

STREET TRUCK

Industry Services

SIMATIC PCS 7 Lifecycle Services

BR SELENS

Ensuring serviceability and optimizing plant availability

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A reactive service strategy increases the risk of obsolescence. Expenditures for operations and unplanned downtimes fluctuate and are difficult to budget for. Pressure to invest will increase until an upgrade can no longer be delayed. Longterm maintenance planning is out of the question, risks are hardly to assess, and TCO (Total Cost of Ownership) cannot be calculated transparently.

But with a proactive service strategy, management of obsolescence and upgrades is systematically included in the planning process. Continuous plant maintenance keeps the risk of obsolescence low, while optimized expenses for maintenance and modernization (OPEX) remain constant and can be budgeted for.

Reliability throughout the entire lifecycle

Optimizing operating costs and making it possible to budget for them, protecting investments and ensuring plant availability – the key factor for success here is to ensure that your process control technology remains available and serviceable. That's why state-of-the-art plants ensure the total functionality of their process control technology for defined periods with an optimized cost structure using Lifecycle Services. This requires scheduled modernization work, since the large-scale use of constantly developing PC systems in automation creates major pressure to innovate. Only process control technology that will keep pace with system technology developments for the entire life cycle of the system will enable you to secure the value of your plant and remain competitive in terms of productivity and efficiency.

SIMATIC PCS 7 Lifecycle Services

The demands and requirements involved in running a plant are highly specific, especially for a service life of 15 years or more. The service requirements are equally variable, depending on the plant involved. Siemens works with you to establish the foundations for:

- Protecting your investment;
- System availability;
- · Costs of modernization and servicing;
- Obsolescence management;
- Migration cycles and upgrades.

Obsolescence management – reactive approach



Obsolescence management – proactive approach



SIMATIC PCS 7 Lifecycle Services provides you with a powerful service program for the SIMATIC PCS 7 distributed control system. It forms the basis for flexible, individual service contracts, perfectly tailored to your needs during the life cycle of your plant. In addition to the standard services, the service program also offers you proactive Lifecycle Services that can be combined with a range of contract options such as contract duration and arrival/ response times.

Long-term protection for your investment, with costs you can budget for

A Lifecycle Services contract offers you a lower total cost of ownership (TCO) as well as maintenance and modernization costs that you can schedule in your budget. This ensures serviceability as well as a long-term supply of spare parts and optimized plant availability.

Long-term investment protection: **Total Cost of Ownership**



End-of-life

Investment costs (CAPEX) vs. operating costs (OPEX)

The calculation of TCO includes both investment costs (capital expenditure, CAPEX) and operating costs (operational expenditure, OPEX). CAPEX includes the costs of procurement, engineering costs and outgoings for installation and commissioning.

Once the plant goes into operation, not only do operating costs start to accrue but also expenses for maintenance, which will depend on the service plan that you have adopted. Further costs for engineering and support are also incurred for optimizing or upgrading your plant.

As your plant becomes older, you will also need active obsolescence management, which will involve replacing discontinued components and performing scheduled modernization work.

Defined service elements and contract-specific parameters make up a modular SIMATIC PCS 7 Lifecycle Services contract. We work with you to select and decide on these plant-specific service elements and contract parameters.

The contract solution is based on the requirements that are reflected in typical contract profiles for lifecycle contracts, such as reactive or preventive service strategies. Before a Lifecycle Services contract can be entered into, however, it is essential to gain a thorough understanding of the system's current status.



Prerequisites

A precise understanding of the system as currently installed is the key prerequisite for a perfectly structured Lifecycle Services contract, both for Siemens and for you. The following are essential in this connection:

- The documentation for the process control system must be up to date;
- The process control system must be in a serviceable condition;
- The process control system must be stabilized at the latest product version.

When reviewing these preconditions, a distinction must be made between existing and newly installed SIMATIC PCS 7 process control systems.

Existing installations (brownfield)

Existing systems that were not installed by Siemens and/or have undergone repeated modifications, and for which the plant documentation is incomplete, may not meet the necessary preconditions for a Lifecycle Services contract. In this case it will first be necessary to take stock of the situation and perform a SIMATIC System Assessment/Audit. To do this, specialists analyze your system's situation and define the measures that need to be taken to achieve service and upgrade eligibility status. Once the audit report has been discussed with you, these measures are then implemented as a precondition for entering into the Lifecycle Services contract.

New installations (greenfield)

In general, systems configured and installed by Siemens or by certified partners already satisfy the necessary preconditions for entering into a Lifecycle Services contract for SIMATIC PCS 7, on condition that the project was implemented in accordance with the engineering guidelines for SIMATIC PCS 7 and the plant documentation is available.





Contract profiles

The individually compiled SIMATIC PCS 7 Lifecycle Services contracts can be divided into typical contract profiles that build on one another, and come in different forms for practical application:

- Standard
- Maintenance
- Basic Lifecycle
- Extended Lifecycle

"Standard" contract profile

On-Call Services:

Fault notification, callback and start of troubleshooting within contractually agreed timeframes (standby, response and arrival time) by dedicated service personnel

Repair Services:

Corrective repairs or fault clearance using standard services such as error diagnosis, replacement of defective parts and correction of errors in application software, remote or on-site repairs. A key aspect: agreed service times through to 24/7 Support Services – Online Support:

Comprehensive information platform for products, systems and services, with examples on programming, configuration and options for use, and central access to further-reaching services and contact persons. Online Support is divided into different subordinate areas:

- Products & systems
- Applications & Solutions
- Services & Functions
- Communications
- Service Catalog

support.industry.siemens.com

Support Services – Technical Support:

The Technical Support specialists provide support by telephone, e-mail or online support for all inquiries about functions and handling of all industrial products and systems. The following services are available:

- Technical Support Basic
- Technical Support Priority
- Technical Support 24 h
- Technical Support Mature Products
- Technical Support Extended



"Maintenance" contract profile

This contract profile is based on the "standard" contract profile with additional inspection and maintenance services.

Inspection:

These include investigating causes of wear and tear and identifying appropriate maintenance work, for example. Advanced methods from Condition Monitoring also produce outstanding results. Examples of inspection services:

- Visual inspection;
- Checks of data back-ups;
- · Analysis of log files and system resources;
- Software system diagnosis;
- · Analysis and evaluation of weak points;
- · Derivation of necessary maintenance work;

Maintenance:

In addition to the measures established as part of the plant maintenance plan, the results of the plant inspection are also taken into account. This often enables traditional maintenance services to be performed efficiently and at modest cost via remote maintenance. SIMATIC PCS 7 also comprises powerful Condition Monitoring and Maintenance tools that support this proactive monitoring with real-time status analyses. This makes potential malfunctions foreseeable and means they can be avoided through a program of scheduled maintenance.

"Basic Lifecycle" contract profile

This profile is based on the "Maintenance" contract profile and offers long-term services aligned with the life cycle of your plant. The following services are recommended:

- SIMATIC Inventory Baseline Services
- Lifecycle Information Services
- Asset Optimization Services: Analysis Module
- SIMATIC System Assessment/Audit: Audit LCS Module

Active contract administration:

A life cycle contract always includes active contract administration, e.g. contract execution, organization, documentation and change management.

Lifecycle Information Services:

Lifecycle Information Services provide regular updated and detailed information regarding the life cycle of the products and systems being used. Plant-specific information on upgrades and updates, relevant services and contributions to optimize plant maintenance are also made available.

Spare parts logistics:

Once the on-site needed spare parts has been established, you make compatible spare parts available for maintenance work. Based on agreed delivery conditions and times, Siemens will assure this spare parts delivery and the subsequent supply.



"Extended Lifecycle" contract profile

Building on the "Basic Lifecycle" contract profile, this profile includes modernizations, upgrades and updates for the SIMATIC PCS 7 process control system. If the system's suitability for servicing is unclear or uncertain, an audit is performed first, to enable a position to be taken on whether the system in question can be serviced/upgraded/ updated. This is where the "Audit LCS" guidance module comes in, documenting the audit results in a Lifecycle Conformance Report.

- Software updates
 - SIMATIC PCS 7 Software update service (SUS) (service pack/version management);
 - Installation of service packs for SIMATIC PCS 7;
 - Installation of Microsoft security updates;
 - Updating the list of plant in the context of the updates performed;
- Upgrade service (hardware and software)
- Upgrading the existing software version for SIMATIC PCS 7 and the relevant hardware components of SIMATIC PCS 7 in accordance with the upgrade cycles as set down in the contract (typically five years);
- Adaptation for components from third-party manufacturers (drivers, libraries).

The benefits of a SIMATIC PCS 7 Lifecycle Services contract for you:

- Long-term investment protection;
- Modernization and maintenance costs can be budgeted for at the time of investment for a service life of up to 15 years (TCO);
- Improved plant availability thanks to assured arrival times for servicing, spare parts supplies and preventive maintenance;
- Expertise on the part of the automation system manufacturer;
- Suitability for servicing assured by an ability to supply spare parts, support services and software support for the plant for the term of the contract;
- Project management from a single source for the entire contract term.

Interested in SIMATIC PCS 7 Lifecycle Services?

Talk to your Siemens contact person, who will be happy to assist with detailed information about the service and how to order it:

siemens.com/aspa

Additional information can be found directly at: siemens.com/pcs7lcs

There's more to it:

siemens.com/pcs7lcs

SIMATIC Lifecycle Services

SIMATIC Lifecycle Services from Siemens optimize availability and ensure the maintainability of plant and machinery. A comprehensive service portfolio covers the entire lifecycle, from planning and development to operation and modernization. Perfect coordination of these services with SIMATIC automation products and systems plays a crucial role in protecting your investment and ensuring the efficiency of your plant and machinery.

Learn more about SIMATIC PCS 7 Lifecycle Services here:

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