ABB Ability™ Monitoring Service

Service description

All capitalized terms used in this service description (“Service Description”) which are not defined herein shall have the meaning described in the Ability Marketplace GTC and GTC Ability (each “GTC”) or Special Terms and Conditions (“STC”) except where the context of this Service Description requires otherwise.

1 Scope of this service

Users of ABB equipment, such as motors, variable speed drives but also other machinery, such as pumps and fans, can outsource the monitoring of these assets. ABB Ability™ Monitoring Service engages ABB technical experts to track the performance of assets, provide regular reports, trigger early warnings and highlight areas of improvement.

This service description document describes the Monitoring Service provided by a network of remotely located technical experts (“Remote Expertise Center”).

The service includes:

- remote monitoring (Section 1.1)
- fleet reports of selected assets with expert comments (“Fleet Detailed-Expert Reports”) (Section 1.2)
- asset reports with expert comments (“Asset Expert-Reports”) (Section 1.3)
- standard ABB Ability™ Smart Sensor service subscription (Section 1.4)
- and standard ABB Ability™ Condition Monitoring for drives subscription, Offline Data Collection service and Condition-Based Maintenance service (Section 1.5)

To qualify for ABB Ability™ Monitoring Service, it is required to gather data, using an “ABB Device” (a physical or virtual device provided or otherwise made available or branded by ABB which generates or gathers data through embedded sensors or otherwise, where such data is accessed, stored or processed by the Services) such as ABB Ability™ Smart Sensors Generation 2, NETA-21 and ABB Drive Connectivity Panel. The ABB Device shall be commissioned and connected via internet to allow the data to be uploaded to the Digital Powertrain Portal. “ABB Ability™ Digital Powertrain” or “Digital Powertrain” is a suite of digital solutions that enables Customers to remotely monitor the health and performance of powertrains, including drives, motors and other machinery, such as pumps. It combines connectivity and data analytics with ABB’s expertise.

ABB Ability™ Monitoring Service can be ordered as a service from a local ABB representative.
1.1 Remote monitoring

ABB provides:

a) Proactive remote monitoring of the status and parameter trends of the assets based on the data gathered by the ABB Device.

b) Regular communication (monthly, as has been specified in the contract) to the Customer by e-mail containing:

- information about early warnings
- detection of unusual behaviours or irregularities of the assets covered by ABB Ability™ Monitoring Service (as specified in the contract)
- detection of interruptions in the transmission of the data gathered by the ABB Device to the Digital Powertrain Portal.

1.2 Fleet Detailed Expert-Reports

ABB provides a deeper insight of selected assets covered by the Monitoring Service. The Fleet Detailed Expert-Report is delivered on a regular basis (every four months) and is made available to the Customer within maximum fifteen (15) days after the report generation. ABB provides recommendations of actions in the fleet report related to specific assets, at its sole discretion.

1.3 Asset Expert-Reports

Asset Expert-Reports help identify the root cause of the change of the health status or performance of the asset. It highlights critical issues requiring attention. For motors and drives, ABB may provide recommendations of corrective actions and maintenance priorities in the Asset Expert-Reports. For other general machinery, such as pumps and fans, ABB will only, for as far as available, provide information about changes to the health status of the asset.

ABB may issue an Asset Expert-Report after an underperformance of a motor and/or drive is identified by ABB. In case ABB detects, at its sole discretion, changes in trends, events and warnings or increase in crossing of thresholds as part of remote monitoring, ABB will, in such situation, generate an Asset Expert-Report and send it to the Customer within three (3) days from the date that ABB or the Customer has collected raw data (in the case of motors). Customer may also request ABB to issue an Asset Expert-Report.

Customer must be aware that the generation of reports for motors may require raw data collection and may impact and reduce the lifetime of battery powered devices, such as the ABB Ability™ Smart Sensor. The generation of reports for motors and general machinery may also incur additional data consumption of the connectivity network.

1.4 Standard ABB Ability™ Smart Sensor service subscription

As described in the ABB Ability™ Smart Sensor service description:
1.5 Standard ABB Ability™ Condition Monitoring for drives subscription, Offline Data Collection and Condition-Based Maintenance services

As described in the ABB Ability™ Condition Monitoring for drives service description:

2 Customer’s obligations

- Customer shall permit ABB, its employees, its Affiliates, agents, consultants and/or subcontractors, to remotely access and monitor Customer assets, as necessary for ABB to providing ABB Ability™ Monitoring Service.
- Customer shall provide access to ABB to its organizations in the Digital Powertrain Portal.
- Customer shall maintain the firmware of the ABB Device up to the latest version.
- Customer shall ensure that all ABB Devices are connected to the internet during the term of the contract (if they are not connected, delivery of the services is not possible). ABB highly recommends Customers to order ABB’s cellular connectivity service (“Plug & Play Connectivity Service”) to ensure a good quality cellular connectivity.
- Customer is responsible for providing telephone and internet connection facilities to enable communication between ABB and the Customer.
- ABB Ability™ Monitoring Service can be provided by ABB only if ABB Device has been installed and commissioned by Customer. Customer shall ensure that the necessary data for installation and commissioning of the ABB Device is correct (e.g. motor nameplate data).
- Customer shall provide access to operating and maintenance logs.
- Customer is responsible for site safety briefings.
- Customer is responsible for all necessary licenses and permits.
- Customer is responsible for the site security and to ensure that the areas are kept safe.

2.1 Exclusions

- ABB will provide the Monitoring Service based on the data gathered by the ABB Device. Such data is subject to measurement tolerance and may not fully accurately reflect the status of the asset to which the ABB Device is attached. Accordingly, the identified assets trend changes and the alerts and alarm threshold breaches may not fully accurately describe the status of the asset(s) and the actual operational performance may differ from the outcome of data analysis and any information provided by ABB. ABB Ability™ Monitoring Service shall be used as a means of guidance by Customers and any decision based on the ABB Ability™ Monitoring Service provided by ABB is taken at Customer’s own risk.
- The threshold of maximum number of Asset-Expert Reports per year is limited to the amount of assets specified in the contract (e.g. if the contract covers 20 assets, the threshold of Asset Expert-Reports is 20).
- Motors equipped with MACHsense-R are not in scope of the service.
- Motors or general machinery equipped with ABB Ability™ Smart Sensor Generation 1 are not in scope of the service.
- LCI drives are not in scope of the service.
- ABB is entitled to charge the Customer for any additional work not included in the scope of the service.