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Accreditation



Accreditation promotes the security and quality of products and services

The expression “accreditation” contains the Latin term “credere”: to believe, to confide, in which you find the word “dare”: to give, to offer. Therefore, accreditation also means to give confidence. People can have confidence that accredited bodies provide their services with competence and reliability.



Publisher

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Ordering publications

Additional “Accreditation” Brochures as well as the SAS
Annual Report can be ordered through the publisher

Photos

Marcus Burger, CH-3123 Belp
Getty Images, D-80469 Munich
mediacolor's, CH-8047 Zurich
METAS, CH-3003 Berne-Wabern
André Springer, CH-8810 Horgen
XL Digitale Fotos, CH-8025 Zurich

The following firms kindly contributed photo
material to this brochure:

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Comet Photo, CH-8006 Zurich
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Schweizer Milchproduzenten, CH-3000 Berne
Siemens AG, D-80333 Munich
Swisscom Mobile, CH-3050 Berne

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Edition

1.03.2010

Agency

Republica AG
Wasserwerksgasse 37
CH-3000 Berne 13



Content

Objective

Internationally recognised reports and certificates	4
---	---

Role

Confidence due to Transparency and Comparability	6
--	---

Repercussions

Learning Processes Develop the Competence of Tomorrow	8
---	---

Structure

Nationally Cross-linked and Internationally Criteria-based System	10
---	----

Organisation

Technical Competence and Experience in the Foreground	12
---	----

Terminology

Definitions	14
-------------	----

Internationally recognised Reports and Certificates

Accreditation has an important function in the present economic environment: It creates the ground for the international recognition of evaluation reports and conformity certificates. Accreditation recognises that a body is competent to carry out a specific activity with high reliability and in conformance with the required quality. Therefore, accredited bodies need a specialised know-how and the development of suitable structure in order to allow systematic decisions and learning processes.

The Swiss Accreditation Service (SAS) evaluates and assesses the technical competence and service quality of calibration and testing laboratories as well as of inspection bodies, interlaboratory comparison providers, producers of reference materials, certification bodies for products, management systems and personnel, based on ISO (CASCO) standards and standards of the CEN/CENELEC. Accreditation contributes in an important way to the recognition and competitiveness of these bodies on globalised markets. This is of central importance for Switzerland's global economic standing. The following examples illustrate the important tasks fulfilled by accredited bodies:

- Measuring instruments of manufacturers and service providers have to be calibrated in order to allow correct measurements. **Accredited calibration laboratories** execute this task with the required precision, ensuring the necessary traceability to the International System of Units (SI).
- On a day-to-day basis, the economy and consumers depend on reliable analyses and tests, e.g. in the fields of food products, electrotechnical appliances, building material, medical diagnostical analyses and genetic forensic analyses. **Accredited testing laboratories** make these analyses and tests in a reliable manner.
- Laboratories and product manufacturers depend on reliable reference materials, in order to carry out accurate tests. **Accredited producers of reference materials** ensure the reliability of the reference material characteristics as well as the traceability of the certified values to the International System of Units (SI).
- For laboratories and inspection bodies, it is important that their measurements be comparable with other measurements. **Accredited providers of interlaboratory comparisons** provide samples with guaranteed characteristics and validate the results obtained by third parties with these samples.
- For citizens, it is important that all safety risks concerning food products, medicine and competent technical installations, be detected in time. **Accredited inspection bodies** fulfill these tasks with high reliability.
- **Accredited certification bodies for management systems** deliver conformity certificates that attest the conformity of the assessed management systems with standardised requirements as well as their efficiency. This allows clients to have confidence that these firms have structures and working procedures at their disposal, which will ensure a service that respects the deadlines and corresponds to agreed quality requirements. At the present time, there are management systems in the fields of quality assurance, information technology security, food product safety, environment, safety at the working place, etc.



From fresh milk to high quality cheese safety concepts and tests are necessary

To ensure safe consumption of food



- A large number of firms depend on recognised specialists, whose competences have to comply with defined criteria. Amongst these specialists, are welders, auditors, judicial experts and project managers in the economy. **Accredited certification bodies for personnel** attest their technical competence, so that the economy and society can rely on their expertise.
- Consumers and the processing industry depend on the conformity of products with defined requirements. Accredited certification bodies for products will verify that these requirements have been met after a thorough, objective examination.



The Swiss Accreditation Service evaluates the competence of calibration and testing laboratories, of inspection and certification bodies as well as of reference material services and providers of interlaboratory comparisons.

Swiss Accreditation Service (SAS)



Conformity Assessment Bodies

Calibration Laboratories (SCS)*

Testing Laboratories (STS)

Producers of Reference Materials (SRMS)

Providers of Interlaboratory Comparisons (SPTS)

Inspection Bodies (SIS)

Certification Bodies (SCES)*

Products (SCESp)

Personnel (SCESe)

Management Systems (SCESm)

* f.e.: Swiss Calibration Service; Swiss Testing Service, etc..

* Swiss Certification Service

Confidence through Transparency and Comparability

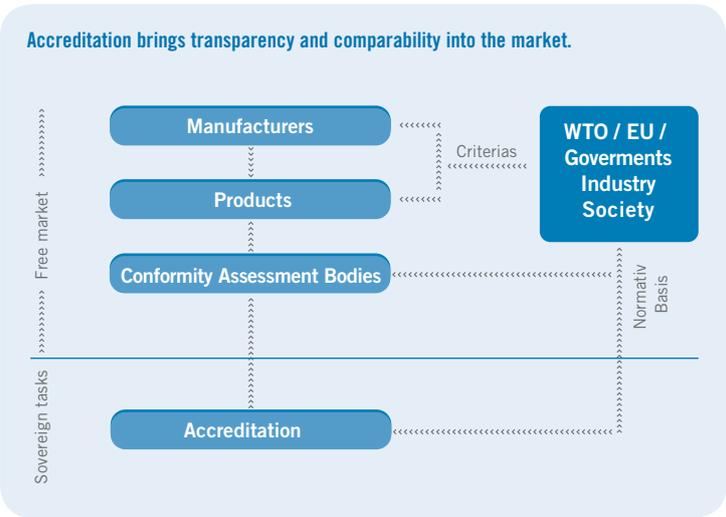
Accreditation attests the competence of a body to provide defined services in a dependable, reliable and efficient way. Accreditation develops the confidence in the services of accredited bodies. It creates, on the national and international level, transparency and comparability in the market place.

Switzerland has, in international comparison, a fast increasing number of accredited bodies with more and more technical fields at its disposal, namely individual firms or departments of major companies, but also associations, federal offices, cantonal offices, universities and research institutes. The range of clients of accredited bodies is equally diverse: not only government authorities but also actors in the realm of the economy, science and research require their services.

In the **legally regulated field**, as a result of testing and conformity assessments, products and services meet requirements, safety is guaranteed and therefore, consumers are

protected. Accredited testing and conformity assessment bodies test in a reliable manner, whether products and services comply with the legal requirements.

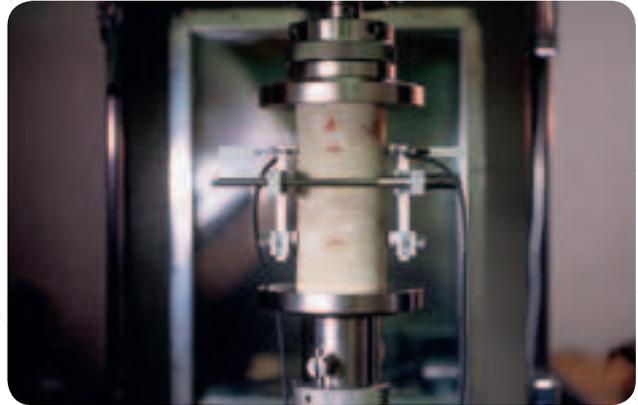
In the **legally non regulated field**, products and services are put on the market on the basis of private law contracts. It is the responsibility of the contract partners to determine requirements which must be met by the contract content, and if need be, by the management system of the manufacturer or service provider. Accredited conformity assessment bodies play a central role in the evaluation of complex products and modern management systems.





From the correct concrete mixture to construction finishing works, reliable inspections and checks as well as efficient management procedures are necessary

In order to overcome obstacles safely



Learning Processes developing tomorrow's Competence

Clearly structured and innovative organisations have a clear advantage in the highly disputed fought market. Innovation implies motivation and learning processes on the part of every employees. Accreditation confirms that a body assures and constantly develops its competence and the quality of its services.

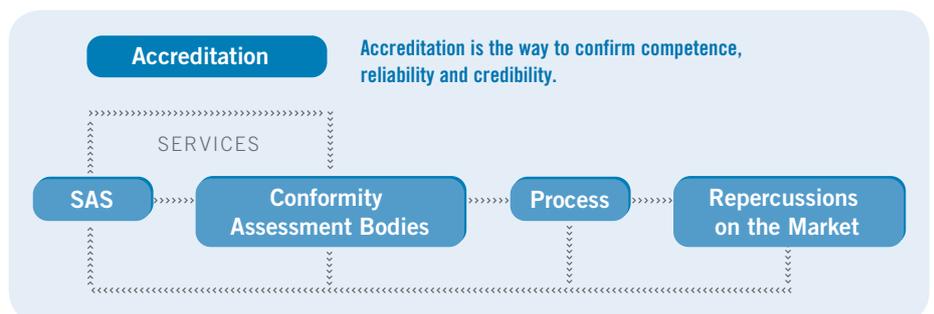
The task of the Swiss Accreditation Service (SAS) is to evaluate if a body possesses the necessary technical competence and conditions for providing reliable services. Procedures should be clearly structured, and management systems should make learning processes possible, in order to ensure competence and reliability on the long term. To evaluate also means providing feedback in relation to technical knowledge, infrastructure and the management system.

How accreditation works, shown by examples of cable transportation plants and operators:

- Accredited calibration laboratories calibrate measuring equipment for material testings.
- Accredited producers of reference materials provide reference samples.
- Accredited testing laboratories test mechanical, hydraulic and electronic system components and assess their quality and safety.
- Accredited inspection bodies inspect technical installation of cable transportation.

- Accredited certification bodies for products certify security components of cable transportation. By delivering credible conformity certificates, they recognise their compliance with security requirements.
- Accredited certification bodies evaluate the management systems of cable transportation manufacturers and operators and their efficiency in a competent manner.
- Accredited certification bodies for personnel examine the training and technical competence of specialists in a reliable manner.

In the entire chain of production and services, one can therefore rest assured, that accredited bodies provide their services in a competent and reliable manner. Accreditation represents the highest control body of the entire quality chain.



➤ From detailed planning to complex security checks systematic and reliable processes are necessary

In order to ensure the passenger's safety



National network based on international criteria

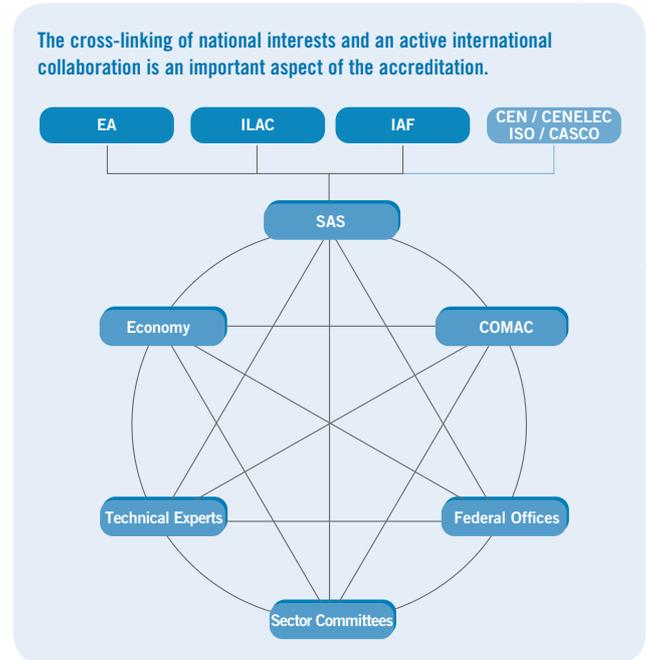
Accreditation constitutes not only a national network, but is also based on international criteria. It is an excellent tool for the application of interstate agreements and contributes considerably to the elimination of technical barriers to trade.

Today international competition does not exclusively take place between companies. The global conditions of national and regional implantation sites are also of crucial importance. The large infrastructure of competent conformity assessment bodies contributes in an essential way, when you compare it internationally, to the attractiveness of Switzerland as an economic place.

An example illustrates this: Within the framework of the **New and Global Approach Concept** of the European Union, the national standards are replaced by uniform guidelines which define the fundamental requirements, especially with regard to the safety of a product. Products in compliance with the requirements and affected by this guideline are provided with the CE Logo (CE = Communauté européenne). They can be put into free circulation in the European Economic Area. In order to realise this concept globally, all states that participate should have competent calibration, testing, inspection and certification bodies.

Multilateral agreements between accreditation bodies within and outside Europe ensure the reliability and worldwide harmonisation of accreditation. They create the basis for the international recognition of evaluation reports and conformity certificates. Therefore, an important task of the SAS is to represent the interests of Switzerland with regards to international organisations like the European cooperation for Accreditation (EA), the International Laboratory Accreditation Cooperation (ILAC) and the International Accreditation Forum (IAF). The World Trade Organization (WTO) resp. the EU-Commission support these organisations. The latter has established guidelines which are enforced at the present time throughout the European Economic Area. Therefore, the national governments are bound to ensure the reliability of their accreditation systems. In Europe, EU and EFTA (European Free Trade Association), together with the economy and the consum-

ers, assume a higher control of the EA tasks. International accreditation organisations establish basic guidelines, in order to harmonise accreditation criteria and evaluation procedures in a way, that the reliability of evaluation reports and conformity certificates for the whole palette of products and services is ensured on a worldwide level. Accredited bodies in Switzerland thereby gain international recognition.





From technical conception to ecological implementation measurements and tests and efficient management structures are necessary

In order to establish reliable communication



Abbreviations

EA	European co-operation for Accreditation
ILAC	International Laboratory Accreditation Cooperation
IAF	International Accreditation Forum
CEN	Comité européen de normalisation
CENELEC	Comité européen de normalisation électrotechnique
ISO	International Organization for Standardization
CASCO	Committee on Conformity Assessment
SAS	Swiss Accreditation Service
COMAC	Swiss Federal Commission for Accreditation

Technical Competence and Experience in the Foreground

Technical scientific questions and efficient methods in the field of management play an essential role in accreditation. The lead assessors of the Swiss Accreditation Service (SAS) have an extensive technical scientific background, many years of practical experience and a thorough knowledge of the field of management systems. Great emphasis is placed on continuing education. This qualifies them, even under changing conditions, for conducting assessments in a competent and satisfactory manner.

With its evaluations, the SAS helps to ensure and develop the high level of Swiss testing and conformity assessment bodies, even in the future. For audits, the SAS calls on the services of external technical experts who have a thorough knowledge and specific experience in the corresponding field. Sector Committees have the task of interpreting the specific technical elements of standards and assist the SAS with its application.

The SAS was founded in 1991. It is part of the State Secretariat for Economic Affairs SECO. Its activity is based upon the Swiss Federal Law on Technical Barriers to Trade (SL 946.51) and the Ordinance on the Swiss Accreditation System and Notification of Testing, Conformity Assessment, Registration and Matriculation Bodies (SL 946.512). The SAS is assisted in its activities by the Swiss Federal Commission for Accreditation (SL 941.291.4), which advises the SAS, the economy and authorities concerning fundamental questions of accreditation.

The accreditation procedure starts with **registration** at the SAS. An **information discussion** helps to clarify basic questions concerning the accreditation procedure and the scope of accreditation. A **preliminary visit** takes place after the body that is to be accredited has taken the necessary measures for the application of the required standard. The audit team which consists of the lead assessor and one or several technical expert(s), is informed about the desired scopes of accreditation and comments about the documents previously received.

Then the **audit** takes place. With the help of checklists, the audit team carries out the evaluation of the technical competence and infrastructure of the body that is to be accredited and the efficiency of its management system. The team establishes a **report**. If all conditions are fulfilled, it

formulates its recommendation to grant the accreditation. Based on the report, the Swiss Federal Commission for Accreditation pronounces its judgement. If the latter is positive, the head of the SAS grants **accreditation**.

An accreditation is valid for five years. Then a new evaluation is necessary in order to **renew** the accreditation for additional five years. **Periodical surveillance activities** take place in the meantime. Any person interested in accreditation can obtain valuable information under **www.sas.ch**.

The main steps of the accreditation procedure.

- ▼ Registration
- ▼ Information Discussion
- ▼ Preliminary Visit
- ▼ Audit
- ▼ Report
- ▼ Accreditation
- ▼ Periodical Surveillance
- ▼ Renewal of Accreditation



➤ From diagnosis to therapy qualified personnel and reliable analyses are necessary

In order to make the right decisions



Definitions

Considering that many technical terms are related to accreditation, we present here some definitions according to ISO/IEC 17000.

Accreditation

Formal recognition of the competence of a calibration, testing, inspection or certification body to carry out specific tests or conformity assessments according to internationally specified requirements.

Calibration

Set of operations that establish, under specified conditions, the relationship between values of quantities indicated by a measuring instrument or measuring system, or values represented by a material measure or a reference material, and the corresponding values realised by standards.

Certificate (Conformity Attestation)

Document issued under the rules of a certification system providing confidence that a duly identified product, process or service is in conformity with a specific standard or another normative document.

Certification

Procedures by which a third party confirms in writing that a product, process or service conforms to pre-specified requirements.

Competence

According to the spirit of accreditation, competence covers primary specialised knowledge of the subject and experience of a company, but furthermore aspects of leadership, organisation and communication inwards and outwards, to ensure trustworthiness of reports and conformity certificates today and in the future.

Conformity assessment

Systematic examination to verify whether a product, management system or service satisfies predetermined requirements. The requirements may be specified in legal ordinances, standards, manufacturer's documentation or by some other means.

Conformity assessment body

Body which carries out services for the conformity assessment.

Inspection

Examination of a product, service, process or installation to determine its conformance to specific or – on the basis of expert assessment – general requirements.

Measurement

Set of operations having the object of determining values of quantity.

Metrology

Science and technique of measurement.

Quality

Totality of characteristics of a product or a service that bear on its ability to satisfy stated and implied needs. According to ISO 9000: Degree of achievement reached by a required set of inherent characteristics.

Reference material (RM)

Material or substance one or more of whose property values are sufficiently homogeneous and well established to be used for the calibration of an apparatus, the assessment of a measurement method or for assigning values to materials. A reference material can be composed of gas, liquid or solid material, in a pure or mixed form: Examples are: Water for the calibration of viscosimeters, the sapphire which allows the calibration of the thermic capacity in calorimetry and the solutions used for calibration in the chemical analytical determination.

Standard

Document established by consensus and approved by a recognised body that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results.

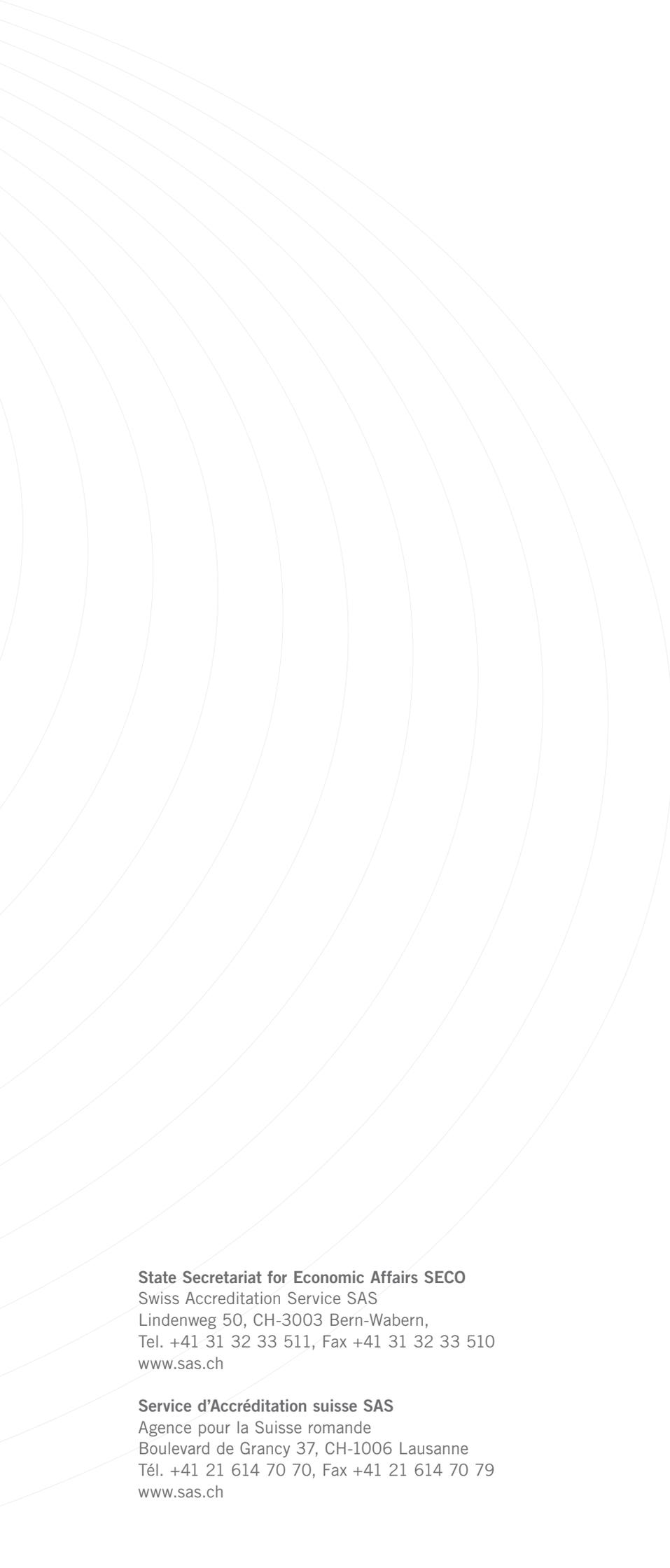
Test

Technical operation that consists of the determination of one or more characteristics of a given product, process or service according to a specified procedure.

➤ From the start to the fulminant final sprint correct measurements and reliable procedures are necessary

In order to obtain credible results





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