

Regulations of Use of the Certification Mark

"Certified Systems Engineer (GfSE)"

1. Holder of the certification mark

Gesellschaft für Systems Engineering e.V.
German Chapter of INCOSE
Hermann-Köhl-Straße 7
D - 28199 BREMEN
DE

also referred to in these Regulations as the "*holder*" or the "*certifying body*".

The holder is an association registered in the Federal Republic of Germany, associated with the international professional organization in the field of systems engineering **INCOSE (International Council on Systems Engineering)** and representing INCOSE as the **German Chapter of INCOSE** in Germany and in Austria.

2. Declaration pursuant to Article 83(2) of the EU Trade Mark Regulation

The holder of this certification mark hereby declares that it is not engaged in any commercial activity involving the provision of services covered by a certification under these Regulations of the certification mark.

3. Reproduction of the mark:

Certified Systems Engineer (GfSE)

hereinafter referred to as "*the certification mark*".

4. Services covered by the certification mark

Class 42:

Architectural services; Civil engineering; Engineering services; Electrical engineering services; Engineering consultancy services; Engineering services relating to the design of electronic systems; Services of a physicist; Services of a mathematician; Services of a computer scientist; IT services; Computer design and programming services; Computer programming services; Services for the writing of computer software; Systems

technology services; Services of a quality engineer; Systems engineering services; Conducting technical project studies; Engineering project management services; Technical project planning in the field of engineering; Architectural project management; Computer project management in the field of EDP; IT project management; Technical project planning; Consultancy in the field of computers; Computer software consultancy; Technical research; Engineering consultancy; Construction drafting; Scientific and technological services and research and design relating thereto (as far as included in class 42); Industrial analysis and research services (as far as included in class 42); Design and development of computer hardware and software (as far as included in class 42);

hereinafter referred to as the "*Covered Services*".

5. Properties of the Covered Services to be certified with the certification mark

The certifying body shall ensure that the covered services are provided by users of this certification mark (hereinafter referred to as "*authorized users*") authorized under these Regulations of the certification mark, taking into account special professional knowledge and skills in the field of systems engineering,

- who have acquired special professional knowledge and skills in the field of systems engineering through their training and professional experience in accordance with the training and examination conditions of the SE-ZERT® training programme of the certifying body, listed in section 9 in its Fundamentals and available in detail on the Internet as "Core Curriculum" at SE-Zert-Pruefungsordnung.GfSE.de, and have demonstrated this by passing an examination, whereby a certificate acquired thereby, which is limited in time and bears the certification mark, qualifies the authorized users at different levels (see sections 6d and 9) to provide the covered services with special knowledge in the field of "systems engineering";
- who have their acquired knowledge and skills refreshed on a regular basis within the framework of the SE-ZERT® training programme of the certifying body and have them reviewed in order to extend the term of the certificate (see section 9b);
- who have undertaken to apply this particular knowledge of systems engineering in the provision of the covered services; and
- who have undertaken to respect and comply with the "INCOSE Code of Ethics" set out in its basic principles in section 6e of the basic principles set out in section 6e of this regulation and made available in detail on the internet at the basic principles set out in section 6e of <http://Ethik-Kodex.GfSE.de>.

6. Conditions for the use of the certification mark and sanctions

a) Permitted forms of use

The authorized user is permitted to use the certification mark in the following forms within the framework of the provisions of these Regulations:

- on personal business cards
- on personal stationery
- in the personal e-mail signature
- on personal printed or electronically distributed business documents
- in personal job application documents and personal professional quotation documents
- in personal advertising (print, audio, moving image)
- visibly displayed in personal presences or profiles in electronic media, e.g. on a professional presence on the internet concerning one's own person or in social networks used for professional purposes.

The use of the certification mark in forms of use other than those mentioned above requires the prior written consent of the holder of the certification mark.

The authorized user is in particular obliged to maintain political, religious and generally ethical neutrality and to respect human rights when using the certification mark. Any existing compliance regulations applicable to the authorized user(s) must be observed when using the certification mark.

b) Forms of use not permitted

The authorized user is not permitted to use the certification mark in particular in the following forms:

- without direct reference to his/her person
- displayed invisibly or as a search sign or keyword in the source code of presences in electronic media
- as a covert keyword for electronic advertising (e.g. Google Adwords)
- in computer programs
- as a designation or name of persons, companies, products or services outside of a use authorized by these Regulations

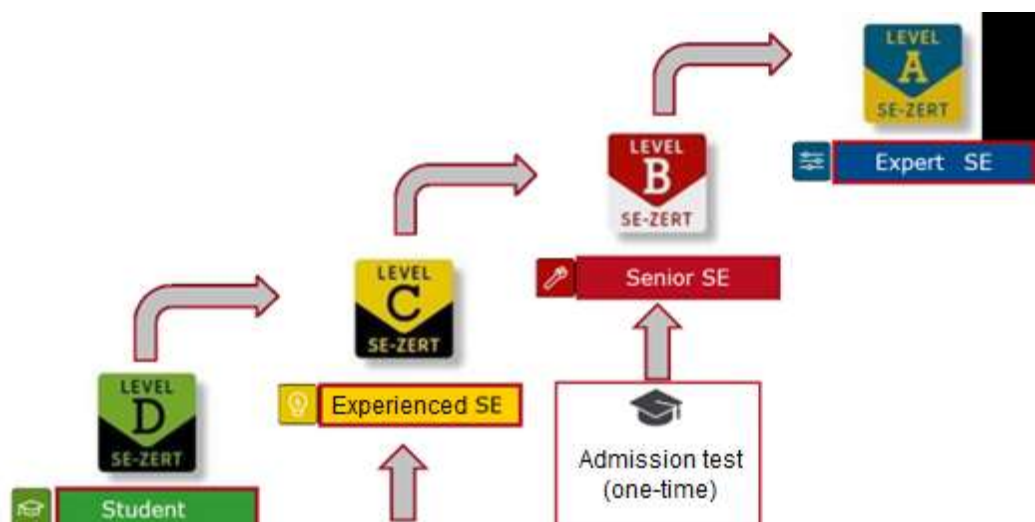
- as a designation of physical or virtual events (e.g. conferences, workshops, lectures, colloquia, trade fairs, radio or television broadcasts, internet blogs or other discussion forums, etc.)
- as an internet domain, tag or other address in electronic media
- as part of one's own company name or as any other business designation
- in connection with the granting or acceptance of any advantage, in particular in connection with attempted or actual corruption; the naming of the person of the authorized user is sufficient as a connection.

The aforementioned prohibited forms of use also apply to word and/or figurative signs which are similar to the certification mark in the sense of trade mark law.

c) The certification mark as a certificate

In order to be entitled to use the certification mark, one of the qualifications listed below in the field of systems engineering must be acquired within the framework of the SE-ZERT® training programme of the certifying body. In order to obtain a corresponding qualification level, access and training requirements must be fulfilled and an examination (section 9) must be passed. The SE-ZERT® training programme distinguishes between several qualification levels that build on each other:

- **Level A:** for university graduates with a recognised passed Master's course "Systems Engineering" (lowest level)
- **Level B:** for systems engineers with professional experience
- **Level C:** for Senior Systems Engineers
- **Level D:** for Expert Systems Engineers (highest level).



d) Use of the certification mark

It is a condition of use that the mark shall not be used without indicating that it is a certification mark.

The use of the certification mark shall always be made with reference to the qualification level acquired as a certificate (Level A, Level B, Level C, Level D). The authorised user is therefore obliged to use the certification mark only with reference to its trademark registration by adding a "®" and by adding the level ("A", "B", "C" or "D") of the certificate acquired by him/her as well as the expiry date ("MM/YY") of the certificate acquired by him/her and the associated examination number ("xxxx") in the form below:

**"Certified Systems Engineer (GfSE)® Level A - Term - Exam No.
(certification mark)"**

or

**"Certified Systems Engineer (GfSE)® Level B - Term - Exam No.
(certification mark)"**

or

**"Certified Systems Engineer (GfSE)® Level C - Term - Exam No.
(certification mark)"**

or

**"Certified Systems Engineer (GfSE)® Level D - Term - Exam No."
(certification mark).**

For example: "Certified Systems Engineer (GfSE)® Level B - 05/22 – 0000
(certification mark)". Instead of the word "level", the equivalent German word "Ebene" can also be used.

The right of use is bound to the person of the authorised user and may not be transferred by him/her to third parties.

The authorised user is obliged to use the certification mark only in a legally permissible manner and as an indication of his/her acquired qualification and not as an indication of origin referring to the owner of the certification mark for the service provided by him/her.

e) INCOSE Code of Ethics

INCOSE has issued a binding code of ethics for its members and associate members, the "INCOSE Code of Ethics", the current version of which is available at <http://Ethik-Kodex.GfSE.de>. The basic obligations of this Code of Ethics oblige systems engineers within the framework of a self-commitment to preserve and promote the integrity, honour and dignity of the engineering profession by:

- Sincerity and neutrality;
- Maintaining the highest objectivity and promoting the expertise of their disciplines;
- the desire to enhance the competence and reputation of the engineering profession; and
- supporting educational institutions, professional associations and technical communities of their disciplines.

This Code of Ethics also imposes the following basic obligations on Systems Engineers towards society and public institutions:

- Preserve the common good and value the environment, safety and welfare of those affected by engineering activities and technical products.
- Accept responsibility for your actions and work results and be open to ethical review and judgement.
- Actively avoid procedures that jeopardise security.
- Manage risks with knowledge, based on a whole-system view and understanding of the systemic interfaces.
- Promote knowledge about and the implementation and acceptance of prudent systems engineering measures.

Finally, this Code of Ethics requires the following rules of conduct from Systems Engineers:

- Act lawfully, honourably, honestly, appropriately and responsibly.
- Respect, value and preserve the intellectual property of others.
- Respect all legal contracts and agreements.
- Behave fairly towards all parties.
- Give level-headed advice. Be honest, objective and maintain your professional and technical impeccability.
- Provide diligent and expert services to the best of your ability.
- Respect the trust and privileges granted to you.
- Avoid conflicts of interest and the appearance of them.

The authorised user undertakes, within the framework of a voluntary commitment, to recognise and comply with this Code of Ethics.

f) Duration of the use authorization

The term of the usage authorization ends with the expiry of the certificate acquired by the authorized user (see section 9).

If the authorized user acquires a certificate of a higher level during the term, the term of the usage authorization is automatically adjusted to the validity period of the newly acquired certificate.

With the end of the term or the revocation of the right of use, the right of the person entitled to use the certification mark ends. No period of use shall be granted for business documents still in existence at the time of termination of the right of use and bearing the certification mark.

g) Acceptance of trademark rights

The authorized user acknowledges the trademark rights of the holder of the certification mark and does not challenge these trademark rights. In particular, he/she will not undertake any attack against this certification mark and will not support or induce third parties to undertake such an attack.

The authorized user is obliged not to use any signs as trademarks for the services covered or to apply for trademark protection of signs which are identical with or confusingly similar to the certification mark. He/she shall also neither support nor induce third parties to engage in such acts.

The authorized user acknowledges that the holder of the certification mark alone is entitled, but not obliged, to take action against trademark infringers and to defend the certification mark against attacks by third parties.

The authorized user also acknowledges and respects the trademark rights held by the holder of the certification mark in the sign reproduced in section 3 of these Regulations outside the certification mark on which these Regulations are based.

h) Sanctions

The holder of the certification mark has the right to revoke the right of use with immediate effect in the event of a violation of the rules laid down in these certification mark regulations by the authorized user(s) or in the event of a violation of the "INCOSE Code of Ethics" by the authorized user(s). This right must be exercised within 4 (four) weeks after becoming aware of the violation or infringement. In the event of a repeated or persistent breach, each new act of infringement shall set the aforementioned period in motion again.

In the event of a suspicion of granting or accepting an advantage by the authorized user(s), the holder of the certification mark shall be entitled to pronounce a temporary suspension of the rights under these certification mark regulations.

7. Other regulations

The holder of the certification mark assumes no liability in the event of a legally impermissible use of the trademark by the authorized user(s) and no liability for the services provided by the authorized user(s). The authorized user is therefore obliged to indemnify or compensate the holder of the certification mark in the internal relationship from all claims of third parties based on the use of the certification mark by the authorized user; this applies in particular but not exclusively to claims arising from product liability.

If third parties take action against the authorized user(s) claiming that the use of the certification mark infringes the rights of the third party arising from an earlier protected designation or sign, the authorized user(s) shall inform the holder of the certification mark without delay.

The authorized user shall inform the proprietor of the certification mark without delay of any infringements of the certification mark of which he/she becomes aware.

8. Persons authorized to use the certification mark

Natural persons are authorized to use the certification mark,

- who have acquired special professional knowledge and skills in the field of systems engineering through their training and professional experience in accordance with the training and examination conditions of the SE-ZERT® training programme of the certifying body listed in section 9 and available in detail on the Internet at <http://SE-Zert-Pruefungsordnung.GfSE.de> and have demonstrated this by passing an examination (test) and have thereby acquired a certificate at one of the levels provided for in the training and examination conditions of the SE-ZERT® training programme;
- who refresh their acquired knowledge and skills on a regular basis within the framework of the SE-ZERT® training programme of the certifying body and provide evidence of this in order to extend the term of the certificate;
- who have undertaken to apply this particular knowledge of systems engineering in the provision of the services covered;
- who have undertaken to respect and comply with the "INCOSE Code of Ethics" available on the internet at <Ethik-Kodex.GfSE.de> and
- who undertake to recognise and comply with the regulations of these trademark statutes.

Authorized use of the certification mark is restricted to the authorized user personally and may only be used as a qualification reference to the authorized user but not as an indication of the origin of the services covered. In particular, the certification mark may not be used generally in connection with a company. The authorized use is limited in time to the validity period of the relevant authorization to use.

9. The way in which the properties to be certified are examined and the use of the trade mark is monitored

The SE-ZERT® training programme is an in-service training in the field of systems engineering and provides participants with process-related and content-related competences in the field of systems engineering. With a time-limited certificate acquired by passing an examination, graduates are qualified for their work as a systems engineer across all sectors. The certificate can be renewed within the validity period by acquiring continuing education points (see section 9c).

The validity period of the respective certificates is for the

- Level D: 5 years
- Level C 5 years
- Level B 3 years
- Level A 3 years

each calculated from the date of the associated successfully passed examination.

Details of the respective current requirements can be found in the following essential characteristics and in the training and examination conditions of the SE-ZERT® training programme, which can be accessed in detail on the Internet at <http://SE-Zert-Pruefungsordnung.GfSE.de>.

a) Essential features of the training programme and the test material for the SE-ZERT® initial examination

The training to become a "Certified Systems Engineer (GfSE)® " imparts knowledge in the theory and the concepts and processes of systems engineering according to international standards for the practical work of a systems engineer in four levels. After completion of a respective course and passing of a final successful examination (test), a time-limited certificate "Certified Systems Engineer (GfSE)® " of the corresponding level of the SE-ZERT® programme is awarded.

The courses are offered by course providers authorised by the certifying body and approved universities. The examinations are conducted by SE-TREC GmbH.

The respective training and examination material comprises nine modules:

- Module 1 - Introduction to Systems Engineering for SE-ZERT® of the relevant level
- Module 2 - Cross-project interfaces
- Module 3 - Project management interfaces
- Module 4 - Systems Engineering management
- Module 5 - Requirements management, validation and verification
- Module 6 - Realisation processes
- Module 7 - Cross-cutting function
- Module 8 - Operational aspects and disposal in design
- Module 9 - Conflict management and social skills

The training and examination regulations for the individual levels are available on the internet at: <https://www.sezert.de/de/download/anwärter-de.html>. The participation requirements and the knowledge to be acquired at the respective levels include:

aa) Level D

Prerequisite entry qualification: Recognised Master's degree course

Access qualification to level D: Test

By completing a recognised Master's programme, students for the SE-ZERT® Level D certificate demonstrate in a separate examination (test) that they have understood the methods and procedures of systems engineering and can also apply the methodology in fundamental areas.

Within the scope of this SE-ZERT® training/examination for level D, the following knowledge is taught and tested in the test:

- In-depth knowledge of systems engineering and systems engineering management
- Understanding of subject-specific methods and procedures and the ability to use them to gain knowledge
- Participating in a project or in a sub-project and taking over the corresponding technical responsibility in a project
- Participating in multidisciplinary SE teams.

As soon as a professional experience required for level C as an entry qualification has been acquired, the level D certificate can be extended into a level C certificate without further examination (test).

bb) Level C

Prerequisite entry qualifications:

Closing	Request
Master craftsman or technician	5 years, of which at least 1 year with assignment to the competence areas (at least 3)

Bachelor	2 years, of which at least 1 year with assignment to the competence areas (at least 3)
Master, Dipl. Ing FH, Dipl. Ing.	1 year with allocation to the competence areas (at least 3)

Access qualification to level C:

Training and test

Exception:

Ascent from level D

The general objective of the training for the SE-ZERT® Level C certificate is that the participants understand the methods and procedures of systems engineering with all facets and can also apply them in fundamental areas. In addition, the gaps that exist due to the different educational prerequisites are to be closed in this context.

Within the scope of this SE-ZERT® training/examination for level C, the following knowledge is taught and tested in the test:

- In-depth knowledge of systems engineering and systems engineering management
- Understanding of subject-specific methods and procedures and the ability to use them to gain knowledge
- Participating in a project or in a sub-project and taking over the corresponding technical responsibility in a project
- Participating in multidisciplinary SE teams.

cc) **Level B**

Prerequisite entry qualifications:

Closing	Request
Master craftsman or technician	9 years, of which 3 years with allocation to the competence areas (at least 3)
Bachelor	6 years, of which 3 years with allocation to the competence areas (at least 3)
Master, Dipl. Ing FH, Dipl. Ing.	5 years, of which 3 years with allocation to the competence areas (at least 3)

and

a valid certificate of the Certified Systems Engineer (GfSE)[®] Level C
or
 Passing an entrance examination "B lateral entry".

Access qualification to B level: Training and test

The general objective of the training for the SE-ZERT[®] Level B certificate is that the participants are able to apply the methods and procedures of systems engineering in the context of moderately complex system tasks. With this ability, the participants can work out and use the contextual relationships and apply their knowledge in problem solving.

Within the scope of this SE-ZERT[®] training/examination for level B, the following knowledge is taught and tested in the test:

- Application-safe knowledge of systems engineering and systems engineering management
- Applying of subject-specific methods and procedures and the ability to use them to gain knowledge
- Leading a limited complex project or a sub-project of a complex project and taking over the corresponding technical responsibility in a project
- Leading a small multidisciplinary team.

dd) Level A

Prerequisite entry qualifications:

Closing	Request
Master craftsman or technician	14 years, thereof 6 years with allocation to the competence areas (at least 3)
Bachelor	11 years, thereof 6 years with allocation to the competence areas (at least 3)
Master, Dipl. Ing FH, Dipl. Ing.	10 years, thereof 6 years with allocation to the competence areas (at least 3)

and

a valid Certified Systems Engineer (GfSE)[®] certificate Level B.

Access qualification to A level: Training, student project paper, test

The general objective of the training for the SE-ZERT® Level A certificate is for graduates to provide evidence of knowledge, skills and abilities in systems engineering by means of a student project paper with self-reflection. Thus they acquire the proof that they can further develop the methods and procedures of systems engineering in process organisations or apply them in large programmes.

Within the scope of this SE-ZERT® training/examination for level A, the following knowledge is taught and tested in the test:

- Application-safe knowledge of systems engineering and systems engineering management
- Mastering of subject-specific methods and procedures and the ability to use them to gain knowledge
- Leading a complex project and taking over the corresponding technical responsibility in a project
- Leading a multidisciplinary team.

b) Essential features of the examination programme for the SE-ZERT® initial examination

For each level, a written test must be taken and passed as an examination. The respective training and examination regulations for the individual levels are available on the internet at: <https://www.sezert.de/de/download/anwärter-de.html>.

c) Essential features of the renewal process

Certified systems engineers should keep their knowledge and skills in the field of systems engineering up to date and develop them further as part of a voluntary commitment, as the environment, technologies, procedures and standards are constantly changing. The time limit of the certification and the possibility of extension through the acquisition of continuing professional development points (PDU) is intended to promote this.

Each systems engineer certified by GfSE is responsible for the timely completion of a renewal process before the expiry of the respective certificate (level). If the

deadline is missed and the period of validity of a certificate is exceeded, the certificate expires and a renewal can only take place through a new training and a new examination.

Continuing professional development points (PDU) can be earned through activities that maintain or enhance a systems engineer's knowledge and skills. The current requirements for renewing a certificate are available on the internet at: <https://www.sezert.de/de/qualifikation/erneuerungsprozess.html>.

Up-to-date information on the acquisition of continuing professional development points is available on the website of the Certifying Body linked below:
<https://www.sezert.de/de/download/re-zertifizierung-de.html>.

Validity and required continuing professional development points for each level

The following basic requirements and rules apply for the acquisition of continuing professional development points:

Level	Boundary conditions
C	120 continuing education points in 5 years
B	120 continuing education points in 3 years
A	120 continuing education points in 3 years

A total of 120 continuing professional development points (PDU) must be acquired in the respective period and the evidence for this must be made available to SE-TREC GmbH 4 (four) weeks before the expiry of an existing certificate. At the same time, a renewal fee must be paid to SE-TREC GmbH. In the event of illness, parental leave or other comparable events, an informal application with reasons for an extension of term can be submitted to SE-TREC GmbH.

The continuing professional development points can be acquired, for example, through:

- Participation in activities of the GfSE or related organisations
- Assumption of a leadership role/working group in GfSE/INCOSE
- Continuing education and publications

- Working as a Systems Engineer

If more than 120 points are accumulated during the period, up to 30 points can be carried over into the new certification period. In the case of a higher certification or after the expiry of the validity period, the continuing professional development points balance is reset to zero.

d) Essential features of the SE-ZERT® testing methods

The examinations are conducted as a written examination ("test") with multiple-choice questions as well as with open questions. They can be conducted as a face-to-face exam as well as an online exam.

The examination methodology is the same for all levels, differences exist in the examination questions and in the evaluation points. The examination is split into modules according to the subject areas and contains multiple choice questions and open questions; open questions are only asked as knowledge questions. Correctly answered multiple choice questions are awarded a maximum of one point; a completely correctly answered open question is awarded a score of 1, 2, 3, 4, 5 or 6 points, depending on its importance. The examination lasts 120 minutes and is considered successfully passed with 67% of the maximum score achievable.

10. Control of the use of the certification mark by the certifying body in accordance with the rules

a) Measures to control the use of the certification mark

aa) "Speaking" validity period check

Proper use prescribes the indication of the duration in connection with the use of the certification mark (section 6d). The duration indicates the end of the validity period of the respectively acquired SE-ZERT® certificate. This makes it obvious to third parties whether a user of the certification mark is (still) authorised to do so.

bb) Random test check of the appearance of the authorised users

The holder of the certification mark shall randomly check the external appearance of authorised users, namely the use of the certification mark by the authorised user on the internet on his website, on professional portals (for example LinkedIn, Xing) and in social networks for compliance of the use with the rules of these statutes (conformity check). This conformity check is carried out using automated internet monitoring services such as "Google Alerts" according to the keyword terms "*Certified Systems Engineer*" and "*GfSE*". Such automated monitoring services detect content changes on the Internet and notify the holder of the certification mark when new search results regarding the use of the keyword terms are found on the Internet - such as on web pages, in newspaper articles, in blogs or in scientific research publications. Following these notifications, the search results found will then be viewed by the holder of the certification mark and reviewed for conformity with the rules of these regulations and the "INCOSE Code of Ethics".

b) Collision monitoring and enforcement of the warranty mark

The holder of the certification mark will monitor newly filed trademark applications and newly registered trademarks for potential likelihood of confusion with the certification mark within the scope of collision monitoring and will endeavour to achieve a limitation at reasonable expense.

In the event of a detected trademark infringement by third parties, the holder of the certification mark will take reasonable steps to stop the trademark infringement, reasonably weighing the chances of success.