



EU-China CDM Facilitation Project Workshop on Verification

Verification according to ISO 14064

Beijing
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Prof. Dr. Günter Schock
TÜV Rheinland Group



▶ ISO 14064 “Greenhouse Gases”



1) ISO 14064 Family

2) ISO 14064 Part 3



ISO 14064-3

a) Overview

b) Verification Principles

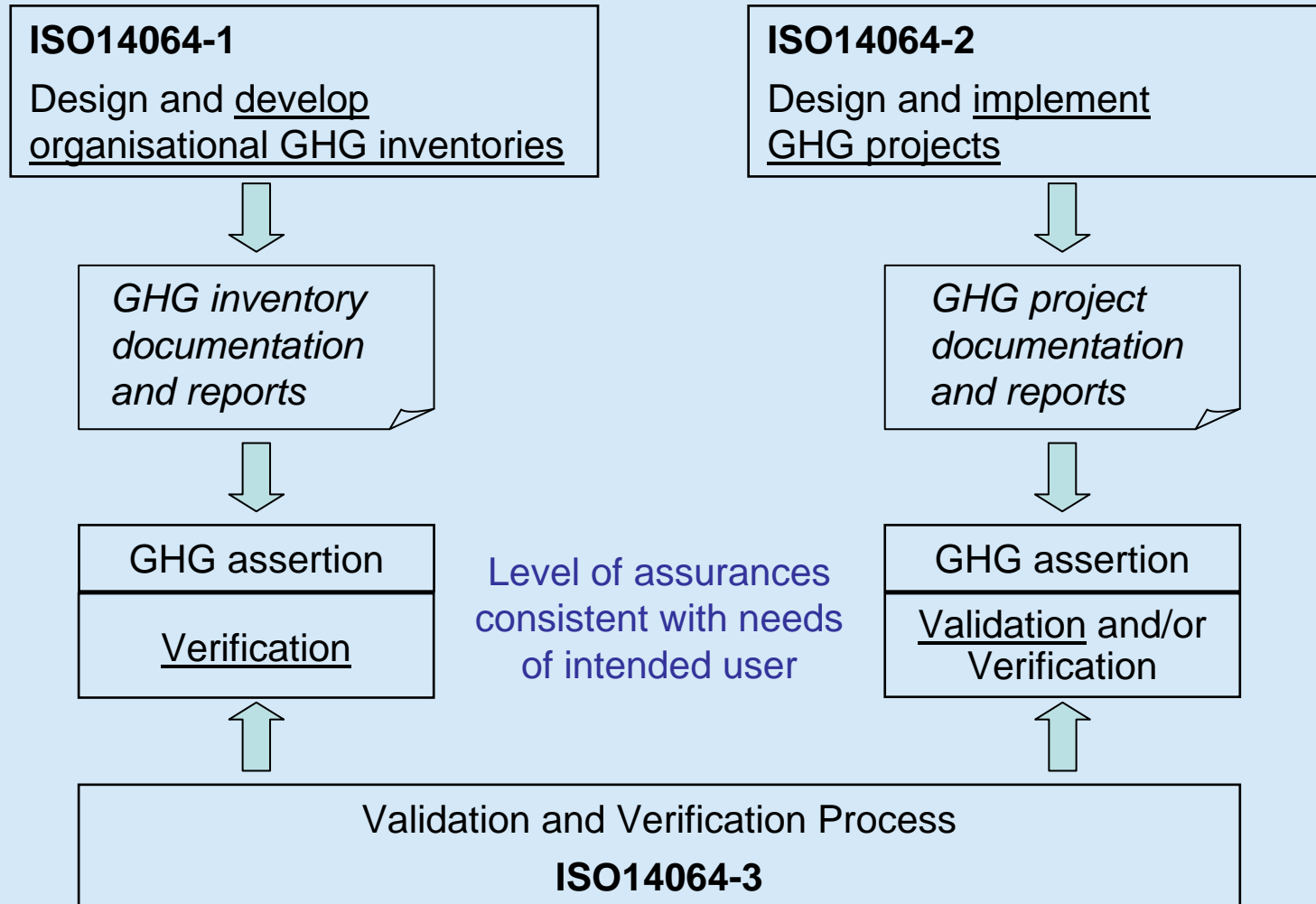
c) Verification Requirements

Specification with guidance for the validation and verification of greenhouse gas assertions

3. Summary



► ISO 14064 Family



► ISO 14064: Definitions

GHG assertion

Declaration or factual and objective statement made by the responsible party

Responsible party

Person or persons responsible for the provision of the GHG assertion and the supporting GHG information

Validation

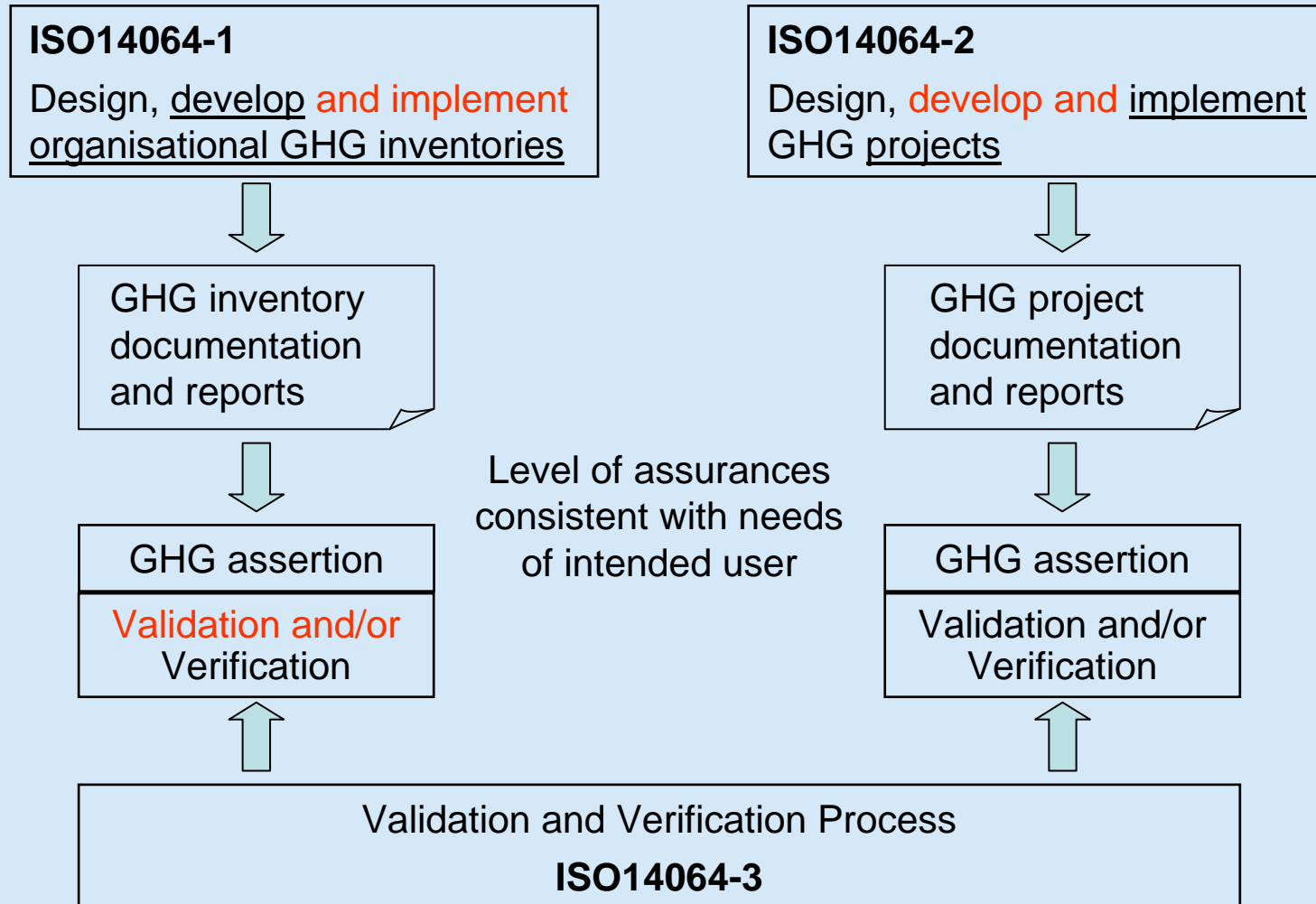
Systematic, independent and documented process for the evaluation of a GHG assertion in a GHG project plan against agreed validation criteria

Verification

Systematic, independent and documented process for the evaluation of a GHG assertion against agreed validation criteria



► ISO 14064 Family (modified)



► ISO 14064:Overview

ISO 14064

... is addressed to organizations, governments, project proponents, stakeholders and validators / verifiers

... defines and regulates GHG quantifying, monitoring, reporting and validating/verifying

... implements GHG inventories, GHG management strategies and GHG projects

... tracks performance and progress in the reduction of GHG emissions and/or increase in GHG removals

... enhances the environmental integrity, credibility, consistency and transparency

Target Groups

Activities

Instruments/Tools

Objective, operative

Objective, strategic



► ISO 14064: Applications

ISO 14064 supports the following applications:

- corporate risk management
e.g. the identification and management of risks and opportunities
- voluntary initiatives
e.g. participation in voluntary GHG registry or reporting initiatives
- GHG markets
e.g. buying and selling of GHG allowances or credits
- regulatory/government reporting
e.g. credit for early action, negotiated agreements or national reporting programmes



▶ ISO 14064 Greenhouse Gases

1) ISO 14064 Family

2) **ISO 14064 Part 3**



ISO 14064-3

a) **Overview**

b) **Verification Principles**

c) **Verification Requirements**

Specification with guidance for the validation and verification of greenhouse gas assertions

3. Summary

► ISO 14064: Objective

ISO 14064 Part 3

- ... describes the process how to verify GHG inventories and how to validate or verify GHG projects
- ... details principles and requirements
- ... provides clarity and consistency for validating/verifying GHG assertions
- ... serves as a voluntary standard to validate or verify GHG assertions



► ISO 14064: Potential users

ISO 14064 Part 3 will be used by

- accredited/appointed GHG validators and verifiers
- organizations and individuals involved in developing GHG projects
- organizations conducting internal audits of their GHG information
- organizations involved in GHG validator or verifier training
- administrators of voluntary and mandatory GHG programmes
- investors, finance and insurance communities
- accreditation bodies of emissions trading / removal / offset programmes



► ISO 14064-3: V&V-Activities

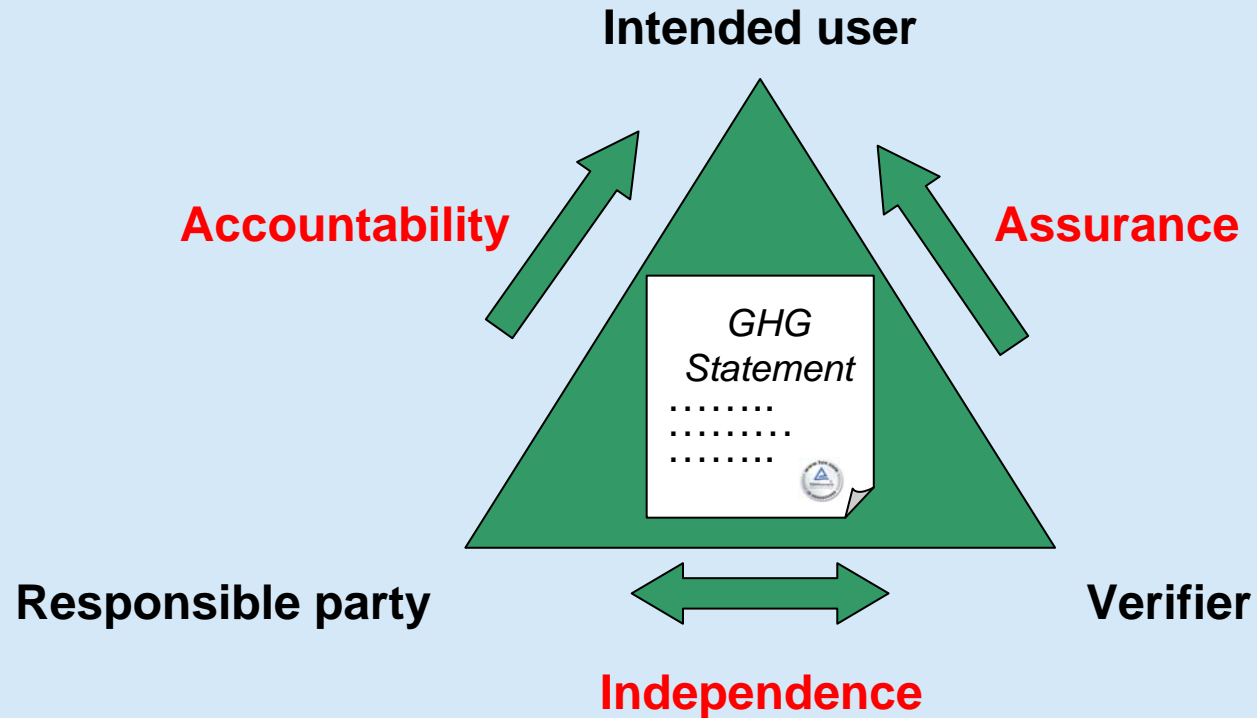
Validation and verification **activities** as e.g.

- establish objectives, criteria and scope (including level of assurance),
- develop an approach for GHG information,
- establish appropriate sampling regimes,
- test the control measures,
- draft and communicate the statement / opinion

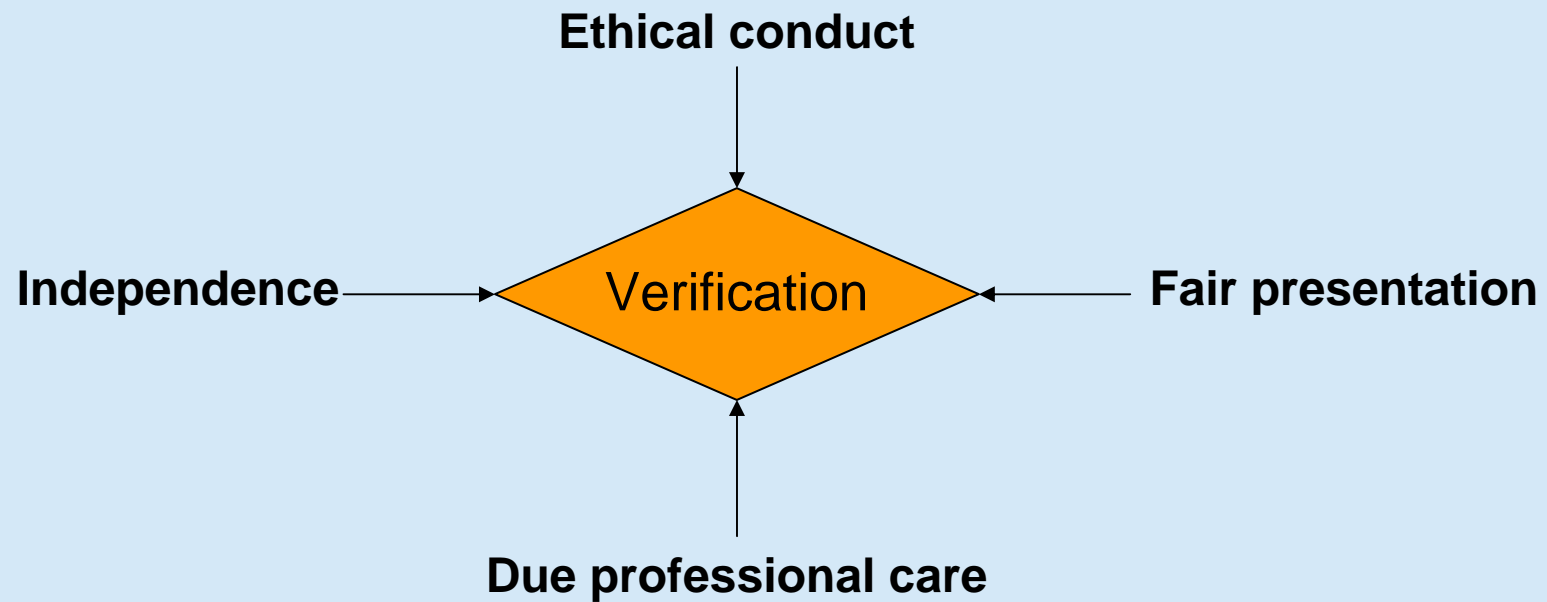
depend on the

- level of assurance required,
- needs of the intended user,
- objectives of the validation or verification activities, and
- validation or verification criteria.

► Verification roles and responsibilities



► Verification Principles



► Verification Requirements

- **Competence of verifier**
- **Level of assurance**
- **Sampling and verification plan**
- **Verification process**
- **Verification statement**
- **Verification records**



► Competence of Verifiers

Knowledge and skills, e.g.

- Legal rules,
- Specific principles or requirements,
- Sectoral scope knowledge,
- Emission quantification,
- Monitoring methodologies,
- GHG data auditing knowledge,
- Risk assessment methodologies,
- Verification procedures

Experience, training and up-to-date knowledge

- Working experience
- Project experience
- Seminars
- Conferences workshops
- Trainee in verification activities



► Level of assurance

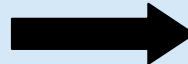
Definition: Degree of assurance the intended user requires in a verification.

Reasonable level of assurance



Reasonable but not absolute, level of assurance that the GHG assertion is materially correct.

Limited level of assurance



A reasonable level of assurance is not being provided, or GHG assertions will not be verified.

► Sampling and Verification Plan

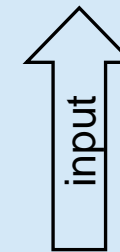
Verification plan addresses

- Level of assurance,
- Verification objectives, criteria, scope,
- Materiality,
- Verification activities and schedules

Extent of verification plan varies according to

- Project size or complexity,
- Verifier's knowledge and experience,
- Verification complexity,
- Industrial sector,
- Used technology or processes

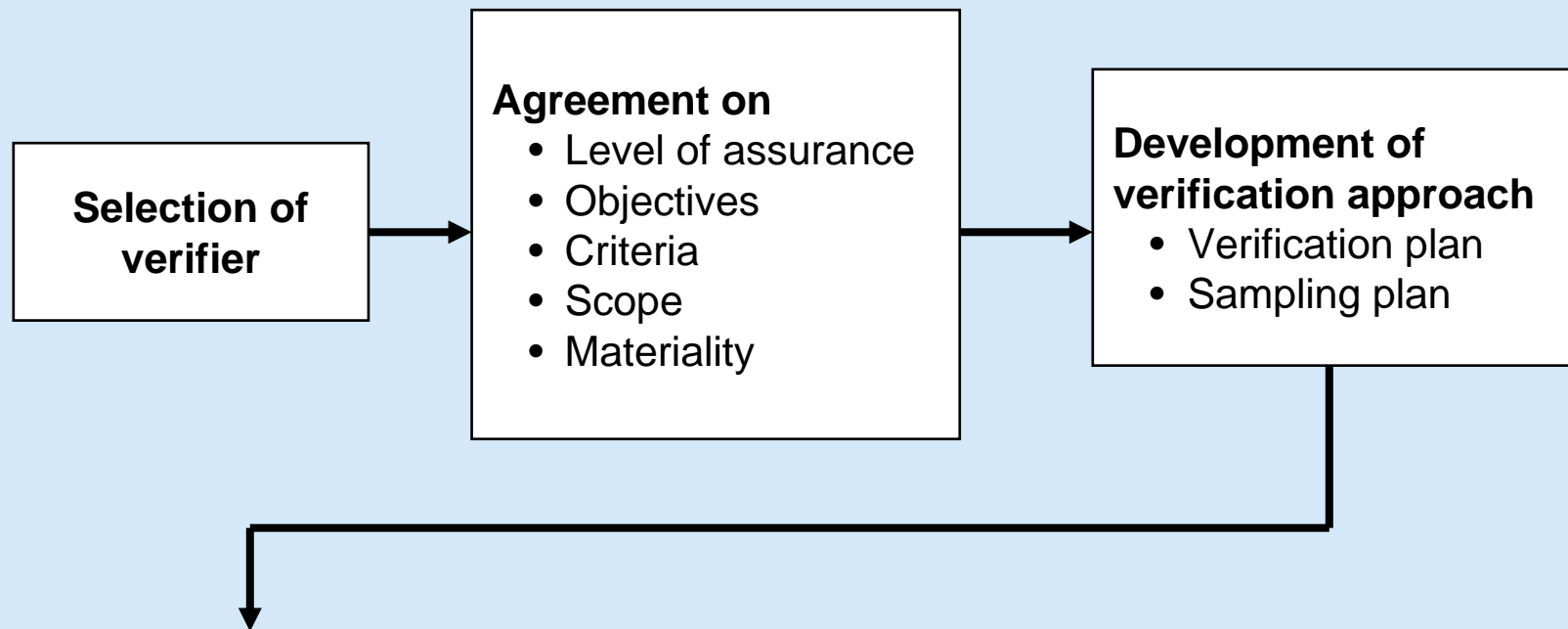
Verification plan



Sampling plan

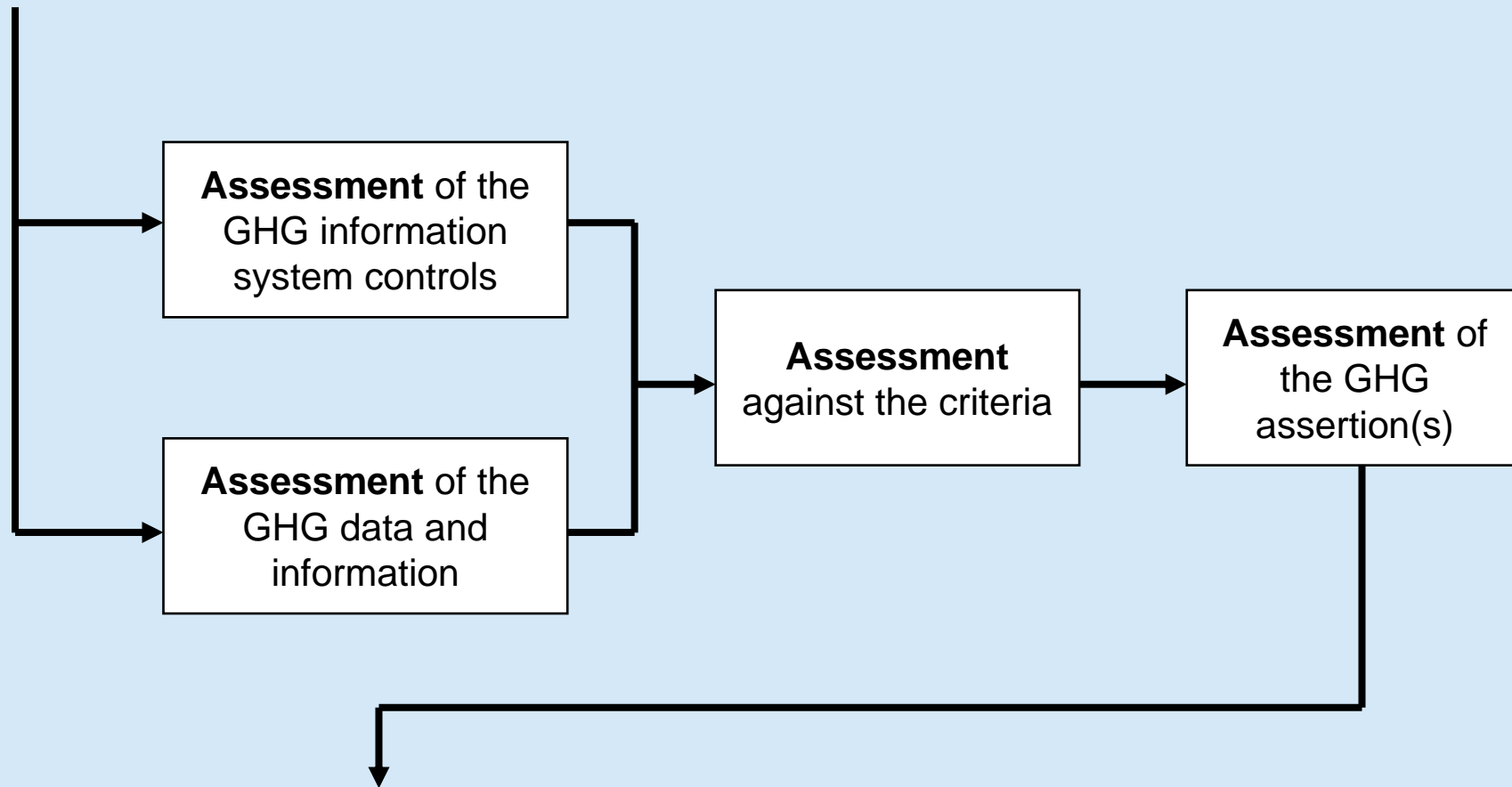
► Verification Process

Planning Phase



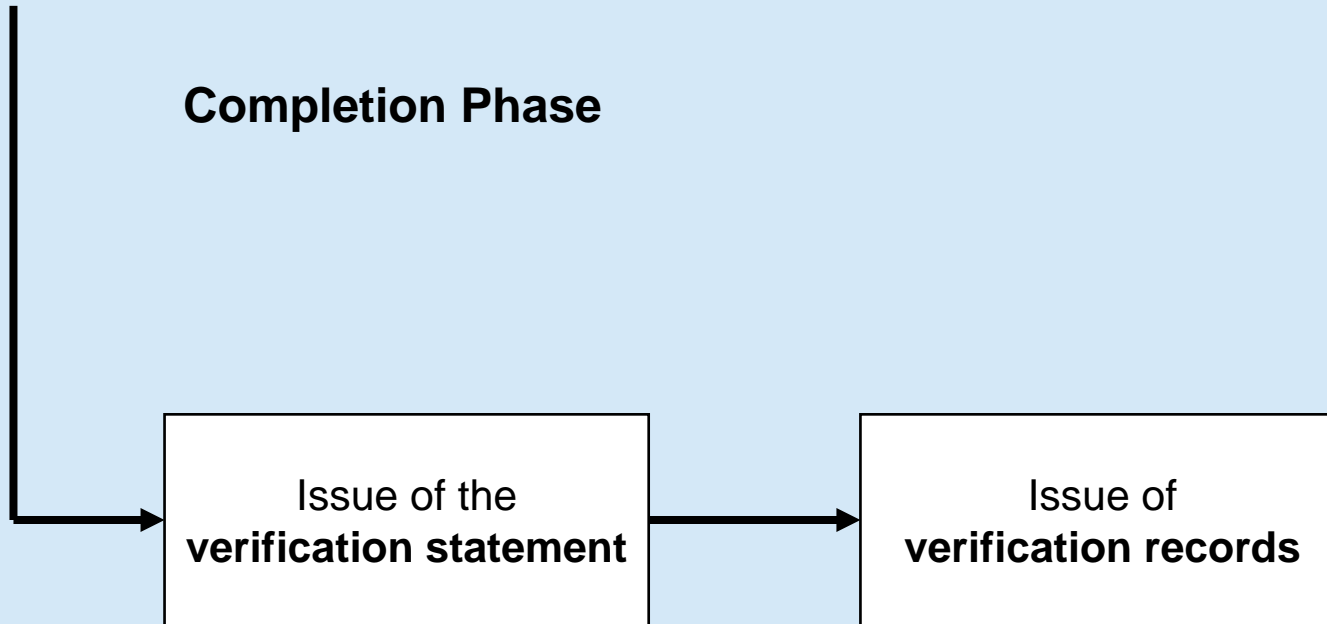
► Verification process

Performance Phase



► Verification process

Completion Phase



► Verification Statement

Verification Statement



- **Contact information for the responsible party or client**
- **A statement that the verification has been performed according to ISO14064-3**
- **Introduction**
- **Scope**
- **Conclusion**
- **Verification statement date**
- **Verifier contact details**
- **Authorized signature from verifier**



► Verification Records

Verification Records



- **Background documentation,**
- **Process documentation,**
- **Communication and reporting documentation,**
- **Verification evidence**



Summary



- ISO 14064
- Verification Scope, Criteria,
- Level of assurance
- Verification Requirements



► TÜV Rheinland Group

Competence Centre Climate Change**

Am Grauen Stein

D-51105 Cologne (Germany)

Beijing Office* Unit 707, AVIC Bldg.,

No.10B, Central Road, East 3rd Ring Road

Chaoyang District, Beijing, 100022 (P.R. China)

Office Contact	Beijing* Jing Fang	Cologne** Prof. Dr. Günter Schock	Cologne** Dipl.-Ing. You. Cui
Phone	+86 10 6566 6660 ext. 141	+49 (0)221 8061733	+49 (0)221 8061733
Fax	+86 10 6566 6667	+49 (0)221 806 1349	+49 (0)221 806 1349
e-mail	Jing.Fang@bj.chn.tuv.com	<u>schock@de.tuv.com</u>	<u>you.cui@de.tuv.com</u>

