



White Paper

How Long Does It Really Take to Qualify a Reliable EMS Partner?

Realistic Timeframes for Selection, Qualification and the Transfer of Outsourced Manufacturing

Dirk Kaussen | EMS Strategy Group | Rev.: 2.0 | Oktober 1, 2026

How Long Does It Take to Qualify an EMS Partner?

The duration of an EMS qualification process depends largely on the scope and complexity of the respective project. For extensive qualification processes at large OEMs, 15 to 18 months are cited as a possible project duration. For a clearly defined industrial standard case without special regulatory or safety-related requirements, approximately 4 to 7 months is a realistic practical guideline for selection, evaluation, qualification and initial product-related approvals.

Calendar Time Is Not the Same as Work Effort

Both figures refer to calendar time or cycle time, not to full-time work effort.

Within a project timeframe, different activities alternate or overlap: preselection of EMS providers, RFQs, technical and quality assessments, audits, internal approvals, contract processes, sample and pilot production, testing and, where applicable, the transfer of an existing outsourced manufacturing operation.

There are also time dependencies. Certain activities can only begin once information, documentation, materials, samples, test results or internal approvals are available. This can create additional calendar time between two active work steps without further work being possible on that specific step. A project that extends over 15 or 18 months therefore does not mean that the employees involved work on it continuously and full-time throughout the entire period. Calendar duration alone does not allow conclusions to be drawn about the personnel effort or the number of actual working hours involved.

Three Areas That Are Often Confused

The key difference between the timeframes mentioned lies in the scope of what is included in the respective project. An EMS qualification does not only involve the selection and approval of the service provider. Depending on the case, it may also include qualification of the specific product and process as well as the transfer of an already outsourced manufacturing operation. These three areas may run partly in parallel and may partly depend on one another:

- **Selection and Supplier Qualification** – assessment of whether the EMS provider is generally suitable for the required manufacturing scope and the OEM's requirements. This includes manufacturing technologies, capacities, quality management, inspection and testing capabilities,

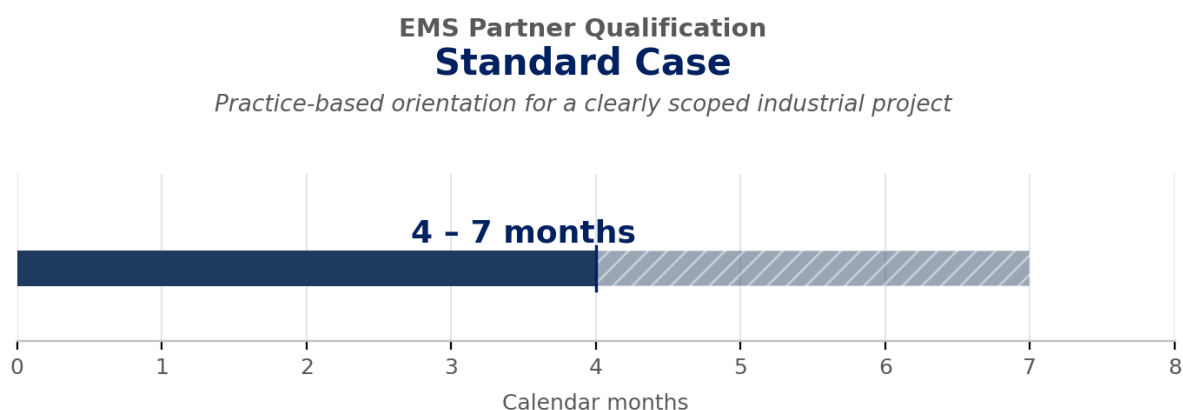
material management, traceability and certifications. This is followed by technical and quality assessments, often an on-site audit and internal supplier approval.

- **Product and Process Qualification** – verification that the specific product can be manufactured and tested reproducibly by the selected service provider. An EMS provider may already be suitable as a company without the product-specific approval being in place. For samples, first-article approval or pilot production, PCBs, components or customer-specific parts must be available. Particularly in the case of difficult-to-source parts, material availability often determines the subsequent progress of the process.

- **Manufacturing Transfer and Series Production Ramp-Up** – relevant when an existing ongoing production is transferred. Manufacturing data, programs, test equipment, fixtures, material inventories, bills of materials and product-specific manufacturing know-how must be established, verified and integrated at the new service provider. This also includes the transfer of relevant process and quality information, initial production runs, adjustments where necessary and the stabilization of series production.

4 to 7 Months as a Guideline for a Standard Case

This assumes, among other things, that the requirements for the EMS provider are clearly defined, suitable suppliers are available, there are no exceptional regulatory requirements and the necessary technical documentation and materials are available in time. The individual activities may partly run in parallel – the months should therefore not be understood as strictly consecutive phases.



Source: EMS Strategy Group analysis — practice-based orientation (not a published industry benchmark)

This timeframe is a practical guideline and not a published general industry benchmark. It assumes a comparatively clearly defined project scope.

What Drives the Effort

The qualification effort depends not only on the technical complexity of the product, but also on the scope of services being outsourced. A pure PCB assembly project with clearly defined documentation presents different requirements from a project in which the EMS provider

additionally takes responsibility for material procurement, programming, functional testing, mechanical integration, final assembly and packaging. As the scope of services increases, more processes, interfaces and responsibilities need to be assessed.

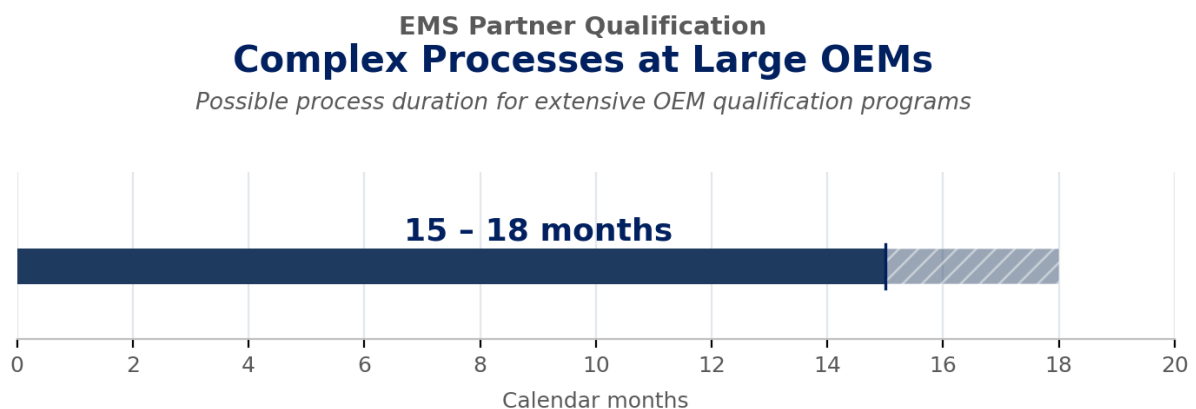
The selection process begins before the audit. First, it must be clear what requirements the future partner needs to meet; only then can it be assessed which providers are actually suitable. Existing certifications can support the preselection process, but they do not replace the assessment of whether a provider is suitable for the specific product and the intended scope.

The process can take considerably longer than 4 to 7 months when several factors come together, such as a large scope of services, complex products, extensive testing and documentation requirements, limited material availability, international supply chains or the transfer of an ongoing production operation. Special regulatory, customer-specific or safety-related requirements can also extend the process.

How Should the 15 to 18 Months Be Classified?

This timeframe originates from descriptions of qualification processes at many large OEMs and refers to the qualification of new EMS providers. It describes a possible longer process duration.

The figure is neither a general industry statistic nor a median or average duration for all EMS projects. The definition of the process under consideration and its starting and ending points are decisive. Depending on whether only supplier qualification is considered or whether product approvals, sample and pilot production, contract processes, internal approvals and the transfer of an existing outsourced manufacturing operation are also included, the calendar time under consideration can vary considerably.



Total duration from project start (month 0) for extensive, formal qualification processes at large OEMs — typically between 15 and 18 months, depending on process scope.

Source: EMS Strategy Group analysis — practice-based orientation (not a published industry benchmark)

Conclusion

The qualification of an EMS provider does not generally take 15 to 18 months. For a clearly defined industrial standard case, approximately 4 to 7 months can serve as a practical guideline. Larger OEM organizations may have considerably longer processes. For reliable planning, a distinction should be made between the three areas of supplier qualification, product and process

qualification, and manufacturing transfer and series production ramp-up – only this differentiation enables a realistic assessment of the calendar time actually required.

For the timeframes mentioned – both the industrial standard case (4 to 7 months) and complex OEM processes (15 to 18 months) – these figures expressly refer to calendar time or cycle time and not to continuous full-time work effort.

Sources

[1] *Venture Outsource – Electronic supplier qualification differs for startup v. large OEMs. Source for the 15 to 18 month timeframe cited for many large OEMs.*

Note: The timeframes stated in this white paper are intended solely as general guidance. The actual duration of a project depends on the respective technical, organizational, commercial, quality-related and regulatory conditions as well as the specific scope of the project.

About the Author

Dirk Kaussen is Founder and Managing Director of EMS Strategy Group. With around 40 years of experience in the electronics industry — including founding and managing his own electronics manufacturing company in Germany — he brings deep expertise in manufacturing processes, EMS partner selection, supply chain stability, relocation projects, and risk management. His approach combines practical solutions with a direct connection to industrial reality.

About the EMS Strategy Group

EMS Strategy Group supports industrial enterprises in the strategic and operational advancement of their electronics manufacturing. Our core expertise lies in the strategic relocation of manufacturing volumes, the selection of qualified EMS partners, the establishment of new production capacities, and the expansion of existing manufacturing structures.

Furthermore, we design resilient supply chain frameworks, conduct comprehensive risk assessments, and guide dual-sourcing strategies, with operational support through to a successful series production ramp-up.

www.emssg.com | [LinkedIn: Dirk Kaussen](#)

Legal Notice / Disclaimer

The information, assessments, and recommendations contained in this Document have been prepared with the utmost care and to the best of our knowledge. They are provided solely for general informational purposes in a B2B context and do not constitute legal, tax, technical, or business advice tailored to any specific situation. The content of this document does not replace, and is not intended to replace, individual qualified professional counsel or economic feasibility studies.

Regulatory Proviso: As legal requirements, directives, standards, and their official application guidelines (particularly at the EU and international levels) evolve continuously, all information reflects the status at the time of preparation. It is strictly subject to later official publications or

regulatory changes. Only the official legal texts and governmental publications remain legally binding.

Translation Notice: This document was translated from the original German version using machine translation systems. Although the translation has been reviewed, discrepancies, inaccuracies, or translation errors cannot be entirely ruled out. In the event of any ambiguity, conflict, or contradiction, the original German text shall remain solely authoritative.

Limitation of Warranty and Liability: While every reasonable effort has been made to ensure the accuracy of the information provided, EMS Strategy Group makes no representations or warranties, express or implied, regarding the accuracy, completeness, or timeliness of the content contained herein.

To the fullest extent permitted by applicable law, EMS Strategy Group shall not be liable for any direct, indirect, incidental, consequential, or other damages arising from the use of, reliance on, or practical implementation of any information, strategies, recommendations, or evaluation criteria contained in this Document.

Copyright and Distribution: This Document may be distributed and shared in its original, unmodified form, provided that full attribution and copyright ownership of EMS Strategy Group is maintained at all times.

Tax Advisory Disclaimer: Where this document refers to tax or tax-related matters, such references are made exclusively in the context of general strategic or economic considerations and do not constitute an individual tax assessment, tax advice or tax planning. EMS Strategy Group does not provide case-specific assistance in tax matters. The assessment of specific tax implications and the development or review of tax structures or tax planning measures should be carried out by a qualified tax adviser, auditor, lawyer or other professional legally authorized to provide such services.



www.emssg.com | [LinkedIn: Dirk Kaussen](#)

© 2026 EMS Strategy Group. All rights reserved. This document may be freely quoted, provided the source is acknowledged.