



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 Customer Engagement Service Manager ("CESM")

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 the HEC delivery organization, 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 the HEC delivery organization
HEC Enhanced Managed Services¹ ("EMS") that can be performed by customer	HEC EMS services include tasks/services that a customer can perform, but the customer may elect to have SAP ² deliver.
HEC Enhanced Managed Services¹ ("EMS") that <u>cannot</u> be performed by customer	HEC EMS services 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.
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. 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 CAA or CESM.

All tasks and work efforts not purchased by customer or not provided by 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 Projects
<>	task is different between HEC Production and HEC Projects; 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



#	Task	D	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	
SM1	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	
SM2	Account Management			
SM3	Conduct Delivery & Operations Kick-Off -Review HEC Support Manual -Schedule Landscape Review and Scope Alignment -Detailed Engagement & Operations Review		HEC Standard Services	
SM4	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	
SM5	Capacity Management Planning: Develop quarterly capacity plan based on technical capacity management review.		HEC Standard Services	
SM6	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
SM7	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	
SM8	Service Request Management - Technical Support			
SM9	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
SM10	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
SM11	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.
SM12	Create service plan for reoccurring and proactive HEC EMS tasks		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
SM13	OSS / Support Portal Management			
SM14	Create/modify/delete OSS user		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Handling of the initial S-user cannot be covered under this line item; the initial S-User needs
SM15	Assign authorizations		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SM16	Request developer keys		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Developer keys for admin purposes (e.g. implementation of patches and SAP notes) need to be provided to HEC by the customer
SM17	Request and manage object keys		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SM18	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	
SM19	Qualifications Services			
SM20	Qualification deliverables (project and lifecycle documentation)		not offered	
SM21	Personnel qualification and training as mandatory requirement for administrator access to regulated industries systems		not offered	
SM22	Onboarding / system setup with additional Installation Qualification		not offered	
SM23	Process Services			
SM24	Documents and records management for regulated industries		not offered	
SM25	Change & Configuration Management for regulated industries		not offered	
SM26	Problem Management for regulated industries		not offered	
SM27	Audits and Periodic Review		not offered	
SM28	System Decommissioning for regulated industries		not offered	
IM1	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	
IM2	Data Center Management			
IM3	Data Center Management		HEC Standard Services	HEC is operated either in DC facilities owned by the respective HEC service provider or in rented co-location facilities
IM4	Network Management			
IM5	Manage remote connection between the hosted system landscape and SAPs support infrastructure		HEC Standard Services	Service initiated after formal transition to HEC service provider
IM6	Separation of systems in HEC customer landscape into more than one network segment		not offered	
IM7	Hardware Operations			Applies to equipment managed by HEC service provider
IM8	Maintain valid vendor maintenance agreements		HEC Standard Services	
IM9	Use vendor proactive support capabilities to help identify potential failures		HEC Standard Services	
IM10	Schedule hardware maintenance (as part of planned activities or as a result of hardware failures)		HEC Standard Services	
IM11	Operational hardware monitoring (availability, critical operations parameters)		HEC Standard Services	
IM12	Monitor disk capacity		HEC Standard Services	Subject to additional fees for additional capacity
IM13	Monitor server capacity		HEC Standard Services	Subject to additional fees for additional capacity
IM14	Monitor network utilization		HEC Standard Services	



#	Task	D	Responsibility Project HEC	Remarks Project HEC
IM15	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).
IM16	Scale compute capacity (memory & CPU)		HEC Optional Services	
IM17	Storage Management			
IM18	Manage data files, file systems and disks per HEC standards and practices		HEC Standard Services	
IM19	Scale storage capacity		HEC Optional Services	
IM20	Enable SnapLock/WORM/Immutability capability for archiving use cases		not offered	
IM21	Operating System			
IM22	Create and maintain OS users and groups		HEC Standard Services	HEC service provider access only, no privileged access to operating system by customer
IM23	Inform customer regarding security incidents		HEC Standard Services	
IM24	Configure OS parameters		HEC Standard Services	
IM25	Troubleshoot operating system problems, monitor system log and file systems		HEC Standard Services	
IM26	Work with vendor to resolve operating system issues		HEC Standard Services	
IM27	Monitoring of swap and page areas		HEC Standard Services	
IM28	Monitoring of memory load		HEC Standard Services	
IM29	Software Lifecycle Management of operating system		HEC Standard Services	
IM30	System Startup/Shutdown			
IM31	Perform scheduled startup/shutdown of hardware and OS		HEC Standard Services	
IM32	Restart the hardware/OS after failure		HEC Standard Services	
IM33	Backup/Restore			
IM34	Perform standard file system and database backups		HEC Standard Services	Per HEC standards, or according to specific terms of the HEC Agreement
IM35	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
IM36	Provide non-standard backup services (e.g. extended retention period for long-term backups)		not offered	Offered options are described in separate service descriptions and are subject to change; not every theoretically possible combination of backup frequency and retention period is offered
IM37	Monitor backup processes		HEC Standard Services	
IM38	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
IM39	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
IM40	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
IM41	Validate logical integrity and consistency of restored information		HEC Excluded Tasks	
IM42	Infrastructure integration			
IM43	Integration of customer Active Directory		HEC Excluded Tasks	Customer must engage SAP Consulting for services pertaining to SSO solutions for HEC
IM44	Provide access to systems/resources within customer infrastructure		HEC Excluded Tasks	If required to fulfil agreed contractual obligations



#	Task	D	Responsibility Project HEC	Remarks Project HEC
IM45	File transfer capabilities: CIFS shares			
IM46	Provide CIFS (aka Samba) share on LINUX		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
IM47	User and access management		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Once/initially when share is created
IM48	Creation and maintenance of folder structure on shares		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
IM49	Ensure up-to-date anti virus protection on end user equipment connecting to the provided shares		HEC Excluded Tasks	
IM50	Implement virus protection on server		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
IM51	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
IM52	Managed SFTP Server			To be installed on existing application server in HEC landscape
IM53	Configuration of sftp daemon		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Only available on Linux
IM54	Create and maintain sftp user accounts and groups		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Up to 10 users
IM55	Manage file systems		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
IM56	Provide user list		HEC Excluded Tasks	
IM57	Creation and deletion of files		HEC Excluded Tasks	
IM58	Management of Wide Area Network			
IM59	Provide network infrastructure at customer data center/site		HEC Excluded Tasks	
IM60	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
IM61	Determine appropriate size and purchase network connection between customer and HEC sites; manage telecommunication provider/ISP		HEC Excluded Tasks	
SH1	C1 - Database Management SAP HANA			
SH2	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.	
SH3	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
SH4	Plan and perform file system extensions for e.g. backup activities		HEC Standard Services	
SH5	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
SH6	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 may also be provided via SAP Enterprise Support services
SH7	Design table partitioning strategy/architecture		HEC Excluded Tasks	
SH8	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
SH9	Perform rowstore / column store migration		HEC Standard Services	Executing party to be mutually agreed between HEC and customer; migration of larger SAP tables to be done by HEC; customer can perform task on own tables if desired; additional downtime required per customer approval
SH10	Monitor database for technical issues; analyze and resolve technical database failures		HEC Standard Services	
SH11	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	
SH12	Maintain technical configuration parameters for SAP HANA and SAP HANA XS based on SAP and HEC standards and recommendations		HEC Standard Services	
SH13	Start/stop database		HEC Standard Services	
SH14	Add/remove SAP HANA node to adjust SAP HANA capacity		HEC Optional Services	For HANA scale-out configurations only
SH15	Creation of additional schema for existing SAP HANA datamart		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
SH16	Renaming of SAP HANA database (ID, instance number)		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
SH17	Change SAP HANA database architecture (single node to multi node or vice versa)		HEC Optional Services	
SH18	Management of standby databases (HANA System Replication) for high availability		not offered	Performed only for productive systems; only if dedicated standby databases are explicitly included as part of the solution in the contract. Not in scope for multi-node setups. Failover tests are not performed on a regular basis per system
SH19	Update SAP HANA database software and client		HEC Standard Services	Additional downtime for maintenance required; this task does not include the usage of advanced update approaches such as ZDO etc.
SH20	Implement updates to the managed HANA DATABASE Patching using Near Zero Downtime Option of Software Update Manager (ZDO)		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Available from SAP HANA SPS 12 onwards
SH21	Update and maintain SAP HANA Studio		HEC Standard Services	Applies to SAP HANA Studio installed within HEC; the customer may operate SAP HANA Studio instances for their own purposes for which they would be responsible
SH22	SAP HANA Transports Management Setup		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH23	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
SH24	Identify, analyze and optimize expensive SQL-statements to improve application performance		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH25	System troubleshooting, e.g. blocked transactions, to overcome issues and bring SAP HANA back to normal state of operations		HEC Standard Services	
SH26	Create/modify users for HANA modelling in the SAP HANA Studio		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH27	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
SH28	User, roles and permissions management for technical and administration users		HEC Standard Services	Technical users: e.g. users delivered and used by SAP HANA
SH29	Perform database backups (regular full backups and log backups)		HEC Standard Services	Per HEC backup policy
SH30	Restore and recover SAP HANA after technical issues		HEC Standard Services	Restores on customer request provided at additional costs.
SH31	dbcc (database consistency check)		HEC Standard Services	
SH32	Implement SAP HANA database encryption on SAP HANA database already installed in HEC		not offered	Downtime required for re-installation of database; potential additional storage consumption is subject to a change request (CR)
SH33	Operate encrypted HANA database		not offered	



#	Task	D	Responsibility Project HEC	Remarks Project HEC
SH34	SAP HANA XS			
SH35	Maintain technical configuration parameters for SAP HANA XS based on SAP and HEC standards and recommendations		HEC Standard Services	
SH36	Maintain Application Runtime Configurations		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH37	Manage Trust Relationships		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH38	Maintain SAML Providers		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH39	Maintain SMTP Server Configurations		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH40	Maintain HTTP Access to SAP HANA		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH41	Maintain User Self Service Tools		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH42	Schedule XS Jobs		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH43	Maintain Translation Text Strings		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH44	Maintain HTTP Traces for SAP HANA XS Applications		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH45	Maintain the SAP HANA XS Advanced Model Run Time		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH46	SAP HANA XSA		Extended HANA feature beyond SPS08 baseline; not included in standard HEC service for SAP HANA	
SH47	Installation along with HANA Server		HEC Optional Services	
SH48	Install XSA Components as an add-on for already installed HANA Server		HEC Optional Services	
SH49	Setup/Configuration of XSA for HANA Development at customer side		HEC Excluded Tasks	
SH50	Configuration of XS-CLI Tool for HANA Development		HEC Excluded Tasks	
SH51	User management for HANA Development		HEC Excluded Tasks	
SH52	SAP HANA: Enterprise Information Management (EIM)		Extended HANA feature beyond SPS08 baseline; not included in standard HEC service for SAP HANA	
SH53	Setup		Technical Set Up Only - Not Application Set Up	
SH54	Enable EIM server processes		HEC Optional Services	
SH55	Activate EIM roles and import EIM Delivery Units		HEC Optional Services	
SH56	Configure Data Provisioning Proxy		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	The Data Provisioning Proxy is an XS application that acts as a proxy to provide communication between the Data Provisioning Agent and Data Provisioning Server. Only applicable for a hybrid scenario with SAP HANA in HCP and DP Agent in HEC).
SH57	Install Address Cleansing Packages		HEC Optional Services	
SH58	Install and register DP agent		HEC Optional Services	
SH59	Technically enable EIM application services for data replication and transformation		HEC Optional Services	
SH60	EIM DB backup		HEC Optional Services	
SH61	EIM - FlowGraph jobs backup		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Backups are performed using HANA Studio
SH62	EIM - Replication task backup		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Backups are performed using HANA Studio
SH63	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
SH64	Configure & Enable XS Engine for Data Replication		HEC Optional Services	Webdispatcher.ini configuration is updated with additional profile parameter for Tenant DB XS engine
SH65	Configure & update HEC-DNS list with EIM XS Engine Alias entry		HEC Optional Services	DP Server XS Engine alias name must be updated in customer DNS server
SH66	Create remote source SDA for Federation/Replication		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Using Smart Data Access, create remote source to query seldom used data from an external system without the need to copy it into HANA and persist beforehand



#	Task	D	Responsibility Project HEC	Remarks Project HEC
SH67	SAP HANA: Dynamic Tiering (DT)		Extended HANA feature beyond SPS08 baseline; not included in standard HEC service for SAP HANA	
SH68	Operational Setup			
SH69	HANA-DT operational setup: Install and technically configure HANA DT, add DT Host, Import DT delivery units, maintain technical authorizations		HEC Optional Services	
SH70	Optional Services			
SH71	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
SH72	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	
SH73	SAP HANA: Smart Data Streaming (SDS)		Extended HANA feature beyond SPS08 baseline; not included in standard HEC service for SAP HANA	
SH74	Operational Setup			
SH75	HANA SDS operational setup		HEC Optional Services	Install and Configure HANA SDS, Add SDS Host, Import DT Delivery Units, Authorizations, Cockpit Activation
SH76	Installing Smart Data Streaming Package		HEC Optional Services	
SH77	Adding Smart Data Streaming host		HEC Optional Services	
SH78	Setup streaming authorization		HEC Optional Services	Activate smart data streaming roles, privileges and object access for monitoring and operations
SH79	Optional Operational Set-up Services			
SH80	Configuration of streaming cluster		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SH81	Configure SDS for high availability by adding multiple SDS nodes.		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Increased infrastructure consumption is subject to a change request (CR) and may result in additional service fees
SH82	Optional Services			
SH83	SDS - project backups		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Backups are performed using HANA Studio
SH84	Streaming Lite setup		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Streaming lite is optional and not required as part of a standard smart data streaming installation. The streaming lite package is downloadable as a separate component only. Streaming lite is designed to deploy streaming projects on remote gateway devices
SH85	Create and deploy SDS streaming projects		HEC Excluded Tasks	Using HANA Studio, create and deployed SDS project for data streaming to HANA and other external sources.
SH86	Monitor Smart Data Streaming objects and projects		HEC Excluded Tasks	Monitoring Smart Data Streaming objects and projects using HANA/ESP Cockpits
SH87	SAP HANA: Multiple Database Containers (MDC)		Extended HANA feature beyond SPS08 baseline; not included in standard HEC service for SAP HANA	
SH88	Operational Setup			
SH89	Install HANA MDC (HANA server, Client, AFL, Runtime Libraries and Studio)		HEC Optional Services	
SH90	Creation of technical users		HEC Optional Services	
SH91	Convert an SAP HANA System to support Multitenant Database Containers		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
SH92	Creation or deletion of additional tenants for application or for datamart scenarios		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Creation of tenants leads to additional infrastructure consumption and might require a change request (CR)
SH93	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
SH94	Scale out of tenant database		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	SAP BW systems only
SH95	Tenant Copy/Move Preparation, Checks, Certificates, Pre-Steps, Move/Copy via replication, post processing steps.		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.
SH96	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	
SH97	Cross-Database authorization in MDC databases to facilitate cross-DB queries		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
SH98	Auditing: Creating and enabling audit policies for systemdb and each tenant db		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
SH99	Data storage: DB-specific encryption keys		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	SSFS Master Key Change
SH100	Data storage: DB-specific encryption keys (SSFS Master Key) Change		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
SH101	DB-specific SSL configuration on the SAP HANA Server for client server communication		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
SH102	Change isolation level		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	From high to low isolation or vice versa; effort and downtime requirement depend on circumstances, e.g. whether HA/DR is implemented for the respective database
SH103	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.
SH104	Restore of individual tenant		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
SH105	Authorization: Management of system privileges and tenant DB privileges		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
DB1	C2 - Database Management		excluding SAP HANA and Sybase IQ which are described in the respective sections	
DB2	Database operations			
DB3	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
DB4	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
DB5	Perform database extensions to increase database capacity		HEC Standard Services	Increased consumption will be charged according to contractual Agreement
DB6	Monitor table extension parameters to avoid issues		HEC Standard Services	
DB7	Monitor database for technical issues; analyze and resolve technical database failures		HEC Standard Services	
DB8	Schedule periodic statistical database collectors to generate statistical performance data		HEC Standard Services	
DB9	Reorganize database logs to free up space		HEC Standard Services	
DB10	Maintain/change database parameters		HEC Standard Services	Based on vendor recommendations and HEC standards
DB11	Start/stop database		HEC Standard Services	
DB12	Create and check optimizer statistics to maintain database performance		HEC Standard Services	
DB13	Perform upgrades of database software		HEC Standard Services	
DB14	Apply database patches		HEC Standard Services	
DB15	Perform database backups (regular database and log backups)		HEC Standard Services	Per HEC backup policy
DB16	Restore and recover database after technical issues		HEC Standard Services	For technical issues. Restores on customer request provided at additional costs.
DB17	Perform dbcc (database consistency check)		HEC Standard Services	
DB18	Assist customer in optimizing SQL statements (indexes, selects etc.) for application improvements		HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Task	D	Responsibility Project HEC	Remarks Project HEC
OP1	D - Core Technical Operations			
OP2	System Installation			
OP3	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 copy 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.
OP4	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
OP5	Application customizing and configuration, application maintenance, application support and application troubleshooting		HEC Excluded Tasks	HEC delivers systems which are technically configured on the 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.
OP6	Integration of installed systems into SAP HEC operations environment		HEC Standard Services	
OP7	Enablement of HEC system monitoring		HEC Standard Services	
OP8	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
OP9	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
OP10	Integration of system with other systems and applications		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
OP11	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 (not the central SAP Solution Manager system owned by HEC); EMS effort is calculated per server.
OP12	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
OP13	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 this must be checked individually to determine whether SAP HEC can implement a particular RDS or whether it must be covered by the customer or a consulting party
OP14	Configuration of SAP online help (local installation)		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Once (1) per landscape; subject to contractual change request (CR) to cover increased infrastructure consumption and additional administrative efforts
OP15	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
OP16	Data handover after contract termination		HEC Standard Services	Efforts for a one-time data handover (creation of export and transfer to media) as part of HEC off-boarding 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



#	Task	D	Responsibility Project HEC	Remarks Project HEC
OP17	Incident Management			
OP18	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
OP19	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	
OP20	Sign-off/Approve solution and confirm incident resolution		HEC Excluded Tasks	
OP21	Event detection and notification ("monitoring")			
OP22	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
OP23	Monitor critical business transactions		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
OP24	General Operations			
OP25	Start/Stop HEC managed systems		HEC Standard Services	
OP26	Troubleshooting of technical issues in HEC managed systems		HEC Standard Services	For technical issues only; application related problems must be resolved by the customer
OP27	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 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.
OP28	Maintain SAP system profile parameters		HEC Standard Services	SAP will provide recommendations for technical system parameters; SAP will also adjust parameters by customer request except for certain standardized settings required to maintain system stability or security.
OP29	Regularly analyze application and solution related SAP system settings and profile parameters		HEC Enhanced Managed Services ("EMS") that can be performed by customer	HEC will review system parameters and system settings and provides recommendations for optimization
OP30	SAP Security Management			
OP31	Define and implement security concept for application		HEC Excluded Tasks	
OP32	Define and implement infrastructure security concept		HEC Standard Services	Special rules apply for HEC Server Provisioning; please refer to the respective section for details
OP33	Customer specific Security Audit Log analysis		HEC Enhanced Managed Services ("EMS") that can be performed by customer	HEC investigates the security related log entries on a regular basis and provides information to the customer.
OP34	Analyze the SAP system and identify relevant SAP security notes		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
OP35	Definition, maintenance, review and audit of roles, profiles, authorizations etc.		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
OP36	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	
OP37	Maintain user profiles, roles, authorizations, master data and passwords in client 000		HEC Standard Services	
OP38	Provide access to client 000 for customer		HEC Standard Services	Restricted, predefined profile only; limited set of users provided; service provided on request only
OP39	Implementation of Single Sign On (SSO) for systems in HEC landscape		HEC Excluded Tasks	SSO implementation services provided by SAP Consulting as consulting project; details depending on scoping and consulting agreement
OP40	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
OP41	Homogeneous system copy (aka System refresh)			for systems already located in HEC
OP42	Pre-processing tasks (application), i.e. export tables with 'old' configuration		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
OP43	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	Standard fixed service valid for system sizes <=500GB (actual database size) and single node system architecture. System copy for systems >500GB or multi-node architecture are performed on time & material basis.
OP44	Post processing tasks (application)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
OP45	Test of application		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
OP46	Heterogeneous system copy (aka System migration)			for systems already located in HEC
OP47	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



#	Task	D	Responsibility Project HEC	Remarks Project HEC
OP48	Release Management			
OP49	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
OP50	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
OP51	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.
OP52	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
OP53	Implementation of patches for system software running on OS level, e.g. SAP kernel		HEC Standard Services	May require additional system downtime
OP54	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.
OP55	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 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.
OP56	Implement updates to the managed SAP solution using advanced tools and methods like Near Zero Downtime Option (ZDO) of Software Update Manager (SUM) and others to minimize required downtime		HEC Enhanced Managed Services ("EMS") that cannot 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.
OP57	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
OP58	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
OP59	Version upgrade of SAP Software: Execute technical upgrade tasks		HEC Enhanced Managed Services ("EMS") that cannot 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
OP60	Execute application related tasks as part of Release and Change Management (e.g. application testing, adjustments, content/functional activation)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
OP61	Conversion of SAP ERP systems to SAP S/4HANA		not offered	
OP62	Proactive services			
OP63	Prepare SAP service sessions session by maintaining RTCCTOOL		not offered	



#	Task	D	Responsibility Project HEC	Remarks Project HEC
OP64	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	
OP65	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	
OP66	System performance management			
OP67	Initial assessment of system performance issues		not offered	
OP68	Troubleshoot SAP system performance issues (technical root causes within HEC service scope)		not offered	
OP69	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.
OP70	Execute performance tuning		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Proactive activities to 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.
OP71	Review and optimize customer code to improve system performance and stability		HEC Excluded Tasks	
OP72	Certificate handling			
OP73	Generate Certificate Signing Request (CSR)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Except LoadBalancers, Web Dispatchers and BO systems; for these systems HEC will generate the CSR and hand it over to the customer for further processing
OP74	Send request to Certificate Authority		HEC Excluded Tasks	
OP75	Creating SSL server / client identity with key pair		HEC Excluded Tasks	
OP76	System (OS Level) configuration to enable SSL		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	EMS effort is calculated per server
OP77	System (Application Level) configuration to enable SSL		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
OP78	Monitor validity period of certificates		HEC Excluded Tasks	



#	Task	D	Responsibility Project HEC	Remarks Project HEC
OP79	Disaster Recovery			
OP80	Implement disaster recovery setup according to architecture blueprint and contractual specifications		not offered	
OP81	Develop disaster recovery procedures (data center and tech system infrastructure only)		not offered	
OP82	Ongoing management of disaster recovery architecture: monitoring of data replication to secondary site including troubleshooting		not offered	
OP83	Ongoing management of disaster recovery architecture: maintenance and change management for systems at secondary site to ensure system consistency including troubleshooting		not offered	
OP84	Develop and maintain disaster recovery procedures for those areas and aspects of the service which are in customer responsibility (application layer, customer infrastructure, connectivity to HEC, interfaces, organizational measures and processes etc.)		not offered	
OP85	Execute disaster recovery tests (data center and technical system infrastructure only)		not offered	
OP86	Execute additional disaster recovery tests (data center and technical system infrastructure only, beyond the one which is part of the HEC DR service)		not offered	
OP87	Execution of productive failover in case of an officially declared disaster		not offered	
OP88	Execute disaster recovery tests (application layer, customer infrastructure, interfaces, organizational measures etc.)		not offered	
OP89	Operations extension via EMS			These services provide possible extensions to areas of Incident, Change and Event Management beyond the standard scope of HEC services
OP90	Incident Management: Troubleshooting of technical/non-functional incidents not included in HEC Standard Services		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
OP91	Change Management: Changes of technical system configuration not included in HEC Standard Services		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
OP92	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	
NW1	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)	
NW2	General NetWeaver Operations			
NW3	Analyze SAP system log and fix technical failures included in scope of services		HEC Standard Services	May require customer assistance
NW4	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
NW5	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
NW6	Clean up terminated updates		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW7	Analyze lock entries, determine business impact and appropriate action		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW8	Check/clear lock entries		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW9	Check for ABAP dumps to detect serious system issues		not offered	Performed only for productive systems; HEC informs customer in the event of serious application related issues that need to be resolved by the customer. Dumps relevant to HECs responsibility will be resolved by HEC
NW10	Regular ABAP dump check and classification		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW11	Analyze SAP application log and provide recommendations on fixing failures		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW12	Reorganize qRFC/tRFC queues		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW13	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	
NW14	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
NW15	Creation/Update/Change of the System-PSE (Personal Security Environment)		HEC Standard Services	
NW16	Implement/update tools to ensure readiness for SAP support services		HEC Standard Services	
NW17	Definition of archiving strategy		HEC Excluded Tasks	
NW18	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
NW19	Management of Web Service Runtime		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW20	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
NW21	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	
NW22	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
NW23	SAP J2EE: adjust/configure Java applications		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW24	SAP Client Operations			
NW25	Copy or delete 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
NW26	Perform client export/import 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



#	Task	D	Responsibility Project HEC	Remarks Project HEC
NW27	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	
NW28	Interface Administration			
NW29	Creation, execution, monitoring and troubleshooting of batch input sessions		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW30	Configuration, monitoring and troubleshooting of interfaces and 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	
NW31	Establish trust relationships between SAP NW ABAP systems		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW32	Job Scheduling			
NW33	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
NW34	Administration of application batch jobs: - Define production job schedule and dependencies based on business requirements - Job scheduling - Job monitoring - Troubleshooting according to troubleshooting handbook		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW35	Transport Management			
NW36	Create transport domain in client 000 and transport directory		HEC Standard Services	
NW37	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	
NW38	Setup of CTS+		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	OS access required
NW39	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
NW40	Execute transports to move objects between SAP systems		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW41	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
NW42	Address functional transport problems		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Customer responsible for content of transports
NW43	Adjustment of repository objects as part of software changes		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW44	Setup and configuration of CHaRM		HEC Excluded Tasks	
NW45	Testing and acceptance of object changes		HEC Excluded Tasks	
NW46	Output Management			
NW47	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
NW48	Analyze faulty output requests (transaction SP01)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW49	Reorganize SAP spool system to keep system clean		HEC Standard Services	Via SAP standard batch job
NW50	Design and implementation of print forms		HEC Excluded Tasks	
NW51	Lock/unlock SAP printers		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW52	Check spooler table consistency to prevent printing issues		HEC Standard Services	Via SAP standard batch job
NW53	Configuration of virtual spool (load balancing between spool processes)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
NW54	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



#	Task	D	Responsibility Project HEC	Remarks Project HEC
SP1	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	
SP2	Security Planning			
SP3	Provide application communication requirements		HEC Excluded Tasks	
SP4	Determine communication and security requirements		HEC Excluded Tasks	
SP5	Create and maintain security policies		HEC Excluded Tasks	
SP6	Determine security strategy and implementation plans		HEC Excluded Tasks	
SP7	Monitor and assess security strategies		HEC Excluded Tasks	
SP8	Hardware Operations			
SP9	Maintain valid vendor maintenance agreements as needed		HEC Standard Services	
SP10	Use vendor proactive support capabilities to help identify potential failures		HEC Standard Services	
SP11	Schedule hardware maintenance (for hardware failures and planned modifications)		HEC Standard Services	
SP12	Schedule hardware/equipment maintenance as recommended by vendors		HEC Standard Services	
SP13	Server Management			
SP14	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 fulfill the requirements of the intended use case
SP15	Provide server infrastructure		HEC Standard Services	
SP16	Provide licenses for OS		HEC Standard Services	Licenses will be provided and charged by HEC
SP17	Basic operating system installation		HEC Standard Services	Supported OS: SUSE LINUX and MS Windows Server (most up-to-date HEC versions)
SP18	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
SP19	Installation of antivirus software and patterns updates		HEC Excluded Tasks	Customer is responsible for Antivirus installation and virus pattern updates on a daily basis
SP20	Antivirus software licenses		HEC Excluded Tasks	
SP21	Perform scheduled startup/shutdown of hardware		HEC Standard Services	
SP22	Restart the hardware after failure		HEC Standard Services	
SP23	Monitoring of hardware on hypervisor level		HEC Standard Services	
SP24	Monitoring of operating system of provided OS instances		HEC Excluded Tasks	
SP25	Storage Management			
SP26	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)
SP27	Manage data files/file systems		HEC Excluded Tasks	
SP28	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	
SP29	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	
SP30	Scale storage capacity		HEC Optional Services	
SP31	Application Management			
SP32	Define application requirements		HEC Excluded Tasks	
SP33	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
SP34	Application installation		HEC Excluded Tasks	
SP35	Application operations		HEC Excluded Tasks	
SP36	Installation of patches and security updates		HEC Excluded Tasks	Customer is responsible for software lifecycle management
SP37	Application monitoring		HEC Excluded Tasks	
SP38	IaaS VM Snapshot (offline image backup)			
SP39	Service Setup		HEC Optional Services	
SP40	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 data domain
SP41	Snapshot of IaaS		HEC Optional Services	Performed on customer request only; shutdown, rsync block device and copy to data domain; task is either available on a fixed subscription basis or as an ad-hoc service via EMS
SP42	Restart server and inform customer		HEC Optional Services	After successful restart of VM, inform customer and update the ticket
SP43	Start required applications on server		HEC Excluded Tasks	Customer needs to make sure that applications are started after the snapshot operation
SP44	Disaster Recovery			
SP45	Provide VM and related storage in the secondary Data Center		not offered	Only for those IaaS servers explicitly specified in the contract as relevant for DR.
SP46	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	
TP1	X1 - 3rd Party Software			
TP2	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	
TP3	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	
TP4	Installation		HEC Standard Services	
TP5	Configuration		HEC Excluded Tasks	
TP6	Application monitoring		HEC Excluded Tasks	
TP7	Apply updates		HEC Standard Services	
TP8	Application troubleshooting including engagement with the partners support organization		HEC Excluded Tasks	



#	Task	D	Responsibility Project HEC	Remarks Project HEC
TP9	Unmanaged 3rd Party ABAP add-ons			
TP10	Installation		HEC Excluded Tasks	
TP11	Configuration		HEC Excluded Tasks	
TP12	Application monitoring		HEC Excluded Tasks	
TP13	Apply updates		HEC Excluded Tasks	
TP14	Application troubleshooting including engagement with the partners support organization		HEC Excluded Tasks	
BC1	X2 - Business Connector			
BC2	Operations			
BC3	Reorganization of Message Store		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
CP1	X3 - SAP CO-PA Accelerator			
CP2	Operations			
CP3	Determine initial data load procedure		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
CP4	Perform initial data load procedure		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
CP5	CO-PA customizing		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
CP6	Setup DB connection to HANA		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
CP7	Setup CO-PA Jobs for data replication		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
CP8	Monitor CO-PA Jobs for data replication		HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Task	D	Responsibility Project HEC	Remarks Project HEC
DS1	X4 - SAP Data Services (DS)			
DS2	Operations			
DS3	Authorization - Users and Rights Management		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
DS4	Create/Modify Data Services jobs		HEC Excluded Tasks	
DS5	Schedule Data Services jobs		HEC Excluded Tasks	
DS6	Create/Configure database connections for DS (e.g. ODBC)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
DS7	Monitor jobs		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
DS8	Repository backup DS & BOE		HEC Standard Services	
DS9	Delete batch job history		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
DS10	Verify that job and access servers are running		HEC Standard Services	
DS11	Remove obsolete repository contents		HEC Standard Services	
DS12	Troubleshooting issues with DS Jobs		HEC Excluded Tasks	
DS13	Generate certificate request		HEC Standard Services	
DS14	Generate and install self-signed certificate		HEC Standard Services	
DS15	Provide certificates from external certificate authority		HEC Excluded Tasks	
DS16	Install certificates provided by customer		HEC Standard Services	
DS17	Authorization - Users and Rights Management		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
DS18	Create/Manage Additional Repositories		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	System comes with default repositories, if more are requested these will be delivered per EMS.
DS19	Backup: On-Demand - BI Database and File Repo Sync		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
DS20	Restore: On-Demand - BI Database and File Repo Sync		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
DS21	Authentication - AD/LDAP/SSO/SAP Setup		HEC Excluded Tasks	
DS22	Installation and Configuration of Data Services Adapters		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
DS23	Add and configure additional Job Servers/ Job Groups for load balancing		HEC Optional Services	Depending on sizing, additional infrastructure may be required.
DS24	Configure Runtime Resources		HEC Standard Services	
DS25	Configure SMTP Email		HEC Standard Services	
DS26	Starting and Stopping Services		HEC Standard Services	
DS27	Enhanced Change and Transport System (CTS+) Integration Setup		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
DS28	Configure transports via Data Services (DS) Object Promotion Management		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
DS29	Backup Data Services Repository using Import/Export Tool		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SC1	X5 - SCIC Operations			
SC2	Operations			
SC3	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
SC4	Setup LiveCache replication jobs in source system		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SC5	Monitor LiveCache replication jobs in customer system		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SC6	Manage end users with HANA Studio		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BI1	X6 - SAP BusinessObjects Business Intelligence (BI)			
BI2	Operations			
BI3	Backup (Full content backup / BIAR backup)		HEC Standard Services	
BI4	Scan / Repair and compact all repository errors		HEC Standard Services	
BI5	Clean-up empty directories created for Repository Diagnostic Tool		HEC Standard Services	
BI6	Cache Clean-up and Maintenance - Tomcat, Web Intelligence, Log Files		HEC Standard Services	
BI7	Program Object Actions: Import and Execution		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
BI8	Promote/deploy BI objects between environments		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BI9	Create, rename, remove connections and Universes		HEC Excluded Tasks	
BI10	Provide user access and maintain authorizations		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BI11	Generate certificate request		HEC Standard Services	
BI12	Generate and install self-signed certificate		HEC Standard Services	
BI13	Provide certificates from external certificate authority		HEC Excluded Tasks	
BI14	Install certificates provided by customer		HEC Standard Services	
BI15	Deploy templates and system configurations for hardware changes		HEC Standard Services	
BI16	BI System Copy		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
BI17	BI Auditing Setup and Configuration		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
BI18	Perform ERP Integration Setup and Configuration		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
BI19	Implement Patches and Support Packs		HEC Standard Services	
BI20	Version upgrade of SAP Software: Execute technical upgrade tasks		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
BI21	Backup: On-Demand - BI Database and File Repo Sync		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
BI22	Restore: On-Demand - BI Database and File Repo Sync		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
BI23	Setup Authentication - AD/LDAP/SSO/SAP		HEC Excluded Tasks	
BI24	Configure Cryptography Settings		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
BI25	Configure Web Application - Reverse Proxy Settings		HEC Standard Services	
BI26	Add and configure additional BI servers for load balancing		HEC Optional Services	Additional infrastructure may be required
BI27	Manage Server Process and Server Groups		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BI28	Setup/Support technical tasks for BI Report Version Management		HEC Standard Services	Customer responsible for maintaining report versions
BI29	Enhanced Change and Transport System (CTS+) Integration Setup		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
BI30	Manage Server Process and Server Groups		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI1	X7 - SAP PI			
PI2	SAP PI Implementation			
PI3	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.
PI4	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.
PI5	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.



#	Task	D	Responsibility Project HEC	Remarks Project HEC
PI6	SAP PI Operations			
PI7	Monitor application-specific PI functions, e.g. messaging, queues etc.		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI8	Monitor the message processing in PI (success & performance)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI9	Monitor communication channels, queues, backlogs of PI (AEX)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI10	Monitor BPM processes (success & performance)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI11	Configure adapters		HEC Excluded Tasks	
PI12	Deal with incorrect messages		HEC Excluded Tasks	
PI13	Configuration, execution and monitoring of message archiving		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI14	Change and Release Management: PI transports		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI15	Role/authorization maintenance (except SAP & initial customer administrator role)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI16	Update/upgrade planning, and execution until update of regression testing		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI17	Security: client certificate maintenance for external partners		HEC Excluded Tasks	
PI18	Maintain users and roles/authorizations (except for the SAP and initial customer administrator role)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI19	Plan, setup and monitor housekeeping of PI / BPM / AEX		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI20	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)
PI21	Maintain client certificate for external partners		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI22	Maintain the system landscape directory (SLD)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Related to PI scenarios
PI23	Apply SAP basic application content update to the Enterprise Service Repository (ESR)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI24	Handle errors and analyze root cause for incorrect message processing in PI (AEX)		HEC Excluded Tasks	
PI25	Check PI / PO / AEX readiness after changes (upgrades, patches, notes)		HEC Excluded Tasks	
PI26	Configure the required system connections to partner systems		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PI27	Transport management of PI objects		HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Task	D	Responsibility Project HEC	Remarks Project HEC
EP1	X8 - Enterprise Portal			
EP2	Operations			
EP3	Monitoring application services for Portal, Unifiers, Unification Server, PCD, TREX, CM, Database, SAP J2EE, IIS, and ITS		HEC Standard Services	HEC monitors application services only; customer responsible to monitor portal content
EP4	Maintain Portal, Unifiers, Unification Server, PCD, TREX, CM, Database, SAP J2EE, IIS, and ITS		HEC Excluded Tasks	HEC installs basic SAP Enterprise Portal only
EP5	Maintain LDAP (Novell, ADS, iPlanet and others)		HEC Excluded Tasks	
EP6	Analyze Portal System logs and revise failures occurred		HEC Standard Services	HEC has to inform customer of required assistance
EP7	System landscape maintenance, connection of external systems – e.g. SAP		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Port connection required
EP8	User mapping		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
EP9	Role/Channel/Panel allocation		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
EP10	Content administration		HEC Excluded Tasks	
EP11	Set-up and maintain Portal user master data		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
EP12	Lock and delete portal user master data		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
EP13	Release locked portal users		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
EP14	Define and change licensee specific portal authorization profiles		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
EP15	Administer Content Repository		HEC Excluded Tasks	
EP16	Administer TREX indices		HEC Excluded Tasks	
EP17	Administer Taxonomies		HEC Excluded Tasks	
EP18	Monitoring of status of TREX queues		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
EP19	Delete faulty documents in TREX queues		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
EP20	Customize, upgrade POE including all components		HEC Excluded Tasks	Set J2EE passwords, configure Java port, add service packs
EP21	Upgrade of pages, roles, static html content		HEC Excluded Tasks	
EP22	Maintenance of Java services		HEC Standard Services	Licensee responsible to develop new java services, and to customize existing java services
IQ1	X9 - Sybase IQ (used as data persistency for NLS or 3rd party archiving solutions)			
IQ2	Database Installation/Configuration			
IQ3	Checking/preparing system requirements (BW Release, SAP Notes, Source/target setup)		HEC Excluded Tasks	
IQ4	Initial configuration / parameter settings		HEC Standard Services	
IQ5	Initialize connection between BW/NLS and Sybase IQ		HEC Standard Services	Customer must check it from BW side
IQ6	Database Operations			
IQ7	Database capacity management		HEC Standard Services	
IQ8	Reorg/Statistic update		HEC Standard Services	
IQ9	dbcc (database consistency check)		HEC Standard Services	
IQ10	Troubleshooting of technical database issues		HEC Standard Services	
IQ11	Setup backup		HEC Standard Services	
IQ12	Restore backup		HEC Standard Services	
IQ13	Monitor database connection		HEC Standard Services	Customer must check connection from BW side
IQ14	Application			
IQ15	Create/schedule/restore data archiving requests		HEC Excluded Tasks	
IQ16	Query handling		HEC Excluded Tasks	
IQ17	Installing partner add-ons in backend systems		HEC Excluded Tasks	
IQ18	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
IQ19	Installation of archiving partner software		HEC Excluded Tasks	Customer must make sure, that they hold valid licenses to run the installed software in an environment such as the SAP HEC
IQ20	Configuration of archiving partner software		HEC Excluded Tasks	
IQ21	Managed services for archiving partner software (issue handling)		HEC Excluded Tasks	
CC1	X11 - SAP Cloud Connector			
CC2	Installation and Configuration			
CC3	Configuration - Enable outbound connection via LoadBalancer to connect with SAP Cloud Platform (SCP)		HEC Standard Services	
CC4	Configuration - Establish connection to customer's cloud account		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
CC5	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	
CC6	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
SA1	X12 - SAP SCI Data Services Agent			
SA2	Installation and Configuration			
SA3	Installation of SAP SCI - DATA Service agent		HEC Standard Services	
SA4	Configuration - Enable outbound connection via LoadBalancer to connect with SCI		HEC Standard Services	
SA5	Configuration - Establish connection to customer's cloud account		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SA6	Configuration - Business Backend Preparation steps for SCI consumption		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SA7	Monitoring - SCC service monitoring (Linux / Windows Services)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Can be done in Administrator UI + HCI Administrator Cockpit
SA8	Migrating Data to SCI Tables		HEC Excluded Tasks	
SF1	X13 - SAP Fiori			
SF2	Installation and Configuration			
SF3	Installation of application specific packages in respective SAP Systems		HEC Standard Services	Initial setup in HEC; installation of additional Fiori applications require a CR and create additional service fees
SF4	Configuration - Web Dispatcher Fiori App redirects		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SF5	Configuration - Application Specific Notes implementation		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SF6	Configuration - HANA XS Engine Web Dispatcher		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
SF7	Enable Fiori launchpad including all required connectivity setup		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Limited to one example FIORI app per S/4HANA system according to requested application type; SAP Standard procedure includes Fiori launchpad enablement for one client per S/4HANA system



#	Task	D	Responsibility Project HEC	Remarks Project HEC
SF8	Configuration - FIORI APPS		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
SF9	Establish trusted connections from Web Dispatcher to Gateway, backend system (e.g. S/4 HANA) and HANA XS engine of backend system		HEC Standard Services	
WD1	X15 - Web Dispatcher			
WD2	Web Dispatcher operation			
WD3	Register/Remove Systems in Web Dispatcher and their options regarding SSL		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
WD4	General memory management definition		HEC Standard Services	
WD5	General security parameter definition		HEC Standard Services	
WD6	General Configuration for Support SSL in Parameter File or PSE Maintenance Tool in Admintool (Handling HTTPS Requests)		HEC Standard Services	
WD7	Communication with the message server / application server using SSL		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
WD8	Modification of HTTP requests		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
WD9	Setting up error handling		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
WD10	Maintaining the authentication File		HEC Standard Services	
WD11	Changes in Backend Systems related to Web Dispatcher (HTTPURLOCC)		HEC Standard Services	
WD12	Log and trace strategy		HEC Standard Services	
WD13	Encryption policy (protocols, ciphersuites, key length)		HEC Standard Services	
WD14	Connection counts		HEC Standard Services	
WD15	Metadata Exchange Using SSL		HEC Standard Services	
WD16	Definition of port ranges		HEC Standard Services	
WD17	LoadBalancer configuration for Web Dispatcher		HEC Standard Services	
WD18	DNS Changes for Web Dispatcher Service		HEC Excluded Tasks	There are no options to have personalized DNS
LB1	X16 - LoadBalancer			
LB2	LoadBalancer operation			
LB3	Setup LoadBalancer instance		HEC Standard Services	
LB4	Register/Remove Systems in LoadBalancer		HEC Standard Services	
LB5	Configure load distribution to application servers		HEC Standard Services	
LB6	Provide external IP for Internet facing scenarios		HEC Standard Services	
LB7	Configure SSL offloading (Encryption)		HEC Standard Services	
LB8	Provide CSR file for certificate requests out of customer domains		HEC Standard Services	
LB9	Perform DNS handling for customer own Domain		HEC Excluded Tasks	
LB10	Provide X.509 certificate for customer domain to enable SSL		HEC Excluded Tasks	
LB11	Provide X.509 certificate for SAP own URL like *.hec.ondemand.com domain		HEC Standard Services	
LB12	Install customer X.509 certificate		HEC Standard Services	
LB13	Configure Web Application Firewall		HEC Standard Services	
LB14	Configure persistence handling		HEC Standard Services	
LB15	Reverse Proxy configuration on LoadBalancer		HEC Standard Services	
LB16	Configure health checks		HEC Standard Services	
LB17	Configure URL/IP based black and white list filtering		HEC Standard Services	
LB18	Configure sorry page function		HEC Standard Services	
LB19	Configure outgoing connections to Internet		HEC Standard Services	



#	Task	D	Responsibility Project HEC	Remarks Project HEC
OT1	X17 - OpenText Solutions			
OT2	Data archiving and document access: ERP + archive + storage			
OT3	ERP part			
OT4	Setup connection to archive server		HEC Standard Services	
OT5	Customizing of archiving solution		HEC Excluded Tasks	
OT6	Archive server part (content repository)			
OT7	Archive server DB installation		HEC Standard Services	
OT8	Archive server installation		HEC Standard Services	
OT9	Configuration of the archive storage		HEC Standard Services	
OT10	Attaching storage to the Archive server		HEC Standard Services	
OT11	Configuration of the archive server		HEC Standard Services	
OT12	Migration of existing archives to HEC			
OT13	Data migration of archived data of OpenText archive system		HEC Excluded Tasks	Consulting project required
OT14	Data migration of archived data of NonOpenText archive system		HEC Excluded Tasks	Consulting project required
OT15	Admin Tasks Archive Server			
OT16	Standard backup (storage handling)		HEC Standard Services	
OT17	Standard monitoring		HEC Standard Services	
OT18	Administrative tasks (create new archives)		HEC Standard Services	On customer request
OT19	Archiving: application management			
OT20	Authorization concept		HEC Excluded Tasks	
OT21	Archiving concept		HEC Excluded Tasks	
OT22	Archiving of data		HEC Excluded Tasks	
OT23	Deletion of data		HEC Excluded Tasks	
OT24	Scanning and Pipeline			
OT25	Installation on premise (scan client)		HEC Excluded Tasks	
OT26	Scan Configuration		HEC Excluded Tasks	
OT27	Pipeline installation on premise		HEC Excluded Tasks	
OT28	Pipeline configuration on premise		HEC Excluded Tasks	
OT29	VIM: SAP Component Installation in SAP ERP			In case VIM is part of solution scope in HEC
OT30	Add-On installation for VIM		HEC Standard Services	
OT31	SAP Business Workflow Engine enabling (Basic configuration)		HEC Standard Services	
OT32	Business Configuration		HEC Excluded Tasks	RDS available
OT33	ArchiveLink customizing		HEC Standard Services	
OT34	VIM: Invoice Capture Center (ICC)			In case VIM is part of solution scope in HEC
OT35	Installation VIM server		HEC Standard Services	
OT36	Basic configuration and connectivity		HEC Standard Services	
OT37	Basic business configuration		HEC Excluded Tasks	RDS available
OT38	Customer specific enhancements		HEC Excluded Tasks	
IS1	X18 - SAP Information Steward			
IS2	Operations			
IS3	Adding additional IS job servers for load balancing		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
IS4	User and access management		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
IS5	Create and manage IS application jobs		HEC Excluded Tasks	
IS6	Executing Information Steward utilities		HEC Excluded Tasks	
IS7	Data Insight, Metadata, Cleansing Package and Match Review administration		HEC Excluded Tasks	
IS8	Monitoring of IS application jobs		HEC Excluded Tasks	
IS9	IS repository and file system backup		HEC Standard Services	
IS10	IS job server and services monitoring		HEC Standard Services	
IS11	IS repository management		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
IS12	Troubleshooting issues with IS jobs and utilities (Data Insight, Rule Tasks, Metadata Management, Data Cleansing)		HEC Excluded Tasks	
IS13	Execute performance tuning for Data Insight, Data Cleansing, Metadata Management, Metapedia and Match Review		HEC Excluded Tasks	
PM1	X19 - SAP Policy Management		This section represents an extension of the HEC standard service as described in the HEC Roles & Responsibilities. It applies only to customers using SAP Policy Management in HEC in combination with the full managed service including the components pm.msg and TomatosX.	
PM2	TomatosX for Policy Management			
PM3	Installation of the solution		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
PM4	Technical configuration (installation post-processing) of installed systems.		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
PM5	Configuration or Integration of TomatosX system with other SAP systems. (TA SM59)		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PM6	Application monitoring with Customer Solution Manager located in HEC		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PM7	Application configuration (post-installation configuration) of installed systems		HEC Excluded Tasks	
PM8	Application troubleshooting		HEC Excluded Tasks	
PM9	MSG.PM designer & CAIMAN for Policy Management			
PM10	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
PM11	Technical configuration (installation post-processing) of installed systems.		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
PM12	Integration of system with other systems and applications		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PM13	Application monitoring with Customer Solution Manager located in HEC		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
PM14	Application configuration (post-installation configuration) of installed systems		HEC Excluded Tasks	
PM15	Application troubleshooting		HEC Excluded Tasks	
PM16	Installation of additional client tools		HEC Excluded Tasks	
PM17	Security Management			
PM18	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	
CL1	X20 - Celonis CPM			
CL2	Celonis CPM			
CL3	Configure SSL		HEC Standard Services	Customer is responsible for get from CA the required Certificate and provide to HEC Service



#	Task	D	Responsibility Project HEC	Remarks Project HEC
CL4	Creation Java Keystore		HEC Standard Services	
CL5	Configuring authorized SQL queries		HEC Excluded Tasks	HEC will update the respective file on OS Level
CL6	Configure audit parameters and password rules		HEC Standard Services	
CL7	Request logging trace for user		HEC Standard Services	
CL8	Transport Export/Import		HEC Excluded Tasks	
CL9	General Administration of users, groups and authorizations		HEC Excluded Tasks	
CL10	Change system settings on application side		HEC Excluded Tasks	
CL11	Backup/Restore H2 Database		HEC Standard Services	
ID1	X21 - SAP Identity Management IDM			
ID2	Assist customer with IDM related tasks that require access to operating system		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
FC1	X22 - SAP Financial Consolidation (FC)			
FC2	Administration of Data Sources			
FC3	Starting/Stopping/Setting Administrator Password and activity views for Datasources		HEC Standard Services	
FC4	Adding Webservices		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
FC5	Adding Application Server/Webserver		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
FC6	Migrating and filtering data source		HEC Excluded Tasks	
FC7	Installing software configuration		HEC Excluded Tasks	
FC8	Sending/Broadcasting messages to End-users		HEC Excluded Tasks	
FC9	Defining log configuration for application servers		HEC Excluded Tasks	
FC10	Defining commands available for machines and instances		HEC Excluded Tasks	
FC11	Activation/Deactivation Machine in the FC Admin console		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
FC12	Starting/Stopping Instances in the FC Admin console		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
FC13	Creating scheduled tasks for starting and stopping servers		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Requires actions at OS Level
FC14	Create Data Source(s)		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	Requires actions at OS Level
FC15	Create FC transport folder		HEC Standard Services	Requires actions at OS Level
FC16	Restart FC platform periodically		HEC Standard Services	Requires actions at OS Level
FC17	Monitoring			
FC18	Monitoring one FC application URL per SID		HEC Standard Services	Limited to one URL per SID. Customer needs to provide URL to be monitored.
FC19	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.
FC20	Administration of HANA Databases			
FC21	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
FC22	Deleting rights created during Cube Deployments		HEC Excluded Tasks	Customer require access to HANA Studio and require HANA Customer Administration authorization



#	Task	D	Responsibility Project HEC	Remarks Project HEC
FC23	Configuring SAP Financial Consolidation Web Site			
FC24	Reconnecting Automatically		HEC Standard Services	
FC25	Activating the SAP Financial Consolidation Web Technical Log		HEC Standard Services	
FC26	Supporting long-term HTTP sessions with firewalls		HEC Standard Services	
FC27	Publishing documents via a URL		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
FC28	Configuring HTTPS		HEC Standard Services	
FC29	Customizing the SAP Financial Consolidation Web Site Home page		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
FC30	Configuring SAP Financial Consolidation Web HTML5 Site			
FC31	Configuring/Customizing SAP Financial Consolidation Web HTML5 site advanced settings		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
FC32	Archiving Tool			
FC33	Installing and accessing the Archiving Tool		HEC Standard Services	
FC34	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.
FC35	Installing and Configuring the SAP NetWeaver BW Server to deploy Infocubes with SAP Financial Consolidation Cube Designer			
FC36	Installing the FPM Basis component on the SAP NetWeaver BW server		HEC Standard Services	
FC37	Creating BW NetWeaver Roles to deploy Infocubes with Cube Designer		HEC Excluded Tasks	
FC38	Installing SAP EPM Solutions Connection Manager on the BOE platform		HEC Standard Services	
FC39	Configuring the Central Management Console for SAP Cube Designer		HEC Excluded Tasks	
FC40	Configuring the Central Management Server for a distributed installation		HEC Excluded Tasks	
FC41	Configuring reverse proxy		HEC Standard Services	
FC42	Creating an EPM Connection for SAP Financial Consolidation with NetWeaver BW Cubes or SAP PCM or SAP SSM or SAP HANA		HEC Excluded Tasks	
FC43	Financial Information Management			
FC44	Configuring the number of lines in a Flat File Preview		HEC Standard Services	
FC45	Configuring Time-out Parameters		HEC Standard Services	
MP1	X23 - SAP Mobile Platform (SMP)			
MP2	Implementation			
MP3	Installation of SMP Application Node(s) - Greenfield		HEC Standard Services	
MP4	Installation of Additional SMP Application Node(s) - Brownfield		HEC Optional Services	
MP5	Connection to backend System		HEC Standard Services	
MP6	Securing Application Platform		HEC Excluded Tasks	
MP7	Updating DB connection settings including DB connection passwords		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
MP8	Operations			
MP9	SMP Mobile/Agentry/Application Administration -Deploying Application -deleting Applications -Managing and Monitoring Application -Provisioning Application		HEC Excluded Tasks	
MP10	Starting / Stopping SMP Application Server		HEC Standard Services	
MP11	SMP Server availability and monitoring		HEC Standard Services	
MP12	Monitoring heap memory		HEC Excluded Tasks	
CR1	X24 - Capture and Replay			
CR2	Prepare capture in source system		HEC Standard Services	Import Delivery units, setup users and roles
CR3	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)
CR4	Setup replay in target system		HEC Standard Services	Import Delivery units, setup users and roles
CR5	Configure replayer service		HEC Standard Services	Configure replayer service
CR6	Preprocess and replay in target system		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BP1	X25 - BPA by Redwood			
BP2	Technical installation		HEC Standard Services	
BP3	License deployment		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BP4	Creating roles & assignment of administrative privileges to a user, via a role or group, in UME		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BP5	Connect the central SAP BPA server system to remote systems within HEC		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BP6	Monitoring of central BPA system		HEC Standard Services	
BP7	Job monitoring		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BP8	User and role management		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BP9	Initial job scheduling Setup		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BP10	Modification of scheduling setup		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BP11	Re-Scheduling of jobs to remote system		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
BP12	Defining monitoring framework for jobs triggered via SAP BPA		HEC Enhanced Managed Services ("EMS") that can be performed by customer	
CA1	X26 - Business Objects Cloud Agent			
CA2	Install Tomcat		HEC Standard Services	Install tomcat server in directory as mentioned in deployment Document/Help Document
CA3	Install JVM Package		HEC Standard Services	Install JVM as per requirements of BO cloud agent and change environment variable
CA4	Deploy C4Agent.war		HEC Standard Services	Deploy the BO Cloud agent war file with tomcat server
CA5	Configure connection with HANA Cloud Connector installed in HEC		HEC Standard Services	
CA6	Configure connection with other systems		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Backend systems, SAP Business Objects systems
AF1	X27 - SAP HANA - Accelerator for SAP ASE (AFA)			
AF2	Operational Setup			
AF3	Installing Accelerator for SAP ASE Package		HEC Standard Services	HANA - AFA package is installed on the SAP HANA DB node



#	Task	D	Responsibility Project HEC	Remarks Project HEC
AF4	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
AF5	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.
AF6	Authorization - Setup		HEC Standard Services	Activate accelerator for ASE roles, privileges and object access for monitoring and operations. Provision HEC specific user and roles.
AF7	Enable Pushdown Optimization		HEC Standard Services	AFA pushdown optimization is enabled on AFA nodes
AF8	Import Delivery Units		HEC Standard Services	Import of AFA Delivery units in HANA multi-container scenarios. This task is required only in MDC setup.
AF9	Multitenant Setup		HEC Standard Services	Configure and setup AFA nodes for each tenant DB including, service initialization, cockpit access, delivery units and verification.
AF10	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.
AF11	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.
AF12	Other Services			
AF13	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.
AF14	Data Replication for Accelerated Reporting		HEC Excluded Tasks	Setup ASE OLTP data replication to HANA DB. Identify and setup DB objects to be replicated.
AF15	Monitor Accelerator for ASE Pushdown Statements		HEC Excluded Tasks	Monitoring Accelerator for ASE objects including pushdown statements using HANA Cockpits



#	Task	D	Responsibility Project HEC	Remarks Project HEC
GK1	X28 - GK Software			
GK1	Setup and configuration			
GK2	Setup and manage GK Software directories		HEC Standard Services	
GK3	Create directory for master data file upload (if not already available)		HEC Standard Services	
GK4	Assist in copying various files related to GK software configuration to file system directories		HEC Standard Services	
GK5	Setup of dynamic takeovers in the structures		HEC Excluded Tasks	
GK6	Setup of structure level overwrites		HEC Excluded Tasks	
GK7	Setup NetWeaver Config tool directory structure		HEC Standard Services	
GK8	Change language after installation		HEC Standard Services	
GK9	Setup system level overwrite (system types)		HEC Excluded Tasks	
GK10	Configure customer specific organizational structure		HEC Excluded Tasks	
GK11	Configure basic Store Manager node		HEC Standard Services	
GK12	Install store templates		HEC Excluded Tasks	HEC to provide share to copy files on to the OS level
GK13	Import of store templates into Store Manager		HEC Excluded Tasks	
GK14	Assign template to the main Store Manager structure		HEC Excluded Tasks	
GK15	Import config into Hybrid InfoServer		HEC Excluded Tasks	
GK16	Configure HANA JDBC datasource connection pooling		HEC Standard Services	
GK17	Deploy EPA files into SAP NetWeaver Portal		HEC Standard Services	
GK18	Create customer store structure		HEC Excluded Tasks	
GK19	Configure GK Store Manager		HEC Excluded Tasks	
GK20	Import Global Configuration for Store Manager (data container)		HEC Excluded Tasks	
GK21	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
GK22	Import master data		HEC Excluded Tasks	
GK23	Configure GK ECON for Data import (defining the xml file for IDoc imports)		HEC Excluded Tasks	
GK24	Create and customize Reference Store (countries, district, stores)		HEC Excluded Tasks	
GK25	Create SAP NetWeaver datasource		HEC Enhanced Managed Services ("EMS") that can be performed by customer	



#	Task	D	Responsibility Project HEC	Remarks Project HEC
GK26	Configure and assign data containers (Taxes, work groups, reasons of transactions etc.)		HEC Excluded Tasks	
GK27	Configure SDC data containers (assign variants etc.)		HEC Excluded Tasks	
GK28	Import templates and activation manually (e.g. EC config template, heartbeat monitor)		HEC Excluded Tasks	
GK29	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.
GK30	Operations			
GK31	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 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.
GK32	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.
GK33	Modification of HTTP requests		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	
GK34	Change application server parameters after handover		HEC Enhanced Managed Services ("EMS") that can be performed by customer	Modifying standard settings to changing customer requirements
GK35	Manage communication with the message server / application server using SSL		HEC Standard Services	
GK36	Definition of port ranges		HEC Standard Services	
GK37	GK Host configuration in the Portal Administration - System landscape		HEC Standard Services	
GK38	Update by CDPL tool (Central Deployment update for Store components)		HEC Excluded Tasks	
GK39	Rebuild client		HEC Enhanced Managed Services ("EMS") that cannot be performed by the customer	OS access required to run the scripts
GK40	GK Software user management		HEC Excluded Tasks	
GK41	Map GK software users to SAP NetWeaver user management		HEC Excluded Tasks	
GK42	Backup and Restore - standard HANA & NW		HEC Standard Services	
GK43	Backup and Restore - sync after DB restore		HEC Excluded Tasks	
GK44	Synchronization of master data after database recovery		HEC Excluded Tasks	
GK45	Clean up obsolete content data and templates		HEC Excluded Tasks	
GK46	Define and implement log and trace strategy		HEC Standard Services	
GK47	Monitor basic technical functions using HEC monitoring environment		HEC Standard Services	
GK48	Monitor GK application using Enterprise Cockpit		HEC Excluded Tasks	
GK49	GK Business Process Monitoring		HEC Excluded Tasks	
GK50	Monitoring solution performance (node level performance using GK Performance Monitor)		HEC Excluded Tasks	HEC to support copying the files into working directories
GK51	Analyze database using GK_PMON, GK_STATS		HEC Excluded Tasks	