Managed Services (HANA Enterprise Cloud and Application Management Services)

1   Definitions

1. **"Application Management Services (AMS)"** provide SLA based post implementation application support for a Customers SAP centric landscape.

2. **"Business Day"** means any days Monday to Friday with the exception of public holidays at Customer location. These means that Saturday, Sunday and country-specific public holidays are not Business Days. Exceptions may be specified in the applicable Scope Document.

3. **"Business Hour"** means business hours (8 a.m. until 6 p.m. local time) at Customer location on Business Days. Exceptions may be specified in the applicable Scope Document.

4. **"(AMS) Change Management Process"** means the procedure to authorize, plan and deploy a change of the business process into the productive systems. All changes in the Customers system, which are not caused by an Incident or Problem or agreed as a Standard Change, are considered a Request for Change. Change Management does not only include the implementation procedure, but the holistic process from the requirement to the deployment. Changes are classified by their potential impact to the productive system (Regular Change and Emergency Change). Depending on the potential impact, a certain approval level is required.

5. **"Change Request"** means any changes in the HEC Services as described in a written document signed by the parties and referencing the applicable Order Form.

6. **"Computing Environment"** means the SAP provided data center facilities, servers, networking equipment, operating systems, and data storage mechanisms selected and used by SAP to provide the HEC Service for the Customer, and includes the Production Computing Environment (PRD) and any other Computing Environment (QAS) used for the non-production purposes (NON-PROD) as agreed in the Scope Document.

7. **"Confidential Information"** means, with respect to Customer, the Customer Data, marketing and business plans and/or Customer financial information, and with respect to SAP: (a) the HEC Service including, without limitation, all (i) computer software (both object and source codes) and related documentation or specifications provided by SAP; (ii) techniques, concepts, methods, processes and designs embodied in or relating to the service; and (iii) all application program interfaces, system security and system architecture design relating to the service; and (b) SAP research and development, product offerings, pricing and availability. In addition to the foregoing, Confidential Information of either SAP or Customer (the party disclosing such information being the "Disclosing Party") may also include information which the Disclosing Party protects against unrestricted disclosure to others that (i) the Disclosing Party or its representatives designates as confidential at the time of disclosure; or (ii) should reasonably be understood to be confidential given the nature of the information and the circumstances surrounding its disclosure; including, without limitation, information about or concerning any third party that is disclosed to other party under the Agreement.

8. **"Continuous Operations"** The Request category Continuous Operations is intended for all Tickets that contain some kind of continuous support for a longer time. As a rule, these will be periodical / recurring Tickets. They can be used to record proactive support (except monitoring) based on the Customer contract or separate agreements, continued consulting or minor maintenance tasks on request of the Customer if the Customer does not want to create a separate Ticket for each task. Continuous Operations Requests are processed in compliance with the Request Fulfillment process.

9. **"Customer Data"** means any content, materials, data and information that Customer or its Authorized Users enter into the Computing Environment.

10. **"Downtime"** means the total minutes in the Month during which the HEC Services does not respond to requests from SAP's Point of Demarcation for the data center providing the HEC Services, excluding Excluded Downtime.

11. **"Emergency Downtime"** is defined in Section 2 subsection 2.5 of this Service Description.

12. **"Excluded Downtime"** is defined in Section 9.2 of this Service Description.

13. **"HEC Service(s)"** means HANA Enterprise Cloud (HEC) services as specified in a Scope Document and Order Form and the relevant HEC Roles and Responsibilities document for a project phase (HEC Project for NON-PRD systems) or for live business transaction (HEC Productive for PRD systems) and may be combined with Application Management Services (AMS) for HANA Enterprise Cloud.. Any services not included in the HEC Roles and Responsibilities document shall be deemed as out of scope for the HEC Services.

14. "**HEC Service Fee**" means the amount payable on a recurring basis under the applicable Order Form for the HEC Services provided thereunder.

15. **"Incidents"** means unplanned interruptions of a business process or cases of material reduction in service quality (HEC Production only) reported by the Customer.

16. **"Initial Reaction Time (IRT)"** means the amount of time (e.g. in hours or minutes) between the receipt of a support Ticket (time stamp of Ticket status "open") and the first action taken by an SAP support person (time stamp of Ticket status "in process") to respond to an Incident or process a Service or Change Request".

17. **"Key User"** means a Customer's specified contact person who has responsibility for a special business process and SAP software knowledge. A Key User is authorized to address Requests to SAP.

18. **"LAN"** means a local area network that is a logical computer network that spans a relatively small area.

19. **"License Agreement"** means the agreement (other than this Agreement) under which Customer procured the Licensed Software.

20. **"Licensed Software"** means the version of the applications, databases, software, tools and components owned or licensed by Customer, which Customer provides to SAP as part of the Computing Environment.

21. **"Local Time"** means, except as otherwise expressly defined the time zone in Customer's primary location:

22. **"Month"** means a calendar month.

23. **"NON-PRD"** (**or "Non-Production Computing Environment"**) means any Computing Environment other than a PRD and may include development, quality assurance or sandbox environments.

24. **"Point of Demarcation"** means the outbound firewall / (or for HEC Services that include a VPN for access, the point of the connection of the SAP network to the VPN) of SAP's Computing Environment.

25. **"PRD" (or "Production Computing Environment")** means that part of the Computing Environment, which is used exclusively for the execution of live business transactions.

26. **"Problem"** means the underlying root cause of an *Incident*. A Problem can cause multiple Incidents.

27. **"Product Support"** means support provided by the software product manufacturer (e.g. SAP) due to software product errors.

28. **"Request"** means a question or a task that is addressed to AMS. A Request can be classified as Incident, Request for Change or Service Request.

29. **"(AMS) Request for Change"** is the formal description of a desired business process change. Requests for Change are processed in compliance with the AMS Change Management process.

30. **"(AMS) Request Fulfillment Process"** means Service Requests are handled in the AMS Request Fulfillment process if they do not match the prerequisites for any other of the predefined AMS processes (Event Management, Incident Management, Problem Management or Change Management). These Service Requests will be further separated into one of the following categories: Standard Change, Request for Continuous Operations, or Service Request.

31. **"SAP Support Portal"** is part of the Global Support platform (included in SAP Enterprise Support), the SAP Support Portal is SAP's knowledge database and SAP's extranet for knowledge sharing on which SAP makes available content and services to customers and partners of SAP only. Thereby, the [SAP Support Portal](https://support.sap.com/home.html) found at https://support.sap.com/home.html is SAP's central portal for all application based support Requests via creation of support Tickets.

32. **"Service Credit"** means an amount calculated and credited in accordance to section 9.7 of this Service Description.

33. **"(AMS) Service Desk"** means a centralized function servicing the single point-of-entry for all AMS Requests and Tickets. The AMS Service Desk handles Tickets in compliance with the Service Desk process, i.e.
    - Ticket acceptance / rejection (contract, SLA, key user check)
    - Ticket monitoring (see SLA)
    - Ticket dispatching to the AMS core team consultants

    The process Service Desk describes the workflow and tasks of the service desk function, including
    - Request / Ticket reception
    - Ticket creation (received by phone or email)
    - Ticket monitoring
    - Ticket dispatching and Reporting

34. **"Service Level Agreement (SLA)"** describe the quality (e.g. IRT) and quantity (e.g. monthly support volume in hours) of agreed services between the Customer and SAP as service provider.

35. **"Service Level(s)"** means the minimum service level agreed by SAP in this Service Description or related Scope Document including Priority Levels and SAP Initial Reaction Times. **"Service Request"** means any Request, which is no Request for Change and no Incident. Service Requests are processed in compliance with the Request Fulfillment process.

36. **"Service Time"** means times in which SAP provides the Customer with the defined HEC Services according to the defined SLA.

37. **"Solution Time ("ST")"** means the amount of time (e.g. in hours or minutes) between the when processing of a Ticket begins (time stamp of Ticket status "in process") until the first solution will be provided to the Customer (time stamp of Ticket status "solution proposed to customer" (can be set exceptionally manually in case of a workaround). The status "SAP Proposed Solution" means SAP has provided a corrective action or a solution proposal. The Solution Time does not include the time, when the Ticket is handed over to Customer (Ticket status "customer action") or SAP's Product Support (Ticket status "Sent to SAP") for processing. The Solution Time SLA only applies to Incident Management Tickets for PRD systems and if agreed contractually.

38. **"Standard Change"** means a low-impact change that are pre-defined and pre-authorized. Standard Changes are processed in compliance with the (AMS) Request Fulfillment process.

39. **"System Availability"** means a percentage calculated by the formula as defined section 9.2 of this Service Description.

40. **"Ticket"** means the format to document any support Request addressed by the Customer to SAP. Each Ticket is given a number at the point of time it is created. The Ticket number will be the single reference to the Customer's Request.

41. **"Total Minutes in the Month"** are measured 24 hours at 7 days a week during a Month.

42. **"VPN"** means a Virtual Private Network that is a secure data network that utilizes the internet to connect geographically distant offices.

43. **"Termination Date"** means the effective date of a valid termination effected in accordance with terms of the Agreement.

44. **"Uptime"** means the total number of minutes in any given month less the total Downtime for such month.

45. **"Workaround"** is a temporary solution aimed at reducing or eliminating the impact of an Incident for which a full resolution is not yet available.

2 HANA Enterprise Cloud (HEC) Services (HEC Production and HEC Project)

2.1 Provision of Licenses

Customer is responsible for providing all Licensed Software and obtaining all necessary rights from third parties required for SAP to run and host the Licensed Software. At SAP's request, customer will provide written verification of such rights from Customer and/or any applicable third party licensors. Customer grants to SAP the nonexclusive right to use the Licensed Software for the sole purpose of and only to the extent necessary for SAP and its subcontractors to provide the HEC Service and to the extent as may be otherwise stated in the applicable Order Form. Customer hereby represents and warrants that it has all rights, licenses and authorizations necessary to grant the rights to SAP as set forth in this Section.

2.2 Support

Customer is responsible for obtaining and retaining SAP Enterprise Support (or any lower level if agreed by SAP in writing) for SAP Licensed Software, and relevant support for non-SAP Licensed Software, for the duration of the Order Form.

2.3 Licensed Software Modifications and Configuration

Customer is responsible for testing and resolving source code, compatibility issues or other conflicts that may arise from modifications permitted under the License Agreement and any patches or workarounds or other changes provided by the licensor of the Licensed Software. Customer will inform SAP immediately about modification or other changes to the Licensed Software. In order to be able to run the underlying Computing Environment, customizations or modifications of the Licensed Software may be restricted as reasonably determined by SAP.

2.4 Currently Supported Version of Licensed Software and Subscription Software

2.4.1 Customer shall use, and all installations including the initial install of Licensed Software and/or Subscription Software in the Computing Environments shall be, a version or release of the Licensed Software and/or Subscription Software for which software maintenance and user support are current, as provided by the software vendor as specified in the relevant license agreement with such vendor. For SAP Licensed Software and/or Subscription Software such support (to the extent included in the applicable Order Form or License Agreement) is provided according to the current maintenance phases of SAP software releases as stated in https://support.sap.com/releasestrategy. For the purpose of this provision, "current" herein relates to "Mainstream Maintenance".

2.4.2 Customer acknowledges that if Customer is not on a version of the Licensed Software and/or Subscription Software under current maintenance, (i) SAP's abilities for the provision of support may be limited and SAP shall assume no responsibilities for such limitations and (ii) the System Availability Service Levels shall not apply. During the Subscription Term, Customer may be required to upgrade to more recent versions of SAP Licensed Software and/or Subscription Software to receive SAP Enterprise Support and the Systems Availability Service Levels, which may require Customer to incur additional costs. In the event that "Mainstream Maintenance" is no longer available for the Licensed Software and/or Subscription Software and a new version or release of the Licensed Software and/or Subscription Software is not available, the parties shall agree in good faith on a mutually agreeable solution, which may require Customer to incur additional costs.

2.4.3 SAP strongly recommends that Customer follows best practices for Software Lifecycle Management as published by SAP Active Global Support. Unless otherwise expressly stated in the Order Form and except as set forth in Section 7.2 below, Customer is responsible for the installation of Subscription Software and Licensed Software, including upgrades and new releases, into the Computing Environment.

2.5 Patches and Operating System Upgrades

SAP reserves the right to apply critical application patches; operating system security patches (security patches with priority "very high", and critical operating system upgrades at any time without Customer's prior consent. SAP will use reasonable endeavors to provide Customer with forty-eight (48) hours advance notice regarding the critical patch deployment unless a shorter notice period is required in order to address a critical security issue. In case of downtime during such critical patch deployment and critical operating system upgrades, the parties agree that such downtime will be considered "**Emergency Downtime"** and shall count towards the aggregate of four (4) hours of Scheduled Downtime for the following calendar month. Non-critical security patches (all security patches with priorities "high", "medium", or "low") will be Customer's responsibility and Customer must engage SAP by way of a service request ticket. The parties agree that such upgrades will be performed during Scheduled Downtime or other Agreed Downtime.

2.6 Microsoft Software products

To the extent that the Computing Environment provided by SAP includes Microsoft software products (e.g. specified in Section "System Set-up Table" in the Order Form), Customer agrees to the comply with the following conditions in connection with the Microsoft software products:

2.6.1 Customer may not remove, modify or obscure any copyright, trademark or other proprietary rights notices that appear on the Microsoft software products or that appear during use of the Microsoft software products.

2.6.2 Customer may not reverse engineer, decompile, or disassemble the Microsoft software products, except and only to the extent that applicable law, notwithstanding this limitation expressly permits such activity.

2.6.3 Any warranties, liability for damages and remedies, if any, are provided solely by SAP and not by Microsoft or its affiliates or subsidiaries.

2.6.4 Any product support for the Microsoft software products included in the Computing Environment is provided to Customer by SAP and is not provided by Microsoft or its affiliates or subsidiaries.

2.6.5 All title and intellectual property rights in and to the Microsoft software products are owned by Microsoft or its suppliers. Copyright laws and international copyright treaties, as well as other intellectual property laws and treaties protect Microsoft software products. Customer's possession, access, or use of the Microsoft software products does not transfer any ownership of the Microsoft software products or any intellectual property rights to Customer.

2.6.6 SAP may disclose Customer's information regarding the use of Microsoft software products to Microsoft or Microsoft affiliates or subsidiaries in case of audits.

2.6.7 Customer acknowledges that the Microsoft software products are not fault-tolerant and is not guaranteed to be error free or to operate uninterrupted and shall not be used in any application or situation where such Microsoft software products failure could lead to death or serious bodily injury of any person, or to severe physical or environmental damage ("High Risk Use"). Examples of High Risk Use include aircraft or other modes of human mass transportation, control of nuclear or chemical facilities, life support systems, implantable medical equipment, motor vehicles, or weaponry systems. High Risk Use does not include utilization of Microsoft software products for administrative purposes, to store configuration data, engineering and/or configuration tools, or other non-control applications, the failure of which would not result in death, personal injury, or severe physical or environmental damage.

3   Application Management Services (AMS) for HEC

Application Management Services (AMS) assist Customer in the ongoing application support of their SAP HANA Enterprise Cloud solution. The AMS Services for HEC to be provided by SAP are limited to the following scope and is subject to Customer fulfilling its responsibilities in this Service Description and Schedule A to the applicable Scope Document (Roles and Responsibilities for AMS).

All other services, systems, applications and locations supported etc. are out of scope.

The following standard Application Management Services can be provided to the extent as described in Schedule A to the applicable Scope Document (Roles and Responsibilities for AMS). The relevant services in scope of the engagement will have to be selected in the applicable Scope Document:

3.1   Incident Management

- Ticket acceptance from Key Users according to defined SLAs
- Analysis and resolution of Incidents according to defined solution scope and agreed SLAs
- Recommendations on application- and system optimization
- Ticket-based documentation
- Request involvement of Product Support when necessary

3.2   Problem Management

- Ticket acceptance from Key Users according to defined SLAs
- Root cause analysis and resolution of Problems according to defined solution scope and agreed SLAs
- Recommendations on application- and system optimization
- Ticket-based documentation
- Request involvement of Product Support when necessary

3.3   Change Management

- Ticket acceptance from Key Users according to defined SLAs
- Analysis of Requests for Change according to defined solution scope and agreed SLAs
- Scope definition, commercial validation and creation of Requests for Change in collaboration between SAP's Engagement Manager and Customer's Engagement Manager both defined in section 6 below
- Planning and deployment of the Requests for Change according to defined solution scope and SLAs after Customers approval as part of services described either during the Operations Phase or as a Change Request to the Order Form.
- Ticket-based documentation
- Request involvement of Product Support when necessary

3.4   Request Fulfillment

- Ticket acceptance from Key Users according to defined SLAs
- Implementation of Service Request, Request for Continuous Operations and agreed Standard Change according to defined solution scope and agreed SLAs
- Ticket-based documentation

3.5   Proactive Event Management (Monitoring)

- Carry out of monitoring activities as specified in the monitoring concept and creation of incident Tickets for identified issues
- Monitoring alerts, categorization of alerts according to criticality, and creation of incident Tickets for critical alerts
- Taking corrective actions by processing the incident Tickets
- If agreed, proactive adjustment to relevant parameter to avoid further issues
- Ticket-based documentation

3.6   Proactive Services for SAP Applications

- Specific service activities defined for the customer specific landscape to be carried in proactive mode as specified in the Scope Document

SAP may provide some AMS services in either a proactive or a reactive mode. When providing services in a reactive mode, it is Customer's responsibility to identify issues, problems or work tasks for SAP to perform in

providing the Services, each Requests have to be addressed to SAP by opening and sending a Ticket to SAP via SAP Support Portal with the full documentation of the inquiry.

Tickets can be classified as Event-, Incident-, Problem-, Change Management or Request Fulfillment. When providing services in a proactive mode, SAP will take the initiative to identify issues, problems or work tasks for SAP to perform in providing the Application Management Services. Unless otherwise agreed in the Scope Document, proactive services will only be provided for production systems.

SLA's will only be measured for tickets created in through SAP Support Portal or Customer's SAP Solution Manager application which has an online support connection to SAP Service and Support established for the SAP installation in scope of this Agreement or tickets created by SAP in SAP's support landscape on behalf of the customer.

As part of the engagement, SAP will provide selected Services as agreed in the Scope Document and/or Order Form up to an agreed number of person hours per month at the discretion of the customer. The agreed number of monthly hours is designated in the Scope Document and/or Order Form for AMS.

As part of the engagement, SAP will provide selected services only for the SAP solution and business processes in scope as specified in the Order Form for AMS.

The nature and type of support activities are described in Schedule A to the applicable Scope Document (Roles and Responsibilities for AMS). Some services will require tasks to be performed by both Customer and SAP personnel for the successful completion of the service.

The services during live operation are provided remotely by SAP. Onsite services at Customer's request require at least one month's notice and must be submitted in a Change Order in accordance with the Change Request Procedure as defined in Exhibit A. SAP cannot guarantee that it will be able to provide resources for these services.

The platform to be used to create support Requests to SAP AMS will be the SAP Support Portal.

Customer is responsible for setting up, operating and maintaining its ticketing infrastructure as described in "Customer Responsibilities and Obligations regarding HEC Services and Application Management Services for HEC" in section 8 unless otherwise agreed in the Scope Document. SAP does not take any responsibility for ensuring that the Ticket replication from Customer ticketing infrastructure to SAP is functioning properly.

4   Engagement Approach for Application Management Services

An AMS engagement consists of four phases with varying duration: Transition, Stabilization, Operations and Closure.

4.1   Transition

The Transition phase precedes the Stabilization and Operations phases and has the objective to establish cooperatively all roles, processes and tools required for a successful delivery of the Application Management Services in the next phases. No Tickets are processed during this phase.

SAP will provide a support structure so that the resources required to provide the Application Management Services are available and that they have the necessary Customer-specific knowledge of the supported applications that will be used.

This includes in particular:

- Appointing SAP's Engagement Manager
- Integration into the processes of SAP's (AMS) Service Desk
- Knowledge transfer to the SAP support team concerning the Customer -specific SAP solution

A mutually agreed transition plan will be drafted in detailed discussions with the Customer during the initial stages of the transition phase and will be used to track all services throughout this phase.

One key activity of Transition phase is the knowledge transfer to make the SAP AMS team familiar with the specifics of the Customer's solution. The intensity and manner of the knowledge transfer depends on the Customer's IT organization or implementation partner of Customer, if applicable, and the complexity of the Customer's supported IT solution (number of systems, application scenarios, business processes and modifications within the SAP solution, the number of non-SAP applications and interfaces, and so on).

The knowledge transfer phase will be coordinated by the SAP Engagement Manager with strong cooperation of the Customer or the responsible contact partner of Customer if applicable, and also with the Customer's project manager responsible for the implementation, if applicable. The knowledge transfer will focus on the business processes listed in the in the applicable Scope Document.

The knowledge transfer will provide the SAP AMS team with the necessary knowledge required for the provisioning of the services, which may, as appropriate include information, records, documents, test scripts, data and live demo-sessions pertaining to SAP's delivering its in-scope services to the Customer.

The Transition phase is a project in itself and consists of 2 primary steps: Transition Planning and Transition Execution (including final service validation and test). The duration of this phase varies depending on the complexity of the AMS engagement.

The main steps in the Transition phase are as follows:

Transition Planning	Planning and Preparation	Detailed workshops between Customer and SAP, team on-boarding, defining responsibility matrix and governance models
	Setup	Request and provisioning of infrastructure and application accesses and other resources necessary to support the Customer. Setup and testing of the ticketing tool
Transition Execution	Knowledge Acquisition	SAP to attend knowledge transfer sessions led by the Customer or responsible contact partner of Customer, if applicable and gather, update and/or prepare documentation, if necessary. Review of documentation provided by Customer
	Shadow Support	Optional step: SAP to observe and assist Customer team on-site or remotely (locations to be determined)
	Reverse Shadow Support	Optional step: SAP to perform services while Customer team to support as escalation contacts
	Finalize Transition Phase	Service Test on SLA Management, Reporting and Monitoring. SAP to perform final Operations Readiness checks and move on to coordinate cutover activities. Sign off of the Transition phase by Customer and SAP

- In addition to Customers responsibilities and Obligations regarding HEC Services and Application Management Services for HEC defined in section 8 Customer is required to provide the following during the Transition phase: Ensure that SAP Personnel receive all necessary usage rights for Customers systems. During the planning phase, it will be determined which authorizations have to be assigned to these users. Support authorizations will have to allow SAP to provide the support services according to Roles and Responsibilities of the applicable Scope Document for Application Management Services.
- Customer's Key Users will support the SAP AMS team in acquiring the necessary knowledge for supporting the business processes in scope. In addition, Customer will provide the relevant documentation required for Application Management Services, especially a detailed system documentation for the supported systems and other documents if required.

4.2 Stabilization

The Stabilization phase precedes the Operations phase and has the objective to mature all aspects of solution operations to a steady state when productive SLA measurement starts in the Operations phase.

During the Stabilization Phase, the described services will be provided primarily remotely in accordance with the agreed scope, but without SLA's. Tickets are processed in compliance with the Event-, Incident-, Problem-, Change Management or Request Fulfilment Process. During this phase, application landscapes shall be stabilized and the consultants' familiarity/understanding with the system landscape increased.

If necessary, SAP will also provide support onsite under this agreement for up to an agreed number of days per event as designated in the Order Form for AMS. Services provided onsite require prior notification irrespective of the priority of the issue at hand. Onsite services are documented in a Ticket, which has to be processed in compliance with the Event-, Incident-, Problem-, Change Management or Request Fulfillment Process.

The duration of this phase varies depending on the complexity of the AMS engagement.

The main steps in the Stabilization phase are as follows:

Stabilization	Kick-off Operations	Conduct a kick-off meeting with the Customer organization (e.g. Key Users)
	Finalize documentation and ITSM procedures	Business processes and technical documentation by Customer and AMS Procedural Manual by SAP will be updated along the experiences made in the Stabilization phase to complete relevant documentation to provide the Services
	Signoff	Perform exit criteria of Stabilization and Obtain customer sign off to commence Operations

4.3 Operations

The Operations Phase is the main phase of the AMS engagement.

The services described in section 3 during live Operations Phase are provided remotely by SAP and will be documented in a Ticket, which has to be processed in compliance with the Event-, Incident-, Problem-, Change Management or Request Fulfillment Process. All Tickets are processed in accordance with the agreed SLA's and scope as defined in the applicable Scope Document.

If necessary, SAP will also provide support onsite under this agreement for up to an agreed number of days per event as designated in the Order Form for AMS. Services provided onsite require prior notification irrespective of the priority of the issue at hand. Onsite services are documented in a Ticket, which has to be processed in compliance with the Event-, Incident-, Problem-, Change Management or Request Fulfillment Process.

Onsite services at Customer's request that exceed the given time requirements require at least one month's notice and must be submitted in a Change Order in accordance with the Change Request Procedure as defined in Exhibit C. SAP cannot guarantee that it will be able to provide resources for these services.

The main steps in the Operations phase are as follows:

Operations	Service delivery	Perform day-to-day monitoring and support
	SLA monitoring	Perform SLA monitoring to prevent SLA violations
	Governance meetings	Perform regular internal meetings and meetings with the customer to meet quality of service delivery and to discuss and agree on proactive tasks as well as continuous improvements
	Reporting and Invoicing	Provide regular reporting
	Update documentation about ITSM procedures	Regularly review and update of business processes and technical documentation by Customer as well as the AMS Procedures Manual by SAP

4.4 Closure

The Closure Phase is the last phase of the AMS engagement. The start and end of this phase is not planned at the time of contracting but agreed on once either Customer or SAP provide termination notice, the duration of this phase varies depending on the finalization of activities.

The objective of the Closure Phase is to collaboratively ramp down the AMS service at SAP by handing back responsibilities to the Customer.

SAP will return all Customer documents received and provide the Customer may request support to the knowledge transition sessions as during this engagement Closure Phase.

During the Closure phase service delivery continues as described in Operations Phase, i.e. this particularly includes Ticket processing in compliance with the Event-, Incident-, Problem-, Change Management or Request Fulfillment Process. Additional activities are managed in a project. A joint project plan (Exit Plan) will be drafted in detailed discussions with Customer during the initial stages of the Closure Phase and will be used to track all services throughout this phase.

The main steps in the Closure Phase are as follows:

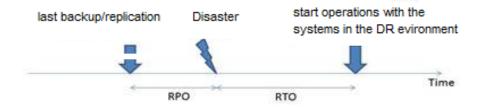| Knowledge Transfer	Knowledge Transfer sessions	Customer to attend knowledge transfer sessions led by SAP
	Handover meeting and sign-off	Customer and SAP verify that if all closure action items have been executed and customer signs off the official end of the engagement
Engagement Closure	Ticket handling	Ticket processing and confirmation by the Customer before Services end
	Deactivation	Termination of processes, meetings, final reporting and invoicing
	Setup	Deactivation of users, infrastructure and tool environment

5 Optional services

The following optional services are NOT included in HEC Services, and will NOT be provided by SAP, unless ordered by Customer for a fee and expressly stated in an applicable Order Form or Change Request.

5.1 Additional HEC Exit Services

Customer may elect to order the following Transition Services from SAP by entering into a Change Request and paying the applicable fees at SAP's then-current rates as specified in such Change Request: (i) services to transition Customer from the HEC Services to replacement services provided by Customer or a third party chosen by Customer, and, (ii) Customer Data in the backup media format being utilized by SAP or other format as mutually agreed. SAP will provide any such Transition Services ordered by Customer upon expiration of the term of HEC Services.

5.2 Disaster Recovery Services for HEC Production (if selected in the Scope Document)

1. **"Disaster"** means an event of substantial extent causing significant disruption of the delivery of the HEC Services and may include physical damage or destruction, to the SAP data center or Computing Environment. It can be natural disasters (such as floods, hurricanes, tornadoes or earthquakes) and/or human-induced disasters (including hazardous material spills, infrastructure failure, and bio-terrorism). A Disaster is typically not limited to one individual system or landscape but larger parts of an infrastructure.

2. **"Disaster Recovery Services" (or "DR Services" or "DR")** means the disaster recovery service, process, policies and procedures that are related to preparing for recovery or continuation of technology or infrastructure identified in the applicable Order Form as included in the DR Services. DR is not a process to overcome outages of isolated systems due to hardware or software incidents (i.e., DR is not a substitute or replacement for System Availability Service Levels described in this Agreement).

3. **"Short Distance DR" or "Metro DR"** means a Disaster Recovery Service in which SAP provides the DR Services (with the failover systems) from a data center less than 80km away from the standard data center, providing lower cost and smaller RPO but more risk regarding a local disaster impacting both data centers.

4. **"Long Distance DR" or "Regional DR"** means a Disaster Recovery Service in which SAP will provide the DR Services (with the failover systems) from a data center over 80km away from the standard data center, to minimize risk of a local disaster affecting both data centers.

5. **"RPO" (or "Recovery Point Objective")** means the maximum tolerable period in which Customer data might be lost due to a Disaster (i.e. time between last backup and point in time a Disaster occurred).

6. **"RTO" (or "Recovery Time Objective")** means the duration of time in which the Licensed Software and PRD is unavailable preventing HEC Services in Disaster case (i.e. time between a Disaster and point in time the systems are available again).

SAP provides standard DR Services with predefined parameters regarding RPO/RTO for defined system characteristics to the extent that prerequisites and conditions are fulfilled. SAP shall be excused from its DR Services obligations to the extent (and for the duration during which) Customer fails to achieve any of the following pre-requisites and such failure prevents SAP from performing the applicable DR Services:

- The applicable components are technically used as they are provided by SAP; any custom or 3rd party developments or modifications affecting them are not covered (excluding development/modifications done in ABAP only systems using SAP ABAP standard development tools, and excluding any third party products embedded in the SAP Software)
- The applicable systems stay within expressly agreed boundaries regarding size and layout
- Interfaces in DR scope are limited to interfaces/protocols supported by SAP systems out of the box (e.g., RFC, web service calls, Flat Files, XML and IDocs) for components located in the data center. Any interfaces that require additional solutions or components within the Computing Environment, as well as external connectivity, are outside of the standard DR scope
- All repositories containing Customer Data that need to be replicated to the DR site are databases; otherwise, RPO times can be substantially longer, thus does not fall under the definition of standard DR services

The relevant parameters depend on the chosen DR layout (Metro DR/ Regional DR), the database platform used, and the adherence to above listed conditions for standard DR services. The predefined c parameters for these standard DR services are:

	Short Distance DR (Metro DR)	Long Distance DR (Regional DR)
Database: SAP HANA	Single Node [1] RTO=12hrs; RPO=30mins Multi Node [2]: RTO=12hrs; RPO=0hrs	RTO=12hrs; RPO=30mins
Database: Sybase ASE	RTO=12hrs; RPO=30mins[3]	RTO=12hrs; RPO=30mins

[1] HANA Single Node: describes a configuration, where the HANA database system resides on one single server node.

[2] HANA Multi Node (or HANA Scale Out System): describes a HANA database system that is installed on more than one host but identified by a single system ID (SID). It is perceived as one unit from the perspective of the administrator, who can install, update, start up, shut down, or backup the system as a whole.

[3] Sybase ASE database replication is currently not supported in continuous mode, which would be the prerequisite for an RPO of 0. If such feature becomes available and the respective systems are updated to that new version and successfully tested, both parties will agree at that time on a modified RPO of 0 hours via a Change Request without additional service charge.

Performance characteristics may be reduced while operating under DR Services failover; provided, however, that such reductions in performance shall only be excused to the extent the Disaster is also a Force Majeure Event.

Other DR Services are not in the scope of SAP's standard DR Services. If requested by the Customer, such additional DR Services ("Additional DR Services) would need to go through a further DR assessment based on Customer architecture and requirements. Details on the implementation of any such Additional DR Services would be agreed upon with Customer, including revised estimated failover times and maximum data loss, and the parties would mutually agree to the applicable RPO and RTO for such Additional DR Services as result of the implementation in a Change Request. As part of this process, SAP would use reasonable efforts to bring RPO/RTO for the System Setup as defined in the Order Form in a similar range as for the defined packages.

Regular DR testing

SAP offers one annual DR failover-test as part of the DR Services to test the reliability of the DR Services. SAP shall promptly re-perform any DR recovery tests that fail to achieve the applicable standards and report any failures to Customer. For DR Service readiness, Customer will fulfill its infrastructure and business preparation in accordance with the Roles and Responsibilities document, and as may be further mutually agreed between the parties in a Change Request. Customer understands and agrees that the Customer business continuity objectives may require additional Customer efforts in addition to and beyond the scope of the DR Services hereunder.

Each DR Service implementation must be tested to achieve the expected functionality. Customer understands that those tests are a viable part of the DR implementation and the respective necessary Downtimes of the affected applications and/or systems are inevitable. The necessary Downtimes must be mutually agreed between SAP and Customer. The Customer is aware that a successfully implementation of DR is not possible without Downtimes for testing.

5.3 Continuous Improvement with additional AMS

Along with provision of continuous, operational managed services per mutual agreement SAP may help Customer to address efficiency challenges and prepare Customers existing landscape for further improvements, redirecting capacity from operations to create opportunity for innovation:

- Assessment and benchmark of operations and scope
- Design of Operations efficiency roadmap

SAP recommends to schedule recurring assessments and reviews according to this approach under the managed services engagement.

Realization of improvements will be implemented outside of the managed service engagement within an Optimize Service for Lifecycle Management for Operational Efficiency with the following approach:

- Transition to achievement of operations efficiency
- Continuous Improvement Measures for Innovation Readiness
- Innovation Framework and Innovation strategy roadmap

6   Engagement Management

SAP and Customer party shall each designate an Engagement Manager. Customer's Engagement Manager shall be empowered to make necessary decisions for Customer or bring about such decision without undue delay and shall provide a list of key Customer contacts, contact role, title, office phone number, cell phone number, e-mail address, etc. HEC and AMS Services performed by the assigned SAP resources shall be coordinated by SAP'S Engagement Manager Such Engagement Managers shall cooperate closely with each other to administer the terms of this service description and any Order Forms.

7   SAP Responsibilities and Obligations regarding HEC Services

7.1   SAP's responsibility shall not extend beyond the Point of Demarcation.

7.2   As part of the HEC Service, SAP will (i) provide the initial installation of the Subscription Software and/or Licensed Software, as applicable, in the Computing Environment, (ii) setup and configure relevant hardware and software monitoring agents for the Computing Environment, and (iii) introduce Customer to SAP's support and communications procedures.

7.3   The HEC Service as contemplated under the Agreement shall include the provision of services for the Computing Environment described in the Documentation.

7.4   At Customer's request prior to termination or expiration of an Order Form, SAP shall, within a reasonable time period provide to Customer in a reasonable backup media format being utilized by SAP the Customer Data stored in the Computing Environment.

8   Customer Responsibilities and Obligations regarding HEC Services and Application Management Services for HEC

8.1   In addition to the relevant conditions in the GTC Customer will change all passwords used to access the HEC Service at regular intervals, no less frequently than once every six (6) months). If Customer learns of an unauthorized third party having obtained knowledge of a password, Customer will inform SAP thereof without undue delay and promptly change the password.

8.2   Customer is responsible for the connection to the HEC Service, including the internet connection to the Point of Demarcation.

8.3   SAP's provision of the HEC Service is subject to Customer's prompt performance of its responsibilities set forth in the Agreement (including the Roles and Responsibilities document) and provision of the qualified employees and resources required:

(a) Primary point of contact in dealing with SAP (Engagement Manager), responsible for coordinating all activities and authorized to implement required technical changes.

(b) Current list of key Customer contacts with access to the Computing Environment, contact role, title, office phone number, cell phone number, e-mail address, etc.

(c) A support user ("S-User") ID in the Computing Environment with the authorizations defined below. This S-User ID, which is (initially) assigned to Customer by SAP in support of the License Agreement and which Customer uses to log on to SAP's Support Portal for software download and support is required by SAP's HEC

resources in order to permit SAP HEC resources to also log on and perform software download tasks necessary to obtain the software for set-up of the Computing Environment. Required authorizations include:

- Sending and/or creating and / or confirming and / or re-opening Customer messages
- SSCR key registration
- Processing service messages
- Opening service connections
- Software download
- Maintaining system data
- Requesting license keys

8.4 Customer authorizes SAP to set up and use an S-user with these authorizations. Customer will ensure that any authorizations that may be required for third parties or its employees will be provided promptly.

8.5 In the event that any SAP equipment is required at the Customer facility, Customer shall provide a physically secure and conditioned environment for any such equipment provided to Customer by SAP and Customer bears all risk for damages. SAP shall not be responsible for any damages to the extent resulting from Customer's failure to provide a physically secure and conditioned environment.

8.6 Customer is and will remain solely responsible for the definition, documentation and execution of its business processes including, but not limited to, configuration of systems management and application and data security policies, batch processing requirements, and compliance with other governmental or regulatory requirements. Customer is responsible to provide SAP necessary and sufficient documentation of its applicable processes in order for SAP to perform its HEC Service responsibilities under the Agreement.

8.7 Reference Sites: During the term of the Agreement, Customer will host up to four (4) hours a month of reference calls, which will be coordinated by SAP's Engagement Manager.

8.8 Customer is responsible for provisioning, operation and servicing of Customer's LAN or parts thereof (infrastructure, local printers, software, and so on).

8.9 Regardless of the scope of services provided under this engagement, Customer is responsible for the implementation and the design of the overall software solution.

8.10 Customer is responsible for the definition and execution of its business processes including but not limited to application and data security policies, Sarbanes-Oxley compliance standards and processing requirements.

8.11 Customer is responsible to provide SAP reasonable and sufficient documentation of its business processes in order for SAP to perform its responsibilities.

8.12 Under this Agreement, a Request will be processed after a Ticket has been issued to SAP detailing the Request. Customer must open the Ticket in SAP Support Portal or Customer's SAP Solution Manager application, which has an online support connection to SAP Service, and Support established for the SAP installations in scope of this Agreement. Alternative entry channels for Ticket acceptance shall be specified and agreed in the applicable Scope Document only.

8.13 Customer will ensure that SAP has access to the supported systems within Customer's IT solution and will bear any expenses required for this purpose.

8.14 Customer is responsible to ensure that its Product Support parties reasonably cooperate in their timely receipt and handling of queries and Tickets forwarded from SAP.

8.15 Customer is responsible for all data stored into the systems. Customer is responsible for making sure its data is backed up. Except where otherwise expressly indicated in writing by Customer, SAP is always entitled to act on the assumption that all Customer Data is backed up.

8.16 Customer will ensure that the release of any new or upgrade to Customer's software complies with the interface requirements of the solution in scope and will notify SAP at least eight (8) weeks prior to the release of any new or upgrade to the software.

8.17 The engagement will be carried out requiring the efforts of both SAP and Customer. Customer will provide knowledgeable, decision-empowered resources available to work on the engagements as part of the engagement team, and will supply SAP with the names and contact information of all Customer and third Party resources assigned to the engagement.

8.18 The Customer Key Users are capable of providing 1st Level Support to the end-user community. Customers 1st Level Support gathers Customer's information on a disruption of service or on a Service Request. For a disruption

of service, Customers 1st Level Support will try to analyze the issue, figure out a solution or work-around or pass it to SAP AMS.

8.19 Customer and SAP will provide timely and adequately skilled team members and replace vacated team slots as deemed necessary during the engagement without undue delay.

8.20 In due time before start before start of the Transition phase, Customer will make technical documentation, end-user documentation and business process documentation available to SAP in English language (exceptions may be specified in the applicable Scope Document). In case Customer fails to provide this documentation on time or if the documentation does not have the required level of detail, the service start might be delayed and support efforts by SAP might increase.

8.21 Customer informs SAP in a timely manner, i.e. with a lead-time of three (3) months about changes to the required support in terms of volume, languages and service times.

8.22 Customer provides SAP for the semi-annual audits a user with all necessary authorizations free of charge. This is required for all systems in which SAP has responsibility for transportation management. Customer also confirms that its transportation management can checked for audit purposes and that information is also made available to the respective auditors. This is only applicable if during the set up phase it is agreed that SAP will be responsible for transports to production.

8.23 During the agreed service times Customer will ensure the availability of a sufficient number of Key Users who have the required technical-, application and business process knowledge and sufficient skills to communicate with SAP's AMS Consultants in the agreed support language and will provide to SAP a list of the key users including name, function, phone number, fax number and email address. Customer will ensure that all Key Users are familiar with the support process including Ticket creation and processing via the SAP Support Portal or Customers SAP Solution Manager Application.

8.24 SAP's provision of the Application Management Service is subject to Customer fulfilling its responsibilities described in Schedule A: Roles and Responsibilities for AMS of the applicable Scope Document for Application Management Services. Customer agrees to execute prompt performance of such responsibilities and provide the employees and resources required for the project phases in sufficient measure.

8.25 Customer is responsible for adaptations or extensions to the solution, for example, ones caused by Customer's changing requirements or structures (Organizational Change Management).

8.26 Customer will be fully responsible for the project management, design, scope, delivery execution, and user acceptance of application changes. SAP's role in enhancements will be on a staff augmentation basis by making a best efforts attempt to staff requested resources within the functional or technical skill sets and consulting level requested.

8.27 Customer ensures that all systems and product specific tools can be accessed by SAP via standard remote/service connection maintained in SAP Support Portal. For products or tools where service connections are not available, the customer has to provide a Windows Terminal Server access. Customer specific VPN client solutions will not be supported by SAP.

If Customer fails or partially fails to comply with these collaborative and cooperative duties or if Customer fails to comply with these collaborative and cooperative duties in the right quality or if Customer fails to comply on, SAP can request adjustments of the schedule and/ or charge additional costs resulting out of the non-compliance to Customer at the agreed rates.

8.28 This Section shall apply if any Licensed Software is non-SAP software licensed by Customer from a third party.

(a) Customer shall indemnify, defend and hold harmless (at its sole expense) SAP, SAP SE, its Affiliates and subcontractors from and against any claims, damages, losses, liabilities, costs and expenses (including reasonable attorneys' fees) arising from or related to any third party claim concerning (i) the Licensed Software (excluding Licensed Software licensed by Customer from SAP) or (ii) the combination of such Licensed Software with the HEC Service or other applications, content or processes, including any claim alleging infringement or misappropriation of third party rights by such Licensed Software or by the implementation, hosting or use of such Licensed Software as contemplated in the Agreement. The defence procedures set forth in the Agreement shall apply.

(b) CUSTOMER'S OBLIGATIONS SET FORTH HEREIN SHALL BE EXCLUDED FROM ANY LIABILITY LIMITS SET FORTH IN THE AGREEMENT.

(c) In the event SAP reasonably believes that any such Licensed Software violates applicable law, infringes or misappropriates the rights of any third party, otherwise violates a material term of the Agreement or results in material harm to the HEC Service, SAP may require such Licensed Software be promptly removed from the Computing Environment.

9   Service Levels and Reporting

9.1   Service Hours

Service Type	Time period during which SAP will provide Services
HEC Services	Systems with PRD: 00:00 to 23:59 every day subject to excluded and scheduled Downtime (defined in section 9.2 below) Systems with NON-PRD: 08:00 – 18:00 local time each Business Day
Application Management Services for HANA Enterprise Cloud	Service hours (Service Times) and Scope for Application Management Services for HANA Enterprise Cloud are specified in the applicable Scope Document for Application Management Services for HANA Enterprise Cloud.

"Business Day" means any days from Monday to Friday with the exception of the public holidays observed at Customer's location.

9.2   System Availability

The following table lists the System Availability applicable to the Computing Environment. SAP shall track and report to Customer the achieved "System Availability" in a monthly summary report. Customer must notify SAP of any claims for any Service Credits within one (1) month after receipt of the monthly System Availability report by filing a support Ticket with SAP.

Computing Environment segment	Service Level	Service Credit
PRD	99,5%	HEC Production: 2% of Monthly Service Fees for each 0.1% below the System Availability Service Level, not to exceed 100% of Monthly Service Fees
NON-PRD and provisioned server (IaaS)	95%	HEC Project: 2% of Monthly Service Fees for each 0.1% below the System Availability Service Level, not to exceed 100% of Monthly Service Fees

"System Availability" is calculated as follows:

$$\text{System Availability in \%age} = \left[\frac{(Total\ Minutes\ in\ the\ Month - Downtime)}{Total\ Minutes\ in\ the\ Month} * 100\right]$$

Excluded Downtime	Total Minutes in the Month attributable to: 1. Scheduled Downtime, as described in the Scope Document and as set forth below 2. Any Downtime requested by SAP or Customer and mutually agreed by the parties ("Agreed Downtime") 3. Emergency Downtime, as defined in Section 2.5 above 4. Downtime caused by factors outside of SAP's reasonable control such as unpredictable and unforeseeable events that could not have been avoided even if reasonable care had been exercised (see examples below this table) 5. Downtime of a NON-PRD system caused by using the NON-PRD for failover/to repair to a PRD system 6. Unavailability caused by factors outside of SAP's reasonable control such as unpredictable and unforeseeable events that could not have been avoided even if reasonable care had been exercised (see examples below this table)
Scheduled Downtime	Scheduled at a mutually agreed time (as listed in the Scope Document, not to exceed four (4) hours per month per system, excluding functional updates.

The following examples include but are not limited to what is beyond SAP's reasonable control:

(a) Customer's failure to meet Customer's responsibilities (including ordering maintenance for the Licensed Software) as set forth in the Agreement
(b) Downtime caused by Customer
(c) interruptions as a result of requirements stipulated by the third party manufacturers of the Licensed Software
(d) interruptions or shutdowns of the Computing Environment (or portions thereof) resulting from the quality of the Licensed Software provided by the Customer and/or Customer's customizations or Modifications of the Licensed Software or Computing Environment, unless this is the responsibility of SAP under this Agreement
(e) restore times of user data (recovery of database data from a media backup) where SAP was not the root cause for the required restoration

9.3   Backup / Restore

Days/ hours during which SAP provides HEC Services are set forth in the applicable Order Form.

Description	Computer Environment segment to which Service Level applies	Service Levels
Backup Frequency and retention period for Databases	PRD	Daily full backup and log file backup per SAP product standard. 30 days retention time. Backup of the PRD will be replicated to an alternate data center or location.
	NON-PRD	Weekly full backup and log file backup per SAP product standard. 14 days retention time. Backup of the NON-PRD will be replicated to an alternate data center or location.
Backup Frequency and retention period for File systems	PRD	Monthly full backup and daily incremental. Two (2) months retention time. Backup of the PRD will be replicated to an alternate data center or location.
	NON-PRD	Monthly full backup and daily incremental. Two (2) months retention time. Backup of the NON-PRD will be replicated to an alternate data center or location.

9.4   Initial Reaction Times and Solution Times

9.4.1   Ticket Priorities

The following priority levels (Ticket Priorities) apply to all Tickets (such priority to be assigned by Customer and may be re-assigned by SAP based on the criteria below and acting reasonably):

Very High: An Incident should be categorized with the priority "Very High" if the incident reported has very serious consequences for normal business processes or IT processes related to core business processes, and urgent work cannot be performed. This is generally caused by the following circumstances:

- A production system is completely down
- The imminent go-live or upgrade is jeopardized
- The core business processes of Customer are seriously affected

A workaround is not available. The incident requires immediate processing because the malfunction may cause serious losses.

High: An Incident should be categorized with the priority "High" if normal business transactions are seriously affected. Necessary tasks cannot be performed. This is caused by incorrect or inoperable functions in the PRD or DEV or QAS system that are required immediately. The incident is to be processed as soon as possible because a continuing malfunction can seriously disrupt the entire productive business flow.

Medium: An Incident should be categorized with the priority "Medium" if normal business transactions are affected. The problem is caused by an incorrect or inoperable function in the PRD or DEV or QAS system. The Customer orders a change to or a service for an existing critical business process.

Low: An Incident should be categorized with the priority "Low" if the problem reported has little or no effect on normal business processes. The problem is caused by incorrect or inoperable functions of the PRD, DEV or QAS system that is not required daily or only rarely used. This priority is also used for any other Service Request.

9.4.2 Initial Reaction Times (IRT)

The following Initial Reaction Time SLA for reactive Ticket based Requests are agreed for the different Priorities:

Initial Reaction Time (IRT)	Service Level
Ticket with Priority Very High (only applicable for PRD)	20 minutes and problem determination action plan within 4hrs within agreed Service Hours
Ticket with Priority High	2 hours for PRD within agreed Service Hours 4 hours for NON-PRD within agreed Service Hours
Ticket with Priority Medium	4 hours within agreed Service Hours
Ticket with Priority Low	1 Business Day within agreed Service Hours

The Initial Reaction Time is in accordance with the contractually agreed support times and can only be guaranteed if the communication channels according to the Support Concept or contract are used. If the priority of a support Ticket is being changed, the service level IRT restarts from this point.

9.4.3 Solution Times

The optional SLA Solution Time can be agreed for Application Management Services for HANA Enterprise Cloud, only if specified in the applicable Scope Document for Application Management Services for HANA Enterprise Cloud.

Solution Time SLA is met if – within the Service Level – SAP provides a solution proposal for resolving the issue or a workaround. If the solution proposal is based on a workaround, SAP and Customer will agree on an action plan for creating and implementing a permanent resolution. This action plan includes a timeline, action items and persons responsible.

Solution Time SLA is measured in the SAP's (AMS) Service Desk tool.

If Customer changes the priority of a Ticket, the service levels "Initial Reaction Time" and "Solution Time" restarts from this point.

The Solution Time starts when the Ticket status is set to "In Process". Solution time stops when the Ticket is on status "Customer Action" and continues to count when it is on status "In Process" at SAP. Solution Time also stops if SAP sets the status "On Hold" and only continues to count when the status is set to "In Process" by SAP. The status "On Hold" may be set in the following situations:

- Returning Ticket to Customer to request additional information
- Returning Ticket to Customer to request a solution approval
- Circumstances that are beyond the control of the SAP AMS team (see more below)
- Delays caused by third Parties (i.e. not by SAP AMS team). In this context other SAP units than SAP AMS are also considered "3rd Parties"

Solution Tim SLA is only applicable under the following circumstances:

- Ticket is classified as "Incident"
- Issue occurs in a productive system
- Ticket priority is set in accordance with the priority definitions

Those times that a Ticket is with Product Support are excluded from the Solution Time calculation.

Solution Time is only applicable if the prerequisites for Solution Time SLA are met and if Customer performs his collaborative and cooperative duties. That means in particular:

- Customer provides working remote access for SAP
- Customer ensures system availability of SAP Systems described in the applicable Scope Document, especially hardware and network
- Customer provides all authorizations required for SAP to provide the described and agreed services. This includes in particular technical authorizations needed to work in SAP Systems described in the applicable Scope Document
- Customer ensures that changes in the SAP Systems, which were not implemented by SAP, will be made known to SAP ex ante. This is done by handing over a documentation describing all technical and process aspects of the change. These changes will be added to the scope based on mutual agreement
- Customer ensures that all required information is given to investigate the issue. That means, that a Ticket must include at least the following:
  1. step by step instructions for reproducing the issue
  2. a set of data to reproduce the issue
  3. a precise description of the issue (including comparison of actual and expected system behaviour)
- Customer ensures that Key Users with sufficient functional and technical expertise as well as decision making authorization are available and reachable (including contact data such as phone number)
- Customer creates Tickets in SAP Support Portal
- Customer actively supports the resolution process. That means in particular that Customer without delay validates the proposed solution
- Customer provides all required information without delay, and
- Customer ensures that all provided data and information are correct

Limitations

The following time windows are explicitly excluded from Solution Time SLA:

- Maintenance windows according to the Customer requirements
- Time windows which can be attributed to technical unavailability of the software solution (hardware, network, infrastructure or others)
- Time windows which can be attributed to issues with software products that are not included in the scope of this AMS Service

In case of events of force majeure and other incidents not caused by SAP, which prevent a smooth and uninterrupted resolution process, Solution Time will not be applicable until normal operations can be re-established.

If Customer fully or partially fails to comply with one or multiple of the listed prerequisites or only fulfils one or multiple of the listed prerequisites in the required quality or not within the required time and if there are delays caused by that SAP will not be in default even if the Solution Time expired. The onus for noncompliance of business process availabilities, the fulfilment of requirements, the reaction times and resolution times lies with Customer.

9.5 Changes to Service Levels

SAP may, at its sole discretion, modify the Service Level terms set forth in Sections 9.1 through 9.4 above upon notice to Customer, if SAP shall not materially diminish the Service Levels, Service Credits, or any other Service Level provision during the applicable initial subscription term or renewal term of the Order Form.

9.6   Service Reporting for AMS

9.6.1   Monthly Customer Report

SAP will create a monthly report providing Customer with information about the services provided in the previous month. The report will be made available online via the AMS Reporting Dashboard for the last reporting month and as downloadable PDF document for last 12 reporting months and will include the following information for the in the respective reporting period:

- Overview of the supported IT solution in scope of the services provided
- Management Summary / Recommendations for continuous improvement
- Total number of Tickets received including break down per service category, per priority, per location, per application
- Total number of completed / not completed Tickets including break down per application
- Total efforts for Tickets processed per month and accumulated over last 12 months (including break down per application and service category)

9.6.2   Real Time Ticket Reporting for AMS

A Real Time Ticket Reporting will be available online via the AMS Reporting Dashboard providing detailed information (including Ticket ID, priority, application, service category, status) on Tickets.

9.6.3   Service Level Reporting for HEC Project and HEC Production

SAP shall track and report to Customer the Service Levels set forth herein in a monthly summary report. In the event that one or more of the Service Levels in the Agreement are not met, the parties will implement the following procedure:

a)   Either SAP will notify the Customer contact person or Customer will notify the SAP Account Manager to analyse Service Levels metric statistics.
b)   SAP will promptly (i) determine the root cause or possible root cause of the failure (if known) to meet the Service Level, and (ii) unless failure is excused develop a corrective action plan, and submit such plan to Customer for written approval (which will not be unreasonably withheld or delayed) and, following Customer's written approval implement the plan in a reasonable period of time (and in accordance with any agreed timescales).
c)   If applicable, SAP will provide the specific Service Credits as described in section 9.7 below.
d)   SAP will be relieved of its obligation to pay applicable Service Credits and will not be in breach of the Service Level where the root cause analysis (as reasonably performed by SAP) indicates the failure to meet the relevant Service Level was caused by the Customer. In the event that Customer disagrees with the root cause analysis, the parties will discuss the root cause analysis in accordance with the escalation procedure described in section 10 of this service description.

9.7   Service Level Failures for HEC

In the event that one or more of the Service Levels in the Agreement are not met, the parties will implement the following procedure:

a)   Service Credits. Subject to Section 9.2 of this Service Description and except as excluded under Section 9.6 above, if and to the extent SAP fails to meet the System Availability Service Level set forth in Section 9.2, Customer is entitled to a Service Credit which is calculated as the sum of the Service Credits for both NON-PRD and PRD for SAP's failure to meet the respective System Availability Service Level.
Under no circumstances will the total maximum Service Credits: (i) for any one month, exceed 100% of the Service Fee for that month; and, (ii) for any given contract year, exceed in the aggregate an amount equal to one-third of the annual Service Fee charged for the contract year (or one third of the total Service Fee charged if the term as defined in the applicable Order Form is less than one (1) year). Customer acknowledges that the Service Credits are the sole and exclusive remedy for SAP's failure to meet the specified Service Level, except to the extent prohibited by applicable law.
b)   When Customer's entitlement of the Service Credit is confirmed by SAP in writing (email permitted), SAP will apply such credit to a future invoice relating to the HEC Service or provide a refund if no future invoice is due under the Agreement.
c)   Termination. Customer may terminate the applicable Order Form with prior written notice to SAP within thirty (30) days of Customer's receipt of the respective Service Level report, if SAP misses the System Availability of the PRD Computing Environment as specified in this Supplement for three (3) consecutive months.

10   Data Privacy and Security – Data Controller to Data Processor Agreement

10.1   SAP and Customer are subject to the terms and conditions of the Data Privacy and Security – Data Controller to Data Processor Agreement (Exhibit B), which permits SAP to perform its obligations pursuant to the Agreement in regards to personal information of Customer's employees and business partners housed in the Computing Environment.

10.2   The technical and organizational measures (Appendix 2 of the Exhibit B) describe the minimum data security framework applicable to any Customer Data stored in the HEC Service.

10.3   Customer may require access and continue to use the HEC Service for the applicable extended term, if any, to support migration efforts to a new system. The parties in a written signed document, which references the relevant Order Form, shall document such extension. Subject to the foregoing, SAP shall have no obligation to maintain or provide any Customer Data.

10.4   SAP has implemented and will maintain security measure for the HEC Services as set forth in the SAP Cloud Security Framework, or its equivalent during the term of the Order Form between Customer and SAP. SAP retains the right to revise and/or update the SAP Cloud Security Framework at SAP's sole discretion, if SAP does not lower the overall level of security provided. SAP will provide a copy of the SAP Cloud Security Framework to Customer upon request.

10.5   During the term of the Order Form between Customer and SAP, SAP shall maintain, at its own expense an audit report by a nationally recognized outside audit firm conforming with the American Institute of Certified Public Accountants' Service Organization Control (SOC) Reports, or its equivalent, and shall provide or make available to Customer, at Customer's request, a copy of its SOC 1 and/or SOC 2 reports during the relevant audit period for the applicable PRD systems within the Computing Environment, which shall be updated at least annually for the applicable PRD systems.

Exhibit A: HEC Services Roles and Responsibilities see http://www.sap.com/corporate-en/about/our-company/policies/cloud/hec-roles-and-responsibilities.html

Exhibit B: Annex for Commissioned Processing of Personal Data, see http://www.sap.com/corporate-en/our-company/policies/cloud/data-security.epx

Exhibit C: Change Request Procedure

Exhibit D Template for Acceptance Protocol

Exhibit C: Change Request Procedure

If during the provision of the agreed services changes are identified – changes that in Customer's or SAP's view affect the scope (by material reduction or excess), content, methods, or schedule, they must be agreed documented and tracked in the provided Change Request form. When one party initiates a Change Request (the "Requesting Party"), the other party ("Responding Party") will use reasonable efforts to respond to such Change Request within ten business days of receipt. Further, both parties will use reasonable efforts to either fully execute such Change Request, or mutually agree to abandon such Change Request, within fifteen business days of the Responding Party's receipt of the Change Request.

The parties must agree to, any change in the Managed Services (HANA Enterprise Cloud and Application Management Services) in writing. The following procedure will be used to control a Change Request ("CR"), whether requested by Customer or SAP.

Summary of the Change Request Procedure:

1. All CR's must be made in writing on the CR form described below and shall be submitted to the appropriate Customer or SAP designated point of contact ("receiving party") for the Managed Services in order to initiate any CR.

2. Upon receipt of a CR, the receiving party will assess the requested change to the AMS Services and inform the submitting party of the result of the assessment within a mutually agreeable period.

3. In the case of an affirmative response, Customer will provide SAP with a CR response specifying the effects of the change to the AMS Services and the estimated cost of the additional Services.

4. SAP will review the CR response within a mutually agreeable period and either accept or reject the CR.

5. If SAP accepts the CR, the changes will be integrated into the AMS Services schedules. If rejected by SAP, SAP will only provide the AMS Services to the extent possible, which were agreed to prior to this CR.

6. Neither party is under no obligation to accept any CR.

Information to be provided on the Change Request form:

1. To initiate a CR, the submitting party must provide the following information:

    a. Name of contact(s) submitting and sponsoring the requested change.
    b. Whether the request relates to the AMS Services under this Order From or to additional Services.
    c. Description of the requested change.

2. Once the Change Request is received, SAP will conduct an impact and cost analysis. The following information will be   provided because of this analysis in the form of a CR response:

    a. Description of the impact, if any, on existing AMS Services.
    b. Description of additional deliverables, if any, required for the Change Request.
    c. Proposed schedule for any additional Services being requested.
    d. Estimate of the change, if any, to the AMS Services fees caused by the Change Request, including the rationale/methodology used for this calculation.
    e. Recommendation on disposition of the CR (approve, disapprove, defer).

If rejected the CR shall be returned to the submitting party with written reasons for rejection and, as appropriate, any alternatives.

A CR that is approved by the parties shall constitute a Change Request and a modification to the applicable Order Form. All approved CR's will be incorporated into the Order Form once Customer and SAP execute the CR form attached hereto. SAP will not perform any Services under the Change Request until the CR has been fully executed by both parties.

The following example shows a template for a Change Request form:

<table>
<tr><td colspan="2" align="center">

Change Request: [CR #]

to

Order Form for Managed Services (HANA Enterprise Cloud and Application Management Services)

SAP Reference No. <mark>\<Insert Order Number\></mark>

between

<mark>\<SAP\></mark> **("SAP")**

and

_____ **("Customer")**

</td></tr>
</table>

This document must be completed and submitted to the appropriate person to commence any change order.

1. Describe reason for requested change:
2. Describe impact, if any, on existing Managed Services:
3. State estimated fee change, if known. Provide a rationale/methodology for used to calculate any change:
4. Change Process:
5. Scheduled Date for Change:
6. Terms and Conditions:

IN WITNESS WHEREOF, the parties have so agreed as of the date written above.

Accepted By: **SAP** By:	Accepted By: **[Customer]** By:
_____	_____
Print Name: **[SAP Representative]**	Print Name: **[Approver]**
Title: **[Title]**	Title: **[Title]**
Date:	Date:

Change Request		Sales Order				
SAP		**SAP P.O.**				
SAP Number		**Original**				
Item	**Invoice Text (40 char)**	**Amount**		**One-Time Monthly**	**Full Partial**	**Begin Bill Month**

Exhibit D: Template for Acceptance Protocol

Acceptance Protocol

Engagement Name:

Working Package:

Customer Project Manager		SAP Engagement Manager	
Order No.			
Customer	Customer Name Department or Contact Person Street, No. ZIP Code, City		

1   **Handover of Engagement Results**

The subject matters of the contract subsequently specified were handed over and were defined in detail in the following documents:

ID	Deliverable	Document	Date	Comments
1	Kick off Workshop			
2	Monthly report			
3	ISAE 3402 Quality Assurance Report twice a year			

Place, Date	SAP Engagement Manager

Acceptance Statement	
☐	The activity results have been generated as mutually agreed in the contract. Consequently, the contract has been fulfilled on part of SAP to the full extent. The Customer hereby declares his acceptance.
☐	The activity results show defects, which do not preclude acceptance and which impair the usefulness of the contracts goods, works and services only to an insubstantial extent. These open issues listed below shall be rectified. The Customer hereby declares his acceptance.
☐	The activity results show substantial defects, which preclude acceptance. Acceptance is refused. The open issues will be listed below.

No.	Ref. to ID	Open Issue	Responsible	Deadline
Place, Date	Customer			