

# **Standards**

## **Handwriting Examination**

### **(002.0)**

Version 3.1

Date of approval: 24th of May 2018

Date of effect: 5th of June 2018

# Contents

- Part I. General Introduction to Standards ..... 3**
  - § 1. Background to and aim of the Standards .....3
  - § 2. Types of applicants .....3
  - § 3. Justification of Standards.....4
  - § 4. Validity of Standards.....4
  - § 5. Version management and formal revision history .....4
- Part II. Demarcation of Handwriting Examination..... 5**
  - § 1. Introduction .....5
  - § 2. Core activities.....5
  - § 3. Methodology .....5
  - § 4. Boundaries of the field of expertise .....5
  - § 5. Registration.....6
- Part III. Registration requirements for Handwriting Examination..... 7**
  - § 1. Article 12(2) sub-paragraph a .....7
  - § 2. Article 12(2) sub-paragraph b .....9
  - § 3. Article 12(2) sub-paragraph c ..... 10
  - § 4. Article 12(2) sub-paragraph d ..... 10
  - § 5. Article 12(2) sub-paragraph e ..... 10
  - § 6. Article 12(2) sub-paragraph f..... 10
  - § 7. Article 12(2) sub-paragraph g ..... 10
  - § 8. Article 12(2) sub-paragraph h ..... 11
  - § 9. Article 12(2) sub-paragraph i ..... 11
  - § 10. Hardship clause..... 11
- Part IV. Assessment procedure for Handwriting Examination ..... 12**
  - § 1. General..... 12
  - § 2. Assessment procedure per type of applicant..... 12
- Annex A Suggested literature for the field of Handwriting Examination..... 15**
- Annex B NRGD Glossary ..... 16**
- Annex C Revision History ..... 18**

# Part I. General Introduction to Standards

## § 1. Background to and aim of the Standards

Reporting forensic experts play a crucial role in the administration of justice. The NRGD aims to ensure justified confidence in forensic expertise for stakeholders. This confidence must be based on the demonstrable independently safeguarded quality of forensic investigators and their reports on the basis of (inter)national forensic-specific standards.

The NRGD is managed by the Court Experts Board (hereinafter: Board). The Board's core task is to rule on the applications for registration or repeat registration in the register of the NRGD (register). To that end the Board first defines the field of expertise. This is important in order to inform applicants, assessors and users of the register (e.g. judge, public prosecutor and attorney) about the activities an expert in the field of expertise in question engages in and about the activities that fall outside the field of expertise. The demarcation of the field of expertise is set out in Part II of these Standards.

The Board also determines the criteria on the basis of which an assessment is made for each field of expertise as to whether an application complies with the quality requirements. The generic requirements are set out in the Register of Court Experts in Criminal Cases Decree (Besluit register deskundige in strafzaken). These requirements are elaborated further for each field of expertise. This elaboration is set out in Part III of these Standards.

Furthermore the Board determines the assessment procedure. This procedure is described in Part IV of these Standards.

The NRGD has a system of periodic repeat registration. Court experts must demonstrate every five years that they still meet the requirements in force at that time. The Standards are dynamic and are being developed further in order to enhance the quality of the experts. These Standards set out the current state of the (sub-)field of expertise.

## § 2. Types of applicants

The NRGD distinguishes two types of applicants: the initial applicant and the repeat applicant. The initial applicant is a reporter who at the time of submission of the application is not yet registered in the register for the field of expertise to which the application relates. The repeat applicant is an expert who is already registered in the register for the field of expertise to which the application relates. These two types of applicants are subdivided as follows:

Initial applicant:

- i. independent reporter: a reporter who has independently written and signed the required number of case reports;
- ii. reporter without work of his own: a reporter who has not independently written and signed the number of case reports required for registration.

*If the assessment is favourable, the reporter without work of his own will only qualify for provisional registration.*

Repeat applicant:

- i. Repeat applicant after full registration;
- ii. Repeat applicant after provisional registration.

The initial applicant is an applicant who at the time of submission of the application does not have an NRGD registration. An initial applicant could be:

- the independently reporting expert;
- the newly-trained expert;
- the applicant whose earlier application has been rejected by the Board;
- the applicant whose registration was previously stricken.

In respect of initial applicants, it is necessary to make a clear distinction between the independent reporter and the reporter without work of his own. An example of a reporter without work of his own is the newly-trained expert. This expert has completed the forensic training (reporter's training), but has not yet been able to independently write the number of reports required for the assessment because these are written under the supervision of a tutor during the training. Another example of a reporter without work of his own is the reporter whose earlier application was rejected and who has been working (partly) under supervision following this rejection.

The Board adopts the following principle. Every applicant must draw up a List of Case Information. This list must include a specific number of cases in a period specified by the Board immediately preceding the application. If the List of Case Information includes one or more cases which have been prepared under supervision, the applicant will be qualified as a 'reporter without work of his own'. Additional requirements apply to the applicant whose application was rejected earlier: the case reports must have been drawn up after the date of the Board's decision rejecting the earlier application (Policy Framework for Application after Rejection).

The distinction between the various types of repeat applicants is important in the context of the assessment procedure: the documents a repeat applicant must submit, the composition of the Advisory Committee on Assessment and the assessment method.

### **§ 3. Justification of Standards**

The draft of these Standards has been published on the NRGD website for public consultation. These Standards have been established by the Board in accordance with the Register of Court Experts in Criminal Cases Decree (Besluit register deskundige in strafzaken) and the Experts in Criminal Cases Act (Wet deskundige in strafzaken).

### **§ 4. Validity of Standards**

The Standards are valid from the date shown on the cover. The validity runs until the moment of publication of a new version. In principle it will be checked annually as being up-to-date. This check can lead to a new version. The aim is to publish the new version no more than once a year. Intermediate alterations can be incorporated in an addendum, which will be published on the NRGD website as well.

### **§ 5. Version management and formal revision history**

All changes made to the Standards lead to a new version. Newer versions of (parts of) the Standards are designated with a higher version number.

#### **5.1. Version management**

In the case of editorial changes the old version number is increased by 0.1. Editorial changes have no substantive impact. In the case of substantive changes the version number is increased by 1.

#### **5.2. Formal revision history**

The revision history starts with version 1.0 as the first formally approved version. Substantive changes made are briefly described in the revision history (Annex C). This makes it possible to trace which Standards are valid at any given moment at all times.

# Part II. Demarcation of Handwriting Examination

## § 1. Introduction

Preliminary remark: In this context, handwriting also refers to signatures.

## § 2. Core activities

The core function of Handwriting Examination is to determine whether samples of handwriting originate from one and the same writer.

In addition, a handwriting examiner may express opinions on the motor state of the writer. These statements will refer only to the way the shape of the handwriting sample is produced by the writer's movement. For instance, the motor state of the writer may be 'tremor' (for example due to Parkinsonism, substance abuse, emotion). The effects of the tremor may be visible in the handwritten trace. In such a case, it would be justifiable to mention the presence of 'tremor', but not its cause.

In addition to formulating conclusions regarding the origin of the handwriting, a handwriting examiner may also formulate a conclusion on the process of production (for example whether a signature is the product of a copying process). Although irregularities in the writing trace and pen pressure transitions may clearly indicate - i.e. constitute visible evidence of - for instance, interruptions in the writing process, it falls outside the scope of the handwriting examiner to make statements about the writer's mental or physical state or personality traits.

Field of law: criminal law.

## § 3. Methodology

A handwriting examination is carried out by assessing geometric<sup>1</sup> and structural,<sup>2</sup> visual features of the text, as well as detailed and measurable characteristics of the writing trace which are the result of the deposition process of the writing instrument, the force applied by the writing instrument (pen pressure) and the temporal order of the writing movements.<sup>3</sup> The features associated with the questioned sample are then compared with the features of the known writing. In general, the degree of similarity or dissimilarity of features may be seen as a measure of evidence for the hypothesis of common origin.

## § 4. Boundaries of the field of expertise

Described below are those tasks in which a handwriting examiner does not engage and which are excluded from the field of Handwriting Examination.

A handwriting examiner will make no further inferences or answer any questions as to the writer of a sample that is being analysed other than those mentioned above.

A handwriting examiner will only express opinions based on handwriting samples written in a script type which falls within his expertise. For most European handwriting examiners, this will be Latin script (as opposed to for example Cyrillic or Arabic script). An exception may be made for signatures. Signatures can be legible (text-based) or illegible (stylized). Signatures in a script unfamiliar to the examiner can to some extent be processed like illegible signatures. The opinions

---

<sup>1</sup> Geometric features refer to angles, lengths, distances and areas that can be measured from the shapes of the written ink trace. An example would be the ratio of the length of the ascender (stick) of a letter <b> to the corpus height of its belly. Geometric features are usually quantitative (See: geometry in mathematics).

<sup>2</sup> Structural features refer to unique shapes or patterns that are either present or absent, such as loops, crossings, hooks, ligatures, curls etc. (See: topology in mathematics). Structural features, if present, are helpful in reporting because they can be more easily verbalized and explained to non experts than is usually the case in quantitative geometric features.

<sup>3</sup> The analysis of ink-deposition features or the indentation pattern on the back of a document will usually require microscopy and/or special equipment such as an electrostatic detection apparatus (ESDA). An example of an ink-deposition feature is periodic striation in the ink trace caused by the rolling ball of a ballpoint pen, indicating aspects of writing direction and speed.

of a handwriting examiner always have to be corroborated by reference to observable features in the writing trace.

A handwriting examiner must have sufficient knowledge to be able to decide whether the services of a document examiner are required.

The following activities emphatically do **not** belong to the field of expertise of handwriting examiners:

- formulating conclusions on any personality traits of the writer on the basis of his handwriting;
- formulating conclusions on the general or incidental mental or physical state of the writer on the basis of his handwriting;
- formulating conclusions on the basis of the linguistic features of a handwritten text. However, a handwriting examiner may describe spelling features and punctuation typicalities;
- formulating conclusions on samples collected from PCs. These require a specific expertise with a demonstrable experience.

## **§ 5. Registration**

The register will record the name of the relevant expert as an expert in the field of Handwriting Examination.

## Part III. Registration requirements for Handwriting Examination

The general (repeat) registration requirements are given in the next paragraphs in italics with a reference to Article 12 paragraph 2 in the Register of Court Experts in Criminal Cases Decree (Besluit register deskundige in strafzaken).

An expert will only be registered as an expert in criminal cases upon submission of the application if, in the opinion of the Board, the expert:

- a. has sufficient knowledge and experience in the field of expertise to which the application relates;
- b. has sufficient knowledge of and experience in the field of law concerned, and is sufficiently familiar with the position and the role of the expert in this field;
- c. is able to inform the commissioning party whether, and if so, to what extent the commissioning party's question at issue is sufficiently clear and capable of investigation in order to be able to answer it on the basis of their specific expertise;
- d. is able, on the basis of the question at issue, to prepare and carry out an investigation plan in accordance with the applicable standards;
- e. is able to collect, document, interpret and assess investigative materials and data in a forensic context in accordance with the applicable standards;
- f. is able to apply the current investigative methods in a forensic context in accordance with the applicable standards
- g. is able to give, both orally and in writing, a verifiable and well-reasoned report on the assignment and any other relevant aspects of their expertise in terms which are comprehensible to the commissioning party;
- h. is able to complete an assignment within the stipulated or agreed period.
- i. is able to carry out the activities as an expert independently, impartially, conscientiously, competently, and in a trustworthy manner.

### § 1. Article 12(2) sub-paragraph a

*(...) has sufficient knowledge and experience in the field of expertise to which the application relates.*

#### 1.1. Initial applicant: independent reporter

Basic requirements:

- work at the level of someone who has completed a Bachelor's degree at a university of applied science;
- have recent experience in examining cases at the time of submitting his application for registration;
- have adequate knowledge of standard works in the field, and keep abreast of academic literature including the most recent developments (see suggested literature in Annex A);
- have adequate knowledge of the motor control of handwriting and the motor skills that lead to the writing trace on paper;
- have adequate knowledge of document examination;
- have adequate knowledge of image processing techniques;
- be informed about methods of digital handwriting comparison and keeps abreast of the developments in this field;
- have adequate knowledge of the concepts of criminalistics, such as descriptive and inferential statistics (see suggested literature in annex A).

Specific requirements:

- have drawn up at least 50 reports not older than 5 years which have been subjected to collegial review.  
*In case the applicant is also acting as a supervisor, at least 10 reports on the List of Case Information should be independently prepared reports;*

- have spent an average of 32 hours a year over the past 5 years on forensically relevant professional development (e.g. publications, attending conferences, running or attending courses);
- have participated at least twice in proficiency tests in the past 5 years and can submit the results of these tests.

### **1.2. Initial applicant: reporter without work of his own**

Basic requirements:

- work at the level of someone who has completed a Bachelor's degree at a university of applied science;
- have recent experience in examining cases at the time of submitting his application for registration;
- have adequate knowledge of standard works in the field, and keep abreast of academic literature including the most recent developments (see suggested literature in Annex A);
- have adequate knowledge of the motor control of handwriting and the motor skills that lead to the writing trace on paper;
- have adequate knowledge of document examination;
- have adequate knowledge of image processing techniques;
- be informed about methods of digital handwriting comparison and keeps abreast of the developments in this field;
- have adequate knowledge of the concepts of criminalistics, such as descriptive and inferential statistics (see suggested literature in Annex A).

Specific requirements:

- have drawn up at least 20 reports not older than 2 years which have been subjected to collegial review and/or under supervision and of which at least one report has been drawn up under supervision;
- have spent an average of 32 hours a year over the past 2 years on forensically relevant professional development (e.g. publications, attending conferences, running or attending courses);
- have participated at least once in proficiency tests in the past 2 years and can submit the results of these tests.

### **1.3. Repeat applicant: after full registration**

Basic requirements:

- work at the level of someone who has completed a Bachelor's degree at a university of applied science;
- have recent experience in examining cases at the time of submitting his application for registration;
- have adequate knowledge of standard works in the field, and keep abreast of academic literature including the most recent developments (see suggested literature in Annex A);
- have adequate knowledge of the motor control of handwriting and the motor skills that lead to the writing trace on paper;
- have adequate knowledge of document examination;
- have adequate knowledge of image processing techniques;
- be informed about methods of digital handwriting comparison and keeps abreast of the developments in this field;
- have adequate knowledge of the concepts of criminalistics, such as descriptive and inferential statistics (see suggested literature in Annex A).

Specific requirements:

- have drawn up at least 50 reports not older than 5 years which have been subjected to collegial review;  
*In case the applicant is also acting as a supervisor, at least 10 reports on the List of Case Information should be independently prepared reports.*

- have spent an average of 32 hours a year over the past 5 years on forensically relevant professional development (e.g. publications, attending conferences, running or attending courses);
- have participated at least twice in proficiency tests in the past 5 years and can submit the results of these tests.

#### **1.4. Repeat applicant: after provisional registration**

Basic requirements:

- work at the level of someone who has completed a Bachelor's degree at a university of applied science;
- have recent experience in examining cases at the time of submitting his application for registration;
- have adequate knowledge of standard works in the field, and keep abreast of academic literature including the most recent developments (see suggested literature in Annex A);
- have adequate knowledge of the motor control of handwriting and the motor skills that lead to the writing trace on paper;
- have adequate knowledge of document examination;
- have adequate knowledge of image processing techniques;
- be informed about methods of digital handwriting comparison and keeps abreast of the developments in this field;
- have adequate knowledge of the concepts of criminalistics, such as descriptive and inferential statistics (see suggested literature in annex A).

Specific requirements:

- have drawn up at least 10 reports per year during the registration period which have been subjected to collegial review;  
*In case the applicant is also acting as a supervisor, at least 2 reports on the List of Case Information should be independently prepared reports.*
- have spent an average of 32 hours per year during the registration period on professional development (e.g. publications, attending conferences, running or attending courses);
- have participated at least once in proficiency tests in the past 2 years and can submit the results of these tests.

## **§ 2. Article 12(2) sub-paragraph b**

*(...) has sufficient knowledge of and experience in the field of law concerned, and is sufficiently familiar with the position and the role of the expert in this field.*

In general an applicant should have adequate knowledge of Dutch criminal law:

- context of criminal law:
  - Trias Politica, distinction between civil law, administrative law and criminal law.
- criminal law procedure:
  - pre-trial investigation;
  - coercive measures;
  - stages of the proceedings;
  - actors in the criminal justice system (tasks/powers/responsibilities);
  - regulations concerning experts laid down in the Dutch Code of Criminal Procedure (position and powers of commissioning party, legal position of expert, position and powers of lawyer, forms of counter-analysis, register of experts in the context of criminal law);
  - legal decision-making framework of the court in criminal cases (decision-making schedule laid down in Section 350 of the Dutch Criminal Code of Procedure), also with a view to the relevance of the commission to the expert and to the question at issue;
  - course of the criminal trial;
  - position of the expert in the court procedure.
- substantive criminal law:
  - sanctions and grounds for exemption from criminal liability (very basic).

- knowledge of the legal context of safeguarding the quality of the expert and the analysis/investigation:
  - position and role of the co-operating organisations in the criminal justice system in safeguarding the quality of the reports;
  - professional codes and relevant regulations in relation to the NRGD Code of Conduct.

### **§ 3. Article 12(2) sub-paragraph c**

*(...) is able to inform the commissioning party whether, and if so, to what extent the commissioning party's question at issue is sufficiently clear and capable of investigation in order to be able to answer it on the basis of their specific expertise.*

### **§ 4. Article 12(2) sub-paragraph d**

*(...) is able, on the basis of the question at issue, to prepare and carry out an investigation plan in accordance with the applicable standards.*

### **§ 5. Article 12(2) sub-paragraph e**

*(...) is able to collect, document, interpret and assess investigative materials and data in a forensic context in accordance with the applicable standards.*

### **§ 6. Article 12(2) sub-paragraph f**

*(...) is able to apply the current investigative methods in a forensic context in accordance with the applicable standards.*

Where necessary, a handwriting examiner uses relevant examination instruments such as a stereomicroscope or ESDA<sup>4</sup>.

### **§ 7. Article 12(2) sub-paragraph g**

*(...) is able to give, both orally and in writing, a verifiable and well-reasoned report on the assignment and any other relevant aspects of their expertise in terms which are comprehensible to the commissioning party.*

Apart from the required administrative data (name of commissioning party, date of commission, date of report, reference commissioning party, own reference, number and type of appendices etc.) a forensic handwriting examination report contains the following sections:

- description of the materials received, with information on the date and manner of submission, whether originals were received or copies. Any other conditions of the materials that might be relevant for the examination are mentioned as well (for example any non-reported damage to the documents or whether any of the documents appear to have been treated with chemicals for fingerprint examination);
- specification of questioned and reference material;
- any relevant background information which could influence the interpretation of the examination results;
- question(s) asked by the commissioning party and, if necessary, all that has been discussed between the commissioning party and the examiner in conformity with Article 12(2)(c);
- the hypotheses applied by the handwriting examiner;
- the examination method(s) used;
- evaluation of the questioned material;
- evaluation of the reference material;
- results of the examination;
- interpretation of examination results;
- conclusions (with scale used and the explanation thereof).

---

<sup>4</sup> ElectroStatic Detection Apparatus.

### **§ 8. Article 12(2) sub-paragraph h**

*(...) is able to complete an assignment within the stipulated or agreed period.*

### **§ 9. Article 12(2) sub-paragraph i**

*(...) is able to carry out the activities as an expert independently, impartially, conscientiously, competently, and in a trustworthy manner.*

An applicant should:

- comply with the NRGD Code of Conduct determined by the Court Experts Board and published on the website of the NRGD.

### **§ 10. Hardship clause**

The Board may decide not to apply or deviate from a registration requirement if application of such requirement would produce very unreasonable results. The hardship clause may only offer a solution in certain exceptional situations. It is up to the applicant himself to submit facts and circumstances showing that a certain registration requirement is unreasonable in his specific case.

# Part IV. Assessment procedure for Handwriting Examination

## § 1. General

In all fields of expertise the assessment will be based on the written information provided, including as a minimum requirement case reports and items of evidence, supplemented in principle with an oral assessment. However, such an oral assessment will not be necessary if the applicant's expertise has already been clearly demonstrated by the written information.

The assessment will in principle be carried out on the basis of the information provided by the applicant:

- general information as part of the application package
- documentary evidence of competence.

If it is felt necessary in the context of the assessment an additional case report and/or information, for example information about the way collegial review and/or supervision is organized within the organization, can be requested.

## § 2. Assessment procedure per type of applicant

### 2.1. Initial applicant: independent reporter

Documents to be submitted:

- NRGD application form;
- Certificate of Good Conduct;
- a clearly legible copy of a valid passport or identity card;
- copies of documents relating to the highest level of professional qualification;
- a curriculum vitae (CV), preferably in English;
- documentary evidence of the current academic working level;
- Overview Continuing Professional Development Handwriting Examination;
- List of Case Information Handwriting Examination;
- 3 case reports not older than 5 years selected by the applicant from the List of Case Information Handwriting Examination. If possible the case reports should also contain the testimony delivered in court;  
*These case reports should provide a clear and broad picture of the applicant's competencies.*
- if available:
  - proof of the forms of professional development referred to in the Overview Continuing Professional Development Handwriting Examination.

Assessment method:

- phase a. administrative, by the NRGD Bureau;
- phase b. substantive, by the ACA made up of at least three people on the basis of the available written material, including possible supplementary written information. In principle this ACA consists of a lawyer and two professional assessors;
- phase c. substantive, by the ACA specified at phase b by means of an oral assessment. This oral assessment will be waived if the applicant's expertise has already been clearly established in phase b;
- phase d. decision by the Board: registration, provisional registration or no registration.

### 2.2. Initial applicant: reporter without work of his own

Documents to be submitted:

- NRGD application form;
- Certificate of Good Conduct;
- a clearly legible copy of a valid passport or identity card;
- copies of documents relating to the highest level of professional qualification;
- a curriculum vitae (CV), preferably in English;

- Overview Continuing Professional Development Handwriting Examination;
- List of Case Information Handwriting Examination;
- 3 case reports, including copies of the samples investigated, drawn up in the past 2 years selected by the applicant from the List of Case Information. If possible the case reports should also contain the testimony delivered in court;  
*These case reports should provide a clear and broad picture of the applicant's competencies.*
- if available:
  - proof of the forms of professional development referred to in the Overview Continuing Professional Development Handwriting Examination.

Assessment method:

- phase a. administrative, by the NRGD Bureau;
- phase b. substantive, by an Advisory Committee for Assessment (ACA) made up of at least three people on the basis of the available written material, including possible supplementary written information. In principle this ACA consists of a lawyer and two professional assessors;
- phase c. substantive, by the ACA specified at phase b by means of an oral assessment. This oral assessment will be waived if the applicant's expertise has already been clearly established in phase b;
- phase d. decision by the Board: registration for a provisional registration or no registration.

### **2.3. Repeat applicant: after full registration**

Documents to be submitted:

- NRGD application form;
- Certificate of Good Conduct;
- copies of documents relating to the highest level of professional qualification (if changed);
- an updated curriculum vitae (CV), preferably in English;
- Overview Continuing Professional Development Handwriting Examination;
- List of Case Information Handwriting Examination;
- 2 case reports, including copies of the samples investigated, drawn up in the past 5 years selected by the applicant from the List of Case Information. If possible the case reports should also contain the testimony delivered in court.  
*These case reports should provide a clear and broad picture of the applicant's competencies.*
- if available:
  - proof of the forms of professional development referred to in the Overview Continuing Professional Development Handwriting Examination.

Assessment method:

- phase a. administrative, by the NRGD Bureau;
- phase b. substantive, by an Advisory Committee for Assessment (ACA) made up of at least two people on the basis of the available written material. This ACA will in principle consist of a lawyer and a professional assessor;
- phase c. substantive, by the ACA specified at phase b to which one professional assessor is added, drawn from the same field of expertise as the applicant, on the basis of the available written material. This will not be necessary if the ACA unanimously gives a positive recommendation to the Board in phase b;
- phase d. substantive, by the ACA specified at phase c by means of an oral assessment. This oral assessment will be waived if the applicant's expertise has been clearly established in phase c;
- phase e. decision by the Board: registration, provisional registration or no registration.

### **2.4. Repeat applicant: after provisional registration**

Documents to be submitted:

- NRGD application form;

- an updated curriculum vitae (CV), preferably in English;
- copies of documents relating to the highest level of professional qualification (if changed);
- Overview Continuing Professional Development Handwriting Examination;
- List of Case Information Handwriting Examination;
- 2 case reports, including copies of the samples investigated, drafted during the registration period selected by the applicant from the List of Case Information. If possible the case reports should also contain the testimony delivered in court;  
*These case reports should provide a clear and broad picture of the applicant's competencies.*
- if available:
  - proof of the forms of professional development referred to in the Overview Continuing Professional Development Handwriting Examination.

Assessment method:

- phase a. administrative, by the NRGD Bureau;
- phase b. substantive, by an Advisory Committee for Assessment (ACA) made up of at least three people on the basis of the available written material. In principle this ACA consists of a lawyer and two professional assessors;
- phase c. substantive, by the ACA specified at phase b by means of an oral assessment. This oral assessment will be waived if the applicant's expertise has already been clearly established;
- phase d. decision by the Board: registration, provisional registration or no registration.

## Annex A Suggested literature for the field of Handwriting Examination

- Budowle et al. (2009). A Perspective on Errors, Bias, and Interpretation in the Forensic Sciences and Direction for Continuing Advancement. *Journal of Forensic Science*, July 2009, Vol. 54, No. 4, pp. 798-809.
- Ellen, D. (1998). *The Scientific Examination of Questioned Documents*. Ellis Horwood Ltd., Chichester.
- Found, B. & Rogers, D. (1998). A consideration of the theoretical basis of forensic handwriting examination: The application of "Complexity Theory" to understand the basis of handwriting identification, in: *International Journal of Forensic Document Examiners*, 4(2), pp.109-118.
- Found, B. & Rogers, D. (Eds.) (1999). 'Documentation of forensic handwriting comparison and identification method: A modular approach', *Journal of Forensic Document Examination*, 12, pp.1-68.
- Sita J, Found B, Rogers D.K. (2002). Forensic Handwriting Examiners' Expertise for Signature Comparison. *Journal of Forensic Science*, Sept 2002, Vol. 47, NO 5, pp 1117-1124.
- Gross, S.R. (2001). Detection of deception: The case of handwriting expertise. *Virginia Law Review*, 87, 1847-1855.
- Gailbraith III, O et al. (1995). The Principle of the "Drunkard's Search" As A Proxy For Scientific Analysis: The Misuse of Handwriting Test Data In A Law Journal Article. *International Journal of Forensic Document Examiners*, Vol. 1, No 1, pp 7-17.
- Hardy, H.J.J. & Fagel, W.P.F. (1995). Methodological Aspects of Handwriting Identification, in: *Journal of Forensic Document Examination* (8), pp.33-69;
- Huber, R.A. & Headrick, A.M. (1999). *Handwriting Identification: Facts and Fundamentals*. CRC Press, Boca Raton/ New York.
- Kam M. et al. (2001). Signature Authentication by Forensic Document Examiners. *Journal of Forensic Science*. 46 (4) pp 884-888.
- Kam M. & Lin E (2003). Writer Identification Using Hand-Printed and Non-Hand-Printed Questioned Documents. *Journal of Forensic Science* 48 (6) pp 1391-5.
- Michel, L. (1982). *Gerichtliche Schriftvergleichung*. W. de Gruyter, Berlin.
- Mnookin, J.L. (2001). Scripting expertise: The history of handwriting identification evidence and the judicial construction of reliability. *Virginia Law Review*, 87, 1723-1845.
- Morris, R. (2000). *Forensic Handwriting Identification, Fundamental Concepts and Principles*. Academic Press, London/ San Diego.
- Risinger, D.M. (2002). Handwriting identification. In: D.L. Faigman, D.H. Kaye, M.J. Saks & J. Sanders (eds). *Modern scientific evidence: The law and science of expert testimony*. St. Paul, MI: West.
- Risinger, D.M. & Saks, M.J. (1996). Science and nonscience in the courts: Daubert (Daubert v. Merrell Dow Pharmaceuticals, 113 S. Ct. 2786 (1993)) meets handwriting identification expertise. *Iowa Law Review*, 82, 21-74.
- Saks, M.J. & Vanderhaar, H. (2005). On the "general acceptance" of handwriting identification principles. *Journal of Forensic Science*, 50, 119-126.
- Schomaker, L.R.B. (2008). 'Writer identification and verification', in: N. Ratha & V. Govindaraju (Eds.), *Advances in Biometrics: Sensors, Systems and Algorithms*, Springer-Verlag, pp. 247-264.
- Seaman Kelly, J. & Lindblom, B.S. (2006). *Scientific Examination of Questioned Documents*. CRC Press, Boca Raton;
- Taroni et al (2010). *Data analysis in Forensic Science: A Bayesian Decision Perspective*. Wiley and Sons, Ltd., Chichester.
- Srihari, S.N., Cha, S-H., Arora, H. & Lee, S. (2002). Individuality of handwriting. *Journal of Forensic Science* (47), pp.856-872.

# Annex B NRGD Glossary

## Advisory Committee for Assessment

A committee appointed by the Board which advises the Board on the (repeat) applicant's (degree of) suitability for (repeat) registration.

## Applicant

Natural person submitting an application to the NRGD in order to be (re-) registered in the register.

## Assessor

A member of an Advisory Committee for Assessment.

## Board

The Court Experts Board is the body as referred to in Section 51k(2) of the Code of Criminal Procedure and is charged with managing the register.

## Brdis

Register of Court Experts in Criminal Cases Decree (Besluit register deskundige in strafzaken).

## Bureau

The NRGD Bureau that supports the Board.

## Collegial review

The assessment of another person's work for the purpose of continuous quality control of a person's expertise. There is thereby not a hierarchical but a horizontal relationship between colleagues specialised in the same subject area. The reviewer does not sign the report.

## Continuing professional development

All (training) activities that contribute to the ongoing development of knowledge and skills, which is desirable and necessary in order to be able to continue performing the role of court expert in a professional manner.

## Independent reporter

A reporter who has independently prepared and signed the required number of case reports

## Initial applicant

An applicant who makes an application to be entered in the register and does not or not yet have an NRGD registration at the time when the application is made.

## Intervision

Intervision is a structured (interdisciplinary) meeting between people who are working or training in the same professional area. The subject of discussion is in any case the forensic work carried out and the associated problems. The aim is to enhance the expertise of those involved and improve quality of work. Unlike supervision, there is no hierarchical relationship between the participants.

## NRGD

The Netherlands Register of Court Experts of which the Board and the Bureau form part.

## Provisional registration

The registration of an expert for a period specified by the Board and possibly under certain conditions which must be met within that period. In principle the period to be specified by the Board is two years.

## Register

The national public register as referred to in Section 51 k(1) of the Code of Criminal Procedure, which lists the court experts which the Board deems suitable.

## Registered expert

An expert who is entered in the register.

### Registration

Entry in the register.

### Repeat applicant

An expert who at the time of submitting a repeat application already has a NRGD registration, possibly for a provisional registration.

### Reporter

An individual who issues a report for the administration of justice and/or gives testimony in court.

### Reporter training

A coherent and structured arrangement of organised training activities in which the necessary knowledge and experience are acquired to report as a court expert in criminal law proceedings and that is completed by an exam.

### Reporter with no own work

A reporter who has not independently completed and signed the number of case reports required for registration.

### Supervision

The assessment of another person's work, the joint consideration of the work and the supervision of a supervisee as part of a training or additional training process. Supervisor and supervisee are thereby in a hierarchical relationship. The supervisor will observe the subject of the investigation (the investigated person) in such a way that they can check the supervisee's investigation, and can endorse and take responsibility for the conclusions thereof. The supervisor will sign the report in all cases.

### User

Someone who uses the register in order to find and potentially engage a registered expert.

# Annex C Revision History

## Version 3.1

Date: Juni 2018

Revisions made:

- Adjustments made on the basis of Template Standards 3.2:
  - changes in policy, e.g. provisional registration
  - Generic textual changes and harmonisation
  - editorial changes in English terminology
  - Statement NRGD added to Application Form

## Version 3.0

Date: 12.12.2016

Revisions made:

- Generic adjustments:
  - addition: generic introduction for all fields of expertise in Part I
  - adjusted description of types of applicants: independent/work of his own
  - differentiation per types of applicants to provide an immediate overview of respective requirements (Part III) and assessment procedure (Part IV)
  - number of hours CPD reduced to 40 hours per year for repeat applicants (instead of 50)
  - Continued Professional Development (CPD) mandatory for all types of applicants
  - integration of several NRGD policy frameworks in Standards

## Version 2.1

Date: 1.3.2014

Revisions made:

- Generic adjustments:
  - Document containing both Demarcation and Requirements and assessment procedure combined
  - CPD mandatory for repeat applicant
  - type of applicants and in accordance with that a generic adjustment in assessment procedure regarding repeat applicants B(iv)

## Version 1.0

Date: 1.3.2010

- First edition