"Defence Standardization"
- **Initiation and execution of a defence standardization project**
  - VG 95820

- **Application of standards - Binding force, priorities**
  - VG 95821-\(\rightarrow\) DIN EN 16341

- **Approval of products**
  - VG 95211 – Products that are subject to approval and qualification testing
  - VG 95212 – List of approved components (LZB)

- **Standardization in the Bundeswehr**
Initiation and Execution of a Defence Standardization Project
1. Already existing civilian standards shall be primarily applied with regard to the development and procurement of products used in the defence sector and the use of services by the Bundeswehr.

2. If, due to military use, products and services must meet further requirements, the armaments sector will endeavour to incorporate these requirements into already existing civilian standards. In this case, experts of the armaments sector will, on equal terms with experts of Industry, contribute to the work of the respective civilian standardization bodies.

3. Should it be impossible to take account of such absolutely essential defence requirements within the context of civilian standardization, German military standards (VG standards) or material specifications sheets (WL sheets) can be prepared for the purposes of the Bundeswehr. In this case, an official standardization request in accordance with VG 95820 shall be submitted.

4. Upon publication of a civilian standard covering the provisions of a VG standard, the latter must be withdrawn.

At European level, these principles are also part of the European Defence Agency’s (EDA) European Defence Standardization Policy.
### DIN Bodies Involved in the Preparation and Maintenance of German Military Standards (VG / WL)

<table>
<thead>
<tr>
<th>NE</th>
<th>NSMT</th>
<th>NABw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards Committee Electrical Engineering (defence sector)</td>
<td>Standards Committee Ships and Marine Technology (defence and civilian sector)</td>
<td>Bundeswehr Standardization Committee (defence sector)</td>
</tr>
<tr>
<td>Koblenz</td>
<td>Hamburg</td>
<td>Koblenz (Part of NE)</td>
</tr>
</tbody>
</table>

*In individual cases: Other (civilian) DIN standardization committees*
Typical Composition of a DIN Standardization Body for German Military Standards (VG / WL)

<table>
<thead>
<tr>
<th>Role</th>
<th>Industry</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deputy chairman:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secretariat:</td>
<td>DIN – NE</td>
<td></td>
</tr>
<tr>
<td>Experts:</td>
<td>1 expert from the BAAINBw Project Team</td>
<td>BAAINBw</td>
</tr>
<tr>
<td></td>
<td>6 experts from Industry</td>
<td></td>
</tr>
</tbody>
</table>

DIagram:
- Chairman:
- Deputy chairman:
- Secretariat:
- Experts: 1 expert from the BAAINBw Project Team
- 6 experts from Industry
- DIN Secretary
- Expert (Industry)
- Expert (Industry)
- Vice Convenor (Industry)
- Convenor (Industry)
- Expert (BAAINBw)
Initiation of a Defence Standardization Project?

1. Initiation of a defence standardization project by:
   - Industry
   - BAAINBw (Project Team or agency within the BAAINBw organization)
   - Other Bundeswehr agencies (e.g. Bundeswehr Logistics Office)

2. Discussion and decision-making in the competent DIN standardization body

3. The DIN examines whether the requirements can be covered by an already existing civilian standard or whether a civilian standard can serve as a basis.

4. The standardization body submits a standardization request in accordance with the Annex to VG 95820.

5. Co-signing of the standardization request by the competent authority (BAAINBw or other agency)

6. Official approval by BAAINBw – Q3.1 (coordination of defence standardization)

7. Publication of the project in the European Defence Standards Information System (EDSIS)

8. Coordination meeting with all interested groups and start of the body’s work
**Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support**

**Procedure for the Preparation of a Defence Standard after the Submission of an Approved Standardization Request**

1. **DIN standardization body (Industry and BAAINBw and ...):**
   Preparation of a VG / WL in accordance with the DIN / CEN / ISO standards as well as with VG 95820 (time frame: maximum three years)

2. **Review and approval of the prepared VG / WL by the standardization inspection office (DIN NPBw)**
   (Body of DIN and BAAINBw and Industry representatives)

3. **BAAINBw – Q3.1:**
   “Authentication” = Formal release

4. **Publication by the Beuth Verlag GmbH, Berlin**
   (Beuth Verlag = DIN publishing house which distributes the standards)

5. **Disclosure of the publication in the monthly DIN journal**

6. **After 5 years: Review of the standard for being up-to-date and, if necessary, revision and reissuance**

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**BAAINBw – Q3.1**

As of: 05/2012
Slide 7
This standard applies to the:

- Drafting
- Publication
- Incorporation
- Withdrawal

of German military standards (VG standards) and material specification sheets of the defence technology materials handbook (WL sheets).

As regards the field of defence technology this standard amends the provisions of the standards of the

- DIN 820 series.

(It contains information on the preparation of standards, in particular on the syntax of standards (table structures, contents lists etc.))
Standardization requests may be submitted by:

- the respective technical BAAINBw section
- the competent technical subordinate BAAINBw activity
- other subordinate MOD agencies
- the competent working committee of a standardization body or standardization committee
- other interested groups (e.g. Industry)

If the request is approved the standard will be automatically uploaded in the European Defence Standards Information System (EDSIS).
Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support

VG 95820
Standardization Request

- New defence standardization projects (VG standard or WL sheet)
- Revision of an existing defence standard
- Inclusion of an existing defence standard into the civilian standards portfolio
- Withdrawal of an existing defence standard
V G 95820
Standardization Request

- New defence standardization projects (VG standard or WL sheet)
- Revision of an existing defence standard
- Inclusion of an existing defence standard into the civilian standards portfolio
- Withdrawal of an existing defence standard
Ensuring the Required Expertise for the Implementation of the Standardization Project

**Technical expertise:**

- **Internal**
  - BAAINBw Project Teams
  - BAAINBw authorities
  - Other Bundeswehr branches

- **External**
  - Industry
  - Civilian research institutes
  - Industrial associations
  - Industrial consortia
  - European cooperation partners

**Standardization expertise:**

- Professional support and management of standardization activities

- Secretarial management by the DIN
- Administrative support by the DIN
- Publication by the Beuth Verlag
- Use of LIVELINK (Electronic Committees)
- European and international representation by the DIN (CEN/ISO)
Application of Standards (Binding Force, Priorities)
DIRECTIVE 2009/81/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 July 2009 on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting authorities or entities in the fields of defence and security.

VG 95821 (as of June 2012: DIN EN 16341)

— Application of Standards and other Technical Rules —

— Binding force, priorities —

VG 95821 takes account of:

The “guidelines for the selection and use of defence materiel standards” prepared by the European Defence Agency (EDA).

Takes account of the “statutory requirements” (within the context of the implementation of an EU directive)

Note: Implementation of the VG standard into a EU standard: prENVG95821:2010

As of June 2012: available as DIN EN 16341
This standard applies to:

- the provision
- development
- use
- improvement
- disposal

of defence products and services.

It also applies to measures intended to maintain the operational readiness of products.

This standard supports project leaders concerning the selection and use of applicable standards and other rules.
a) Standards and other standard-like documents which are referred to in laws, ordinances and statutory provisions;

b) International military alliances standards (e.g. NATO Allied Publications and associated standardization agreements (STANAG)) *;

c) National civilian standards transposing European standards (e.g. BS EN, NF EN, DIN EN, ...);

d) European Technical Approvals (ETA);
NOTE: Mainly in the construction sector.

e) Common European Technical Specifications;

f) National civilian standards transposing international standards (e.g. BS ISO, ...);

g) other international civilian standards;

* NOTE:
For NATO allied partners this applies only if these standards have been ratified with the aim of implementing them, e.g. in order to ensure the required interoperability between armed forces.
h) Other technical reference systems established by the recognized European standardization bodies;

l) National military standards (e.g. UK Defence Standards, DE VG);

m) Mandatory national regulations and directives for special equipment (e.g. for aircraft or Navy ships);

n) National technical specifications of governmental defence procurement agencies;

o) Military standards of partner nations, including MIL standards (US);

When selecting standards, EDSTAR shall be taken into account since it contains best practice standards for the procurement of defence material.

NOTE:
EDSTAR corresponds to the former "European Handbook for Defence Procurement (EHDP)".
In deviation from the above, needs may occur in the execution of a contract which require a change in the list of standards or standard-like documents or which let such a change appear reasonable.

Such needs may be given:

a) by new experience gained during contract execution;

b) where documents of a lower level are referred to in laws, ordinances and statutory provisions;

c) where documents of a lower level appear to be more suitable from a technical point of view;

d) where the application of lower level documents is more economical;

e) where in bilateral or multilateral projects other orders of priority are defined.

If, in the aforementioned cases, the initiative to change the list of standards and standard-like documents is taken by the Contractor, he shall seek the Purchaser’s prior consent. The change shall be laid down in a contract amendment.
Conclusion:

With regard to application, laws, provisions and civilian standards shall be preferred.

VG standards, technical specifications (TL) and other defence regulations and standards are only applied if no other civilian regulations are applicable.

In this context, the following must be observed:

“Under consideration of the selection priorities mentioned before, for the specification of the performance and the scope of delivery of defence materiel preferably such standards and other rules shall be selected, which are recommended as Best Practice Standards in the European Handbook for Defence Procurement (EHDP)”.

But:

The following exception shall apply:

“In deviation from the above, needs may occur in the execution of a contract which require a change in the order of priority or which let such a change appear reasonable”.

A deviation from the order of priority is permissible in justified exceptional cases.
Approval of Products
This standard applies to all products which are subject to approval and qualification testing.

The standard describes the procedures to be applied to obtain an approval for products to be used in defence materiel by the responsible technical department of the Federal Office of Defence Technology and Procurement (now: BAAINBw) as well as the acknowledgment of qualifications awarded by other nations.

The approval requirement in technical specifications is permissible from a qualitative point of view for one of the following reasons:

• The product has substantial influence on the functional reliability and / or availability of the equipment / system.

• Cost-effective maintenance is ensured only by use of the approved product.

• Failure / malfunction of the product may lead to substantial secondary damage.

**NOTE:** Independent from an approval the national legal regulations shall be met.
Approval for a product must be requested at the BAAINBw:

Tests will be conducted by:

- BAAINBw or
- a test centre authorized by BAAINBw
- another test centre under the supervision of BAAINBw

As the basis for approval a test report shall be submitted to BAAINBw by the test centre which must contain the data specified in VG 95211 (such as specifications applied with regard to the test).
If a product is approved, BAAINBw will confirm the approval by issuing a certificate of approval to the applicant.

One copy of the certificate will

• be given to the Bundeswehr Logistics Office (LogABw)),

• the recognizing departments of other national Ministries of Defence or

• procurement agencies which are listed in the endorsement of recognition of VG standards
### VG 95211

**The approval of a product:**

- The approval will be valid for a limited time or until revoked (depending on the item) and must be requested in due time before the termination of the approval (at least 6 month in advance).
- Expires automatically if the product is changed (other chemical composition, changed manufacturing process etc.).
- Does not guarantee the award of contracts.

Products that are subject to an approval will be put up for bidding among the approved manufacturers.

### Examples of approved products:

- VG 95132-1 List of approved welding materials
  Part 1: Bar and wire electrodes for armour steel
- VG 96960 Battery charging and analyzing –
  Requirements for the design of battery chargers and trickle-chargers
- VG 96927-102 Electrical cable assemblies –
  Part 102: Cable and insulated wires for the self-propelled howitzer “PzH 2000”

**ATTENTION:** By taking up an organizational position within the FMOD area of responsibility it might be possible that you will be/become technically responsible for a VG standard. Thus, you might be responsible for monitoring approvals and/or issuing new certificates with regard to certain products.
This standard is valid in connection with VG 95211 for qualified and approved components.

The lists constituting standard VG 95212 include the components to be used in military equipment.

The lists also contain such components which are to be used for maintenance purposes only.

In addition, the lists provide information about BWB (now: BAAINBw) qualification approval certificates for electrical and electronical components withdrawn after 2006.
**List of Approved Components (LZB)**

<table>
<thead>
<tr>
<th>Inhalt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anschlusselemente, elektrisch</td>
</tr>
<tr>
<td>Batterien, nicht wiederaufladbar</td>
</tr>
<tr>
<td>Batterien, wiederaufladbar</td>
</tr>
<tr>
<td>Batterien, Energiequellen, sonstige Stromquellen</td>
</tr>
<tr>
<td>Befestigungs- und Kennzeichnungsteile</td>
</tr>
<tr>
<td>Erdoberflächen</td>
</tr>
<tr>
<td>Faserverbinder</td>
</tr>
<tr>
<td>Getriebegehäuse</td>
</tr>
<tr>
<td>Isoliermaterial, elektrisch</td>
</tr>
<tr>
<td>Kabel und Leitungen, elektrisch</td>
</tr>
<tr>
<td>Konfektionierte elektr. Kabel und Leitungen</td>
</tr>
<tr>
<td>Kaltschrumpfende Bauelemente</td>
</tr>
<tr>
<td>Leuchten, elektrisch</td>
</tr>
<tr>
<td>Relais, elektromagnetisch</td>
</tr>
<tr>
<td>Schalter, elektrisch</td>
</tr>
<tr>
<td>Schutzschalter und Überspannungsschutz</td>
</tr>
<tr>
<td>Schutzschläuche, rote und kanale</td>
</tr>
<tr>
<td>Steckverbinder und Steckvorrichtungen</td>
</tr>
<tr>
<td>Verbindungselemente, elektrisch</td>
</tr>
<tr>
<td>Verteilergeräte, elektrisch</td>
</tr>
<tr>
<td>Wärmeschrumpfende Bauelemente</td>
</tr>
<tr>
<td>Werkzeuge für elektrische Bauelemente</td>
</tr>
<tr>
<td>Zurückziehungen</td>
</tr>
</tbody>
</table>

**Werkzeuge für elektrische Bauelemente**

- Ein- und Ausbauwerkzeuge für Kontakte
- Crimpwerkzeuge, hydraulisch
- Crimpwerkzeuge für Steckverbinderkontakte, handbetätigt
- Verarbeitungswerkzeuge für wärmerinduzierte Bauelemente
- Preßwerkzeuge für Preßhülse, handbetätigt
- Abisolierwerkzeuge
- Anzieh- und Lösewerkzeuge
- Spannwerkzeuge für Befestigungsbänder
- Crimpbacken für Grundwerkzeug M22520/5-01 - Sonderanwendung
- Crimpköpfe für Grundwerkzeug M22520/1-01, Sonderanwendung
- Positionierstücker für Grundwerkzeug M22520/1-01, Sonderanwendung
- Crimpwerkzeuge für elektrische Verbindungselemente und Koaxialkabel (MIL-C-22520/5D)
- Crimpwerkzeuge für elektrische Verbindungselemente und Koaxialkabel (MIL-C-22520/10D)
- Handbetätigte Crimpwerkzeuge für Anschlußhülse AWG 12 bis 20 (MIL-C-22520/1C)
- Handbetätigte Crimpwerkzeuge für Anschlußhülse AWG 20 bis 28 (MIL-C-22520/2C und Änderung 1)
- Pneumatisches Crimpwerkzeug für Leiteranschlußhülse AWG 0000 bis 8 (MIL-C-22520/23)
- Ein- und Ausbauwerkzeuge für Kontakte, elektrischer Steckverbinderkontakt Typ I, Klasse 1, Ausführung C (MIL-M-19689/17B)
- Ein- und Ausbauwerkzeuge für Kontakte, elektrischer Steckverbinderkontakt Typ II, Klasse 1, Ausführung C (MIL-M-19689/19B)
### VG 95212
--- Lists of Approved Components (LZB) ---

#### Ein- und Ausbauwerkzeuge für Kontakte

<table>
<thead>
<tr>
<th>Hersteller</th>
<th>Hersteller Code</th>
<th>Hersteller Tko</th>
<th>Gültig bis</th>
<th>Zul.-Nr</th>
<th>Bemerkung</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daniels</td>
<td>11251</td>
<td></td>
<td>K1600008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saulau</td>
<td>FAUCS</td>
<td></td>
<td>2016-04-30</td>
<td>K1000006</td>
<td></td>
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<tr>
<td>Verso</td>
<td>A40/2</td>
<td>11-7345</td>
<td>2006-12-31</td>
<td>K1000001</td>
<td></td>
</tr>
</tbody>
</table>

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BAAINBw – Q3.1

As of: 05/2012
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VG 95212
— Lists of Approved Components (LZB) —

Hersteller

Kunden Code: Daniels
Name der Firma: Daniels Manufacturing Corporation
Hersteller-Code: 11081
Anrede: 
Nachname: 
Abteilung: 

Telefonnummer: 
Telefax: 
Mobil: 
E-Mail: 
URL: www.din-tool.com

Bemerkung: 

Anschluss: Daniels Manufacturing Corporation, 526 Thorpe Rd, Orlando, FL 32824-3133, USA

Vom Hersteller benannte Vertriebsstelle:

Anschrift: Hersteller- Nr. Telo. Nr. Fax Nr. E-Mail

* Kategorie A oder B nach VG 95211: 2009-06

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Lists of Approved Components and their Manufacturers (VG 95212)
(for users within the Bundeswehr and for external users)

Access via:
For users within the Bundeswehr
http://intranet.bwb/web-ATIIl4/VG-Norm.htm#F

For external users:
http://www.baain.de
Link: “standards”

Prerequisite:
Intranet access
or
Internet access

What is provided?
ACCESS – Database of approved components, including data on approved manufacturers
Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support

List and Full Text of German Defence Standards (VG and WL)

*(only for users within the Bundeswehr)*

Access via:

http://intranet.bwb/web-ATIII4/VG-Norm.htm#F

Prerequisite:

Intranet access

What is provided?

a) A standards search engine (for the VG/WL standards portfolio)

b) Designation of the respective point of contact

c) Downloadable full text pdf files of current defence standards of the German standards portfolio (in most cases bilingual standards (German/English))
List of German Defence Standards (VG and WL) (for external users)

Access via:
http://www.baain.de
Link: “standards”

Prerequisite:
Internet access

What is provided?

a) A standards search engine (for the VG/WL standards portfolio)
b) Designation of the respective point of contact

External users must purchase the VG standards via the Beuth Verlag.
Standardization in the Bundeswehr
Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support

Team BAAINBw – Q3.1.4

- International standardization (NATO)
- Defence standardization and technical specifications (TL)

Team leader: TRDir Günther

International standardization (NATO)

Mil. OTL Drieschner
Mr. Hoffend
Mr. Mehlhorn
Mrs. Mohr

Defence standardization and technical specifications (TL)

TROAR Hans Kopold
Otto Ebel standardization
Björn Kowalske standardization
Reimund Aveaux TL
Norbert Horsch TL

BAAINBw – DIN contract

approx. 10 employees of the DIN are involved in defence standardization (“extended workbench”)

BMVg AIN V 2
TRDir Otterbach:
Standardization coordinator of the armaments sector with respect to the Federal Ministry of Economics and Technology
Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support

Representation of the Armaments Sector in DIN Advisory Boards etc.

DIN Presidium:

President of the BAAINBw: Mr. Harald Stein = FMOD Representative

Standards Committee Ships and Marine Technology (NSMT) – Advisory Board

BAAINBw – Q3.1, Hans Kopold (Deputy Chairman)
BAAINBw – Q3.1, Björn Kowalske

Standards Committee Electrical Engineering (NE) – Advisory Board

BAAINBw – U3.4, Frank Zöllner (Deputy Chairman)
BAAINBw – Q3.1, Hans Kopold
BAAINBw – WTD 41, Dr. Matthias Kloß

Bundeswehr Technical Committee (DIN NABw):

BAAINBw – Q3.1, Björn Kowalske (Vice Convenor)
“Thank you very much for your attention!”

Do you have any questions???