosX.	
799		TomatosX for Policy Management		
800	TO_PM_1.1.01	Installation of the solution	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
801	TO_PM_1.1.02	Technical configuration (installation post-processing) of installed systems.	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
802	TO_PM_1.1.03	Configuration or Integration of TomatosX system with other SAP systems (TA SM59)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
803	TO_PM_1.1.05	Application configuration (post-installation configuration) of installed systems	HEC Excluded Tasks	
804	TO_PM_1.1.06	Application troubleshooting	HEC Excluded Tasks	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
805		MSG.PM designer & CAIMAN for Policy Management		
806	TO_PM_2.1.01	Installation of the solution	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	MSG.PM designer and CAIMAN can only be installed on the windows platform.
807	TO_PM_2.1.02	Technical configuration (installation post-processing) of installed systems.	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
808	TO_PM_2.1.08	Technical integration of system with other systems and applications	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
809	TO_PM_2.1.05	Application configuration (post-installation configuration) of installed systems	HEC Excluded Tasks	
810	TO_PM_2.1.06	Application troubleshooting	HEC Excluded Tasks	
811	TO_PM_2.1.07	Installation of additional client tools	HEC Excluded Tasks	
812		Security Management		
813	TO_PM_3.1.1	Administration of customer users (e.g. user creation, change, deletion, maintenance of user profiles, roles, authorizations, master data and passwords)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
814		X20 - Celonis CPM		
815		Celonis CPM		
816	TO_CEL_1.1.02	Creation Java KeyStore	HEC Standard Services	
817	TO_CEL_1.1.03	Configuring authorized SQL queries	HEC Excluded Tasks	Provider will update the respective file on OS Level.
818	TO_CEL_1.1.04	Configure audit parameters and password rules	HEC Standard Services	
819	TO_CEL_1.1.05	Request logging trace for user	HEC Standard Services	
820	TO_CEL_1.1.06	Transport Export/Import	HEC Excluded Tasks	
821	TO_CEL_1.1.07	General Administration of users, groups and authorizations	HEC Excluded Tasks	
822	TO_CEL_1.1.08	Change system settings on application side	HEC Excluded Tasks	
823	TO_CEL_1.1.09	Backup/Restore H2 Database	HEC Standard Services	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
824		X21 - SAP Identity Management IDM		
825	TO_IDM_1.0.01	Assist customer with IDM related tasks that require access to operating system	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
826	TO_IDM_1.0.02	Install IDM dispatchers as part of the initial cloud environment installation	HEC Standard Services	
827	TO_IDM_1.0.03	Connect IDM UI to IDM system	HEC Standard Services	SSL configuration is not covered by this task.
828		X22 - SAP Financial Consolidation (FC)		
829		Administration of Data Sources		
830	TO_FC_1.1.01	Starting/Stopping/Setting Administrator Password and activity views for Datasources	HEC Standard Services	
831	TO_FC_1.1.02	Adding Webservices	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
832	TO_FC_1.1.03	Adding FC Application Server/Webserver on existing infrastructure	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Adding additional server on existing infrastructure. A Change Request (CR) is required if additional infrastructure needs to be deployed.
833	TO_FC_1.1.15	Adding FC Application Server/Webserver on new infrastructure	HEC Optional Services	Adding additional server on new infrastructure. A Change Request (CR) is required.
834	TO_FC_1.1.04	Migrating and filtering data source	HEC Excluded Tasks	
835	TO_FC_1.1.05	Installing software configuration	HEC Excluded Tasks	
836	TO_FC_1.1.06	Sending/Broadcasting messages to End-users	HEC Excluded Tasks	
837	TO_FC_1.1.07	Defining log configuration for application servers	HEC Excluded Tasks	
838	TO_FC_1.1.08	Defining commands available for machines and instances	HEC Excluded Tasks	
839	TO_FC_1.1.09	Activation/Deactivation Machine in the FC Admin console	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
840	TO_FC_1.1.10	Starting/Stopping Instances in the FC Admin console	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
841	TO_FC_1.1.11	Creating scheduled tasks for starting and stopping servers	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
842	TO_FC_1.1.12	Create/Delete Data Source(s)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Requires actions at OS Level.
843	TO_FC_1.1.13	Create FC transport folder	HEC Standard Services	
844	TO_FC_1.1.14	Restart FC platform periodically	HEC Standard Services	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
845		Monitoring		
846	TO_FC_1.2.04	Monitoring one FC application URL per SID	HEC Standard Services	Limited to one URL per SID. Customer needs to provide URL to be monitored.
847	TO_FC_1.2.03	Monitoring of further FC application URLs	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Customer needs to provide URL to be monitored.
848		Administration of HANA Databases		
849	TO_FC_1.3.01	Prerequisites for creating SAP HANA Modeling Views with Cube Designer	HEC Excluded Tasks	Customer require access to HANA Studio and require HANA Customer Administration authorization.
850	TO_FC_1.3.02	Deleting rights created during Cube Deployments	HEC Excluded Tasks	Customer require access to HANA Studio and require HANA Customer Administration authorization.
851		Configuring SAP Financial Consolidation Web Site		
852	TO_FC_1.4.01	Reconnecting Automatically	HEC Standard Services	
853	TO_FC_1.4.02	Activating the SAP Financial Consolidation Web Technical Log	HEC Standard Services	
854	TO_FC_1.4.03	Supporting long-term HTTP sessions with firewalls	HEC Standard Services	
855	TO_FC_1.4.04	Publishing documents via a URL	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
856	TO_FC_1.4.05	Configuring HTTPS	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
857	TO_FC_1.4.06	Customizing the SAP Financial Consolidation Web Site Home page	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
858		Configuring SAP Financial Consolidation Web HTML5 Site		
859	TO_FC_1.5.01	Configuring/Customizing SAP Financial Consolidation Web HTML5 site advanced settings	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
860		Archiving Tool		
861	TO_FC_1.6.01	Installing and accessing the Archiving Tool	HEC Standard Services	
862	TO_FC_1.6.02	Execute archiving process	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Just possible using AMS/SAP Consulting because require access to OS Level.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
863		Installing and Configuring the SAP NetWeaver BW Server to deploy Infocubes with SAP Financial Consolidation Cube Designer		
864	TO_FC_1.8.01	Installing the FPM Basis component on the SAP NetWeaver BW server	HEC Standard Services	
865	TO_FC_1.8.02	Creating BW NetWeaver Roles to deploy Infocubes with Cube Designer	HEC Excluded Tasks	
866	TO_FC_1.8.03	Installing SAP EPM Solutions Connection Manager on the BOE platform	HEC Standard Services	
867	TO_FC_1.8.04	Configuring the Central Management Console for SAP Cube Designer	HEC Excluded Tasks	
868	TO_FC_1.8.05	Configuring the Central Management Server for a distributed installation	HEC Excluded Tasks	
869	TO_FC_1.8.06	Configuring reverse proxy	HEC Standard Services	
870	TO_FC_1.8.07	Creating an EPM Connection for SAP Financial Consolidation with NetWeaver BW Cubes or SAP PCM or SAP SSM or SAP HANA	HEC Excluded Tasks	
871		Financial Information Management		
872	TO_FC_1.9.01	Configuring the number of lines in a Flat File Preview	HEC Standard Services	
873	TO_FC_1.9.02	Configuring Time-out Parameters	HEC Standard Services	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
874		X23 - SAP Mobile Platform (SMP)		
875		Implementation		
876	TO_MP_1.1.01	Installation of SMP Application Node(s) - Greenfield	HEC Standard Services	
877	TO_MP_1.1.02	Installation of Additional SMP Application Node(s) - Brownfield	HEC Optional Services	
878	TO_MP_1.1.03	Connection to backend System	HEC Standard Services	
879	TO_MP_1.1.04	Securing Application Platform	HEC Excluded Tasks	
880	TO_MP_1.1.05	Updating DB connection settings including DB connection passwords	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
881		Operations		
882	TO_MP_1.2.01	SMP Mobile/Agentry/Application Administration -Deploying Application -deleting Applications -Managing and Monitoring Application -Provisioning Application	HEC Excluded Tasks	
883	TO_MP_1.2.02	Starting / Stopping SMP Application Server	HEC Standard Services	
884	TO_MP_1.2.03	SMP Server availability and monitoring	HEC Standard Services	
885	TO_MP_1.2.04	Monitoring heap memory	HEC Excluded Tasks	
886		X25 - BPA by Redwood		
887		Operations		
888	TO_BP_1.1.01	Technical installation	HEC Standard Services	
889	TO_BP_1.1.03	License deployment	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
890	TO_BP_1.1.05	Connect central SAP BPA server system to remote systems within cloud environment	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
891	TO_BP_1.1.07	Monitoring of central BPA system	HEC Standard Services	
892	TO_BP_1.1.08	Job monitoring	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
893	TO_BP_1.1.09	User and role management	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
894	TO_BP_1.1.12	Initial job scheduling Setup	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
895	TO_BP_1.1.13	Modification of scheduling setup	HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
896	TO_BP_1.1.14	Re-Scheduling of jobs to remote system	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
897	TO_BP_1.1.15	Defining monitoring framework for jobs triggered via SAP BPA	HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
898		X28 - GK Software		
899		Setup and configuration		
900	TO_GK_1.1.01	Setup and manage GK Software directories	HEC Standard Services	
901	TO_GK_1.1.02	Create directory for master data file upload (if not already available)	HEC Standard Services	
902	TO_GK_1.1.03	Assist in copying various files related to GK software configuration to file system directories	HEC Standard Services	
903	TO_GK_1.1.04	Setup of dynamic takeovers in the structures	HEC Excluded Tasks	
904	TO_GK_1.1.05	Setup of structure level overwrites	HEC Excluded Tasks	
905	TO_GK_1.1.06	Setup NetWeaver Config tool directory structure	HEC Standard Services	
906	TO_GK_1.1.07	Change language after installation	HEC Standard Services	
907	TO_GK_1.1.08	Setup system level overwrite (system types)	HEC Excluded Tasks	
908	TO_GK_1.1.09	Configure customer specific organizational structure	HEC Excluded Tasks	
909	TO_GK_1.1.10	Configure basic Store Manager node	HEC Standard Services	
910	TO_GK_1.1.11	Install store templates	HEC Excluded Tasks	Provider to share copy files on the OS level.
911	TO_GK_1.1.12	Import of store templates into Store Manager	HEC Excluded Tasks	
912	TO_GK_1.1.13	Assign template to the main Store Manager structure	HEC Excluded Tasks	
913	TO_GK_1.1.14	Import config into Hybrid Infoserver	HEC Excluded Tasks	
914	TO_GK_1.1.15	Configure HANA JDBC datasource connection pooling	HEC Standard Services	
915	TO_GK_1.1.16	Deploy EPA files into SAP NetWeaver Portal	HEC Standard Services	
916	TO_GK_1.1.17	Create customer store structure	HEC Excluded Tasks	
917	TO_GK_1.1.18	Configure GK Store Manager	HEC Excluded Tasks	
918	TO_GK_1.1.19	Import Global Configuration for Store Manager (data container)	HEC Excluded Tasks	
919	TO_GK_1.1.20	Configure GK Software Store Manager for stores or country level overrides	HEC Excluded Tasks	Example: configuration of the POS Server it points to or LPS.
920	TO_GK_1.1.21	Import master data	HEC Excluded Tasks	
921	TO_GK_1.1.22	Configure GK ECON for Data import (defining the xml file for IDoc imports)	HEC Excluded Tasks	
922	TO_GK_1.1.23	Create and customize Reference Store (countries, district, stores)	HEC Excluded Tasks	
923	TO_GK_1.1.24	Create SAP NetWeaver datasource	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
924	TO_GK_1.1.25	Configure and assign data containers (Taxes, work groups, reasons of transactions etc.)	HEC Excluded Tasks	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
925	TO_GK_1.1.26	Configure SDC data containers (assign variants etc.)	HEC Excluded Tasks	
926	TO_GK_1.1.27	Import templates and activation manually (e.g. EC config template, heartbeat monitor)	HEC Excluded Tasks	
927	TO_GK_1.1.28	Configure reference customer organizational structure (during installation)	HEC Standard Services	Only the basic structure as per the setup procedures. The detailed functional structures is Customer / Project team responsibility.
928		Operations		
929	TO_GK_1.2.01	Assist customers with tasks in their area of responsibility, if OS access is required	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	In cases where the execution of tasks requires activities to be performed within the OS level and for which the customer is responsible according to this document. Customers and GK implementation partners will not get OS access to managed servers within the cloud environment. The service provider will support the customer, e.g. by taking over the tasks or by providing other methods to execute tasks. This line item only applies to infrequent/occasional assistance; projects requiring regular, longer and more general OS access for implementation, development and support cannot be supported via this line item. Extra service charge is calculated per server.
930	TO_GK_1.2.02	Configure Application level JDBC Datasources	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Each central application on SAP NetWeaver must be linked to a database by a datasource entry. This entry has to be set via NetWeaver Administrator one time per application and must be available before the first launch of the related application.
931	TO_GK_1.2.03	Modification of HTTP requests	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
932	TO_GK_1.2.04	Change application server parameters after handover	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Modifying standard settings to changing customer requirements.
933	TO_GK_1.2.05	Manage communication with the message server / application server using SSL	HEC Standard Services	
934	TO_GK_1.2.06	Definition of port ranges	HEC Standard Services	
935	TO_GK_1.2.07	GK Host Configuration via Portal Administration	HEC Standard Services	
936	TO_GK_1.2.08	Update by CDPL tool (Central Deployment update for Store components)	HEC Excluded Tasks	
937	TO_GK_1.2.09	Rebuild client	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	OS access required to run the scripts.
938	TO_GK_1.2.10	GK Software user management	HEC Excluded Tasks	
939	TO_GK_1.2.11	Map GK software users to SAP NetWeaver user management	HEC Excluded Tasks	
940	TO_GK_1.2.12	Backup and Restore - standard HANA & NW	HEC Standard Services	
941	TO_GK_1.2.13	Backup and Restore - sync after DB restore	HEC Excluded Tasks	
942	TO_GK_1.2.14	Synchronization of master data after database recovery	HEC Excluded Tasks	
943	TO_GK_1.2.15	Clean up obsolete content data and templates	HEC Excluded Tasks	
944	TO_GK_1.2.16	Define and implement log and trace strategy	HEC Standard Services	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
945	TO_GK_1.2.17	Monitor basic technical functions using monitoring environment	HEC Standard Services	
946	TO_GK_1.2.18	Monitor GK application using Enterprise Cockpit	HEC Excluded Tasks	
947	TO_GK_1.2.19	GK Business Process Monitoring	HEC Excluded Tasks	
948	TO_GK_1.2.20	Monitoring solution performance (node level performance using GK Performance Monitor)	HEC Excluded Tasks	Provider to support copying the files into working directories.
949	TO_GK_1.2.21	Analyze database using GK_PMON, GK_STATS	HEC Excluded Tasks	
950		Software Lifecycle Management for GK		
951	TO_GK_1.3.01	Implement updates to the managed GK solution (software packages commonly available via the SAP Service Marketplace)	HEC Standard Services	
952	TO_GK_1.3.02	Implement customer specific updates to the managed GK solution (software packages <u>not</u> commonly available via the SAP Service Marketplace)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
953	TO_GK_1.3.03	Upgrade of managed GK solution to the next higher major software version	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
954		X29 - SAP TREX		
955		TREX operations		
956	TO_TREX_1.1.14	Post-Installation Configuration and Connection TREX with an Application (Java or ABAP)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	This includes activities Post-Installation Configuration and Connection between TREX and an Application (Java or ABAP) as is described in Official Product documentation (help.sap.com)
957	TO_TREX_1.1.15	Administer TREX indices	HEC Excluded Tasks	
958	TO_TREX_1.1.16	Administer Taxonomies	HEC Excluded Tasks	
959	TO_TREX_1.1.17	Monitoring of status of TREX queues	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Manual monitoring; effort based per execution.
960	TO_TREX_1.1.18	Delete faulty documents in TREX queues	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
961		X30 - SAP Predictive Analytics (SPA)		
962		SAP Predictive Analytics - Setup and Configuration		
963	TO_SPA_1.1.01	Install Predictive (Automated) Server	HEC Standard Services	
964	TO_SPA_1.1.03	Install Predictive Factory	HEC Standard Services	
965	TO_SPA_1.1.04	Install SAP HANA Automated Predictive Library	HEC Standard Services	
966	TO_SPA_1.1.05	Predictive Analytics Client Install and Connectivity	HEC Standard Services	
967	TO_SPA_1.1.06	Predictive Analytics - Data Source Setups for Automated Server	HEC Standard Services	Install and setup ODBC drivers for HANA as data source. Additional data sources setup will be charged in addition as EMS.
968	TO_SPA_1.1.14	Predictive Analytics - Data Source Setups for Automated Server (additional)	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Install and setup ODBC drivers for HANA as data source. Additional data sources setup will be charged in addition as EMS.
969	TO_SPA_1.1.07	Automated Analytics/Predictive Factory - Authentication setup and configuration	HEC Standard Services	
970	TO_SPA_1.1.08	Automated Analytics/Predictive Factory - Authorization Setup	HEC Standard Services	
971	TO_SPA_1.1.09	Automated Analytics/Predictive Factor - SSL/TLS Secure Communication	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
972	TO_SPA_1.1.10	Automated Analytics/Predictive Factory - Single Sign On (SSO) with Windows Active Directory	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.
973	TO_SPA_1.1.11	Setting Up Modeling Servers in Predictive Factory	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
974	TO_SPA_1.1.12	Executing external commands/program from Predictive Factory	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
975	TO_SPA_1.1.13	Implement additional hosts setup for High Availability	HEC Optional Services	
976		Other Services		
977	TO_SPA_1.2.01	Predictive Analytics Integrator Setup	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
978	TO_SPA_1.2.02	Setup and configure Predictive Analytics Models	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
979		X31 - SAP Solution Manager		
980		TREX operations		
981	TO_SOLM_1.1.01	Setup and configuration of ITSM	HEC Excluded Tasks	
982		X33 - SAP Test Data Migration Server (TDMS)		
983		Installation and Configuration		
984	TO_TDMS_1.1.01	Setup of Control System (TDMS server) and setup of receiver system (target server)	HEC Standard Services	
985	TO_TDMS_1.1.02	Patching of the sender systems (source system)	HEC Standard Services	
986	TO_TDMS_1.1.03	TDMS initial configuration, client creation, setup RFC connections, setup authorizations, Shell Creation	HEC Standard Services	
987	TO_TDMS_1.1.04	Setting scrambling data, customizing, using BPL modeler	HEC Excluded Tasks	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
988		X34 - SAP PowerDesigner		
989		Operational Setup		
990	TO_PWR_1.1.01	Install components (Portal, Repo, Proxy)	HEC Standard Services	Install and setup SAP PowerDesigner repository including any support package and patch updates. SAP ASE database will be setup as repository server. Install and configure Apache Tomcat Server on portal server for remote web access. Install and setup SAP PowerDesigner admin server as staging server for initial deployment. Export/import of SAP PowerDesigner Web application files to portal server.
991	TO_PWR_1.1.02	Install Proxy	HEC Standard Services	Install and setup SAP PowerDesigner proxy server - will be installed on same server as SAP PowerDesigner admin server. This is an optional component.
992	TO_PWR_1.1.03	Setup and configuration	HEC Standard Services	Install and setup ODBC drivers for SAP HANA as data source. Additional data sources setup will be charged as EMS. Setup and configure authentication for portal and repository servers. Authorization setup - provision specific user and roles for SAP PowerDesigner portal and repository Access.
993	TO_PWR_1.1.04	Portal Server - SSL/TLS Setup	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Setup secure communication through SSL/TLS configuration.
994	TO_PWR_1.1.05	Portal Server - Single Sign On (SSO) with Windows Active Directory	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.
995		X35 - bowbridge Anti-Virus for SAP Solutions		
996		Installation and Configuration		
997	TO_BB_AV_1.1.01	Verify files signature or comparing checksum	HEC Standard Services	Check that bowbridge software is original and unmodified.
998	TO_BB_AV_1.1.02	Install bowbridge software	HEC Standard Services	
999	TO_BB_AV_1.1.03	Configure application layer	HEC Excluded Tasks	
1,000	TO_BB_AV_1.1.04	Update bowbridge software	HEC Standard Services	Customer must inform provider and provide software update.
1001		X36 - SAP Billing and Revenue Innovation Management		
1002		SAP Convergent Charging		
1003		Installation and Configuration		
1,004	TO_BRIM_CC_1.1.01	Install SAP Convergent Charging database	HEC Standard Services	
1,005	TO_BRIM_CC_1.1.02	Install SAP Convergent Charging core server	HEC Standard Services	
1,006	TO_BRIM_CC_1.1.03	Post Installation steps	HEC Standard Services	
1007		Operations		



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
1,008	TO_BRIM_CC_1.2.01	Start/stop system	HEC Standard Services	
1,009	TO_BRIM_CC_1.2.02	Apply Updates	HEC Standard Services	
1,010	TO_BRIM_CC_1.2.03	Upgrade	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1,011	TO_BRIM_CC_1.2.04	Monitoring	HEC Standard Services	
1012		SAP Convergent Mediation by DigitalRoute		
1013		Installation and Configuration		
1,014	TO_BRIM_CM_1.1.01	Install SAP Convergent Mediation Database	HEC Standard Services	
1,015	TO_BRIM_CM_1.1.02	Install SAP Convergent Mediation Control Zone & Execution Zone setup	HEC Standard Services	
1,016	TO_BRIM_CM_1.1.03	Post Installation steps	HEC Standard Services	
1017		Operations		
1,018	TO_BRIM_CM_1.2.01	Disaster Recovery procedures and testing for reprocessing of events	HEC Excluded Tasks	
1,019	TO_BRIM_CM_1.2.02	Deletion of collected files after checkpoint batch	HEC Excluded Tasks	
1,020	TO_BRIM_CM_1.2.03	Push Data Records from customer sFTP server to cloud environment sFTP server	HEC Excluded Tasks	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
1021		X37 - SAP Manufacturing Integration and Intelligence		
1022		Implementation & Configuration		
1,023	TO_MII_1.1.01	Setup Plant Connectivity (PCo) for SAP Overall Equipment Effectiveness (OEE) Functionality	HEC Excluded Tasks	
1,024	TO_MII_1.1.02	Setup ALE user	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,025	TO_MII_1.1.03	Establish ALE connection to customer's ERP system	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,026	TO_MII_1.1.04	Execute CTC Template for SAP Overall Equipment Effectiveness (OEE) Management: SAP NetWeaver	HEC Excluded Tasks	
1,027	TO_MII_1.1.05	Execute CTC Template for SAP Overall Equipment Effectiveness (OEE) Management: Integration Interfaces	HEC Excluded Tasks	
1,028	TO_MII_1.1.06	Configure SAP Overall Equipment Effectiveness Management	HEC Excluded Tasks	
1,029	TO_MII_1.1.07	Create XMII Users and perform Roles Assignments	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1030		X38 - SAP Manufacturing Execution		
1031		Operational Setup		
1,032	TO_ME_1.1.01	Execute CTC Template for SAP NetWeaver Engine Configuration	HEC Standard Services	
1,033	TO_ME_1.1.02	Execute CTC Template for SAP Database Setup	HEC Standard Services	
1,034	TO_ME_1.1.03	Execute CTC Template for SAP ME Configuration	HEC Excluded Tasks	
1,035	TO_ME_1.1.04	Execute SAP ME Scripts	HEC Excluded Tasks	
1,036	TO_ME_1.1.05	Perform SAP ME and ERP Integration	HEC Excluded Tasks	
1,037	TO_ME_1.1.06	Install Adobe Document Services	HEC Optional Services	
1038		X39 - R Integration		
1039		Operational Setup		
1,040	TO_RINT_1.1.02	Install R Integration Components	HEC Standard Services	R, R Server, and dependent packages are installed independently from the SAP HANA database.
1,041	TO_RINT_1.1.03	Perform technical post-installation tasks	HEC Standard Services	Setup SAP HANA configuration for index and XS Engine parameters for R Integration. Setup R Server authentication and authorization. Provision cloud environment specific user and roles for R Integration. Configure and setup R Integration nodes for each tenant database including, service initialization, cockpit access, delivery units, and verification.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
1,042	TO_RINT_1.1.04	R Integration - Additional hosts setup for High Availability (HA)	HEC Optional Services	Add and setup R integration additional nodes. High Availability setup and configuration involves single or multi-tenant database setup including R Integration group setup. For R integration LoadBalancer setup, check R&R Section "LoadBalancer".
1043	X40 - SAP SQL Anywhere - Mobilink			
1044	Implementation & Configuration			
1,045	TO_SQLA_ML_1.1.01	Install and activate SQLAnywhere Mobilink Services	HEC Standard Services	Install and setup of SQLA Mobilink Server including any support package and patch updates. Import of Mobilink system object to consolidated database. Note: Prior to Mobilink install, an SAP HANA database should already be provisioned as a consolidated database.
1,046	TO_SQLA_ML_1.1.02	Perform technical post-installation tasks	HEC Standard Services	Activate Mobilink roles, privileges and object access for monitoring and operations. Provision cloud environment specific user and roles. Configure and setup Mobilink nodes for each SAP HANA tenant database including, service initialization, delivery units and verification.
1,047	TO_SQLA_ML_1.1.03	Mobilink - Single Sign On (SSO) Setup	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.
1,048	TO_SQLA_ML_1.1.04	Mobilink - Additional Host Setup for High Availability (HA)	HEC Optional Services	Add and configuring additional hosts for high availability setup. For multi-tenant setup, Mobilink nodes are added exclusively to each tenant database. For Mobilink LoadBalancer setup, check R&R Section "LoadBalancer".
1,049	TO_SQLA_ML_1.1.05	Setup and configure synchronization scripts	HEC Excluded Tasks	Configure synchronization script for upload and download of data between remote and consolidated databases.



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
1050		X41 - SAP Analytics Cloud		
1051		SAP Analytics Cloud Tenant		
1,052	TO_SAC_1.1.01	Establish connection between SAP Analytics Cloud and HEC managed system	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,053	TO_SAC_1.1.02	Setup Single Sign On (SSO) communication with Principle Propagation from SAP Analytics Cloud to SAP S/4HANA	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.
1,054	TO_SAC_1.1.03	Creation or change of user/roles or SAP as Identity Provider	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1055		SAP Analytics Cloud Agent		
1,056	TO_SAC_1.2.01	Install SAP Analytics Cloud Agent	HEC Standard Services	
1,057	TO_SAC_1.2.02	Configure SAP Analytics agent, Cloud Connector, Java Connector	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,058	TO_SAC_1.2.03	Configure SAP Analytics agent connection with other systems like SAP S/4HANA, ERP	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,059	TO_SAC_1.2.04	Configure SAP Analytics Cloud with SAP Analytics agent	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1060		SAP S/4HANA Tasks for SAP Analytics Cloud		
1,061	TO_SAC_1.3.01	Configure STRUST for SSL settings	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,062	TO_SAC_1.3.02	Activate Embedded BW content (BEx queries etc.)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,063	TO_SAC_1.3.03	Enable INA for Analytics Cloud	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,064	TO_SAC_1.3.04	Enable CORS Analytics Cloud and edit allowlist	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1065		X42 - SAP Cloud Platform		
1066		Global Account & Subaccount(s)		
1,067	TO_SCP_1.1.01	Create or change of subaccounts related to HEC landscape (DEV, QAS, PRD etc.)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,068	TO_SCP_1.1.02	Create or change of entitlements in the Global Account	HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
1,069	TO_SCP_1.1.03	Activate Cloud Platform service(s)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,070	TO_SCP_1.1.04	Create or change of user/roles	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,071	TO_SCP_1.1.05	Create or change of connectivity destinations	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,072	TO_SCP_1.1.06	Manage of certificates (issue, import, export)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,073	TO_SCP_1.1.07	Create or change Custom Application Domains Settings	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1074		Identity Provider		
1,075	TO_SCP_1.2.01	Configure Local Provider Settings	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,076	TO_SCP_1.2.02	Configure Trust Relationships and Federation Settings for external Identity Providers (e.g. Microsoft, Okta)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,077	TO_SCP_1.2.03	Configure Trust Relationships and Federation Settings for SAP Identity Authentication Tenant	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,078	TO_SCP_1.2.04	Configure Principle Propagation SAP Cloud Platform, SAP Cloud Connector and SAP S/4HANA	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,079	TO_SCP_1.2.05	Activate CERTRULE for the purpose of client based certificates	HEC Enhanced Managed Services ("EMS") that can be performed by customer	If an existing SAP S/4HANA system is to be used for the integration.
1,080	TO_SCP_1.2.06	User Migration to Cloud Platform Identity Authentication Tenant	HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
1081		SAP S/4HANA Tasks for SAP Cloud Platform		
1,082	TO_SCP_1.3.01	Configure STRUST for SSL settings	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,083	TO_SCP_1.3.02	Activate ICF nodes required for sample Apps to be enabled	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,084	TO_SCP_1.3.03	Activate OData Services required for sample Apps to be enabled	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,085	TO_SCP_1.3.04	Enterprise Search Enablement (ESH)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,086	TO_SCP_1.3.05	Create authorization role in backend system for OData processing	HEC Enhanced Managed Services ("EMS") that can be performed by customer	For relevant sample Apps.
1,087	TO_SCP_1.3.06	Activate Embedded BW content for Analytical Fiori Apps	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,088	TO_SCP_1.3.07	Enable INA for Analytical SAP Fiori Apps	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,089	TO_SCP_1.3.08	Establish backend connectivity to SAP Cloud Platform Forms by Adobe	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Enables generation of print and interactive forms using Adobe Document Services (ADS); includes mandatory baseline configuration.
1090		Portal		
1,091	TO_SCP_1.4.01	Create or change SAP Fiori Launchpad sites (Site Directory & Site Settings)	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,092	TO_SCP_1.4.02	Create or change roles	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,093	TO_SCP_1.4.03	Create or change groups including role assignment	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,094	TO_SCP_1.4.04	Create or change catalogs including role assignment	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,095	TO_SCP_1.4.05	Enable SAP Fiori sample apps and perform required connectivity setup	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1096		X43 - SAP Forms by Adobe (Adobe Document Services/ADS)	SAP Cloud Connector and SAP Cloud Platform are prerequisites.	
1097		Installation and Configuration		
1,098	TO_ADS_1.1.01	Testing	HEC Enhanced Managed Services ("EMS") that can be performed by customer	FP_PDF_TEST_00; FP_CHECK_DESTINATION_SERVICE; FP_TEST_03; FP_TEST_IA_01; FP_CHECK_HTTP_DATA_TRANSFER



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
1,099	TO_ADS_1.1.02	Data Migration from on premise ADS to ADS on SCP	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1,100	TO_ADS_1.1.03	Configure Fonts and Print Information using XDC and XCI Files	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1,101	TO_ADS_1.1.04	Configure document security	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1,102	TO_ADS_1.1.05	Configure job profiles	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
1103		X44 - SAP Enterprise Threat Detection (ETD)		
1104		Installing SAP Enterprise Threat Detection		
1,105	TO_ETD_1.1.01	Create specific SAP HANA Tenant for SAP Enterprise Threat Detection (ETD)	HEC Standard Services	
1,106	TO_ETD_1.1.02	Install SAP HANA Streaming Analytics Option (Formerly Smart Data Streaming/SDS)	HEC Standard Services	For cluster setup see SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)
1,107	TO_ETD_1.1.03	Install of Kafka	HEC Excluded Tasks	Customer must provide Kafka cluster
1108		Creation of User and Assigning Authorizations		
1,109	TO_ETD_1.2.01	Create ETD service users in SAP HANA independent of source systems	HEC Standard Services	Users to be created: ETD_DATA_COMMITTER, ETD_DART_COMMITTER;SDS_ADMIN;ETD_BATCH
1,110	TO_ETD_1.2.02	Create dependent source system user: SDS_RT_<SID>	HEC Excluded Tasks	
1111		Post Installation		
1,112	TO_ETD_1.3.01	Finish installation	HEC Excluded Tasks	
1,113	TO_ETD_1.3.02	Provision initial ETDAdmin Administrator	HEC Standard Services	
1,114	TO_ETD_1.3.03	Define namespaces	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1115		Installing SAP Enterprise Threat Detection on Streaming Analytics Option (Formerly Smart Data Streaming/SDS)		
1,116	TO_ETD_1.4.01	Import SAP HANA Streaming Analytics Option ETD Project	HEC Excluded Tasks	See SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)
1,117	TO_ETD_1.4.02	Create data services for SAP HANA	HEC Enhanced Managed Services ("EMS") that can be performed by customer	See SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)
1,118	TO_ETD_1.4.03	Configure and deploy projects to the Cluster Workspace	HEC Enhanced Managed Services ("EMS") that can be performed by customer	See SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)
1,119	TO_ETD_1.4.04	Start Streaming Web Service	HEC Enhanced Managed Services ("EMS") that can be performed by customer	See SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)
1120		On Demand Tasks		
1,121	TO_ETD_1.5.01	Install ETD Adapters	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1,122	TO_ETD_1.5.02	Install warm storage adapter	HEC Enhanced Managed Services ("EMS") that can be performed by customer	
1,123	TO_ETD_1.5.03	Adjust performance settings for aggregates	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
1,124	TO_ETD_1.5.04	Enable configuration checks	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1,125	TO_ETD_1.5.05	Enable custom configuration checks	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1,126	TO_ETD_1.5.06	Install ETD log collector	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1,127	TO_ETD_1.5.07	Encrypt communications between log provider and the streaming web service	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1,128	TO_ETD_1.5.08	Encrypt communications between non-SAP log provider	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1,129	TO_ETD_1.5.09	Encrypt communications between log providers and the web service provider	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1,130	TO_ETD_1.5.10	Monitor performance of the log learning adapter	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1,131	TO_ETD_1.5.11	Archive and import of log data	HEC Enhanced Managed Services ("EMS") that can be performed by customer	Compilation of project should be executed by SAP if customer performs this task for themselves.
1,132	TO_ETD_1.5.12	Configure provisioning logs from SAP NetWeaver ABAP based system	HEC Excluded Tasks	
1,133	TO_ETD_1.5.13	Configure provisioning logs from SAP HANA-based system	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Requires modification of audit log parameters and possible mount of filesystems. Not possible to configure with filesystems outside cloud environment.
1,134	TO_ETD_1.5.14	Configure provisioning logs from SAP NetWeaver JAVA-based system	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Requires handling of <SID>adm password
1,135	TO_ETD_1.5.15	Configure provisioning logs from other systems including OS	HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
1136		Other Tasks		
1,137	TO_ETD_1.6.01	Configure knowledge base	HEC Excluded Tasks	
1,138	TO_ETD_1.6.02	Enter context information	HEC Excluded Tasks	
1,139	TO_ETD_1.6.03	Define locations	HEC Excluded Tasks	
1,140	TO_ETD_1.6.04	Publishing Alerts	HEC Excluded Tasks	



#	Identifier	Task	Responsibility Project HEC	Remarks Project HEC
1141		X45 - Zscaler ZPA Connector		
1142		Implementation & Configuration		
1143	TO_ZPA_1.1.01	Install ZPA Connector and required OS packages	HEC Standard Services	
1144	TO_ZPA_1.1.02	Configure ZPA Connector	HEC Standard Services	
1145	TO_ZPA_1.1.03	Allowlist ZPA Connector IP addresses in LoadBalancer	HEC Standard Services	
1146	TO_ZPA_1.1.04	Configure connector in ZPA Admin Console	HEC Excluded Tasks	
1147	TO_ZPA_1.1.05	Provision ZPA Connector provisioning keys	HEC Excluded Tasks	
1148	TO_ZPA_1.1.06	Install client software	HEC Excluded Tasks	
1149	TO_ZPA_1.1.07	Client and end-user support	HEC Excluded Tasks	
1150	TO_ZPA_1.1.08	Sizing of required number of connectors	HEC Excluded Tasks	
1151	TO_ZPA_1.1.09	Integration with customer's IDP (SAML)	HEC Excluded Tasks	
1152	TO_ZPA_1.1.10	Install provisioning keys	HEC Standard Services	
1153		X46 - SAP Omnichannel Banking (OCB)		
1154		Implementation & Configuration		
1155	TO_OCB_1.1.01	Install Tomcat	HEC Optional Services	Customer provides Tomcat relevant to OCB
1156	TO_OCB_1.1.02	Install OCB software Retail Banking or Business Banking (Digital)	HEC Standard Services	
1157	TO_OCB_1.1.03	Deploy Business Central and Platform and customized .war files	HEC Excluded Tasks	Provider performs task for customer for SAP product .war files and Customer provided customized war files
1158	TO_OCB_1.1.04	Develop .war files	HEC Excluded Tasks	