Business plan for a DIN DKE SPEC project according to the PAS procedure on

"Battery passport content to fulfill requirements of EU-Battery regulation and to complement voluntary data"

Status:

For the development of DIN DKE SPEC 99100 after adoption on 18.01.2024

Berlin, 01.02.2024 (Version 2)

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1. Status/version of the business plan

- **For public commenting (Version 1)**

  This business plan is intended to inform the public of a new DIN DKE SPEC project. Any interested party can take part in this project and/or comment on this business plan. Please send any requests to participate or comments by e-mail to nico.kimpel@din.de.

  Once this business plan is published, the Chairman of DIN's Executive Board decides whether or not the project is to be carried out.

  If the project is accepted, all those who have applied for participation or have commented on the business plan by the deadline will be invited to the kick-off meeting of the project consortium.

- **For developing the DIN DKE SPEC after adoption on 18.01.2024**

  Changes to the previous version 01:
  - Cover sheet updated
  - Section 2: Table of participating organizations added
  - Section 3.3: IDTA working group added
  - Section 8: Information on consortium leader added

2. Initiator and other consortium members

- Initiator:

Person/Organization	Short description
Dr. Torsten Freund BASF	Has conceptualized and piloted a BP as former head of GBA Battery Passport Project Management office.
Niko D'Agostino Circulor	Industry representative of central value chain in the Battery Pass consortium funded by BMWK to develop a Battery Passport based on EU Battery regulation.

- Other potential participants:

This DIN DKE SPEC will be developed in a consortium (temporary body) that is open to any interested party. The participation of other experts would be helpful and is desired. It is recommended that

- Manufacturers of batteries
- National authority
- Importer
- Distributor
- Service providers (e.g. TÜV,…)
- EoL operators e.g. recycler or waste management operator
- (End-User)
- Multi stakeholder organizations (e.g. GBA,…)
- IT companies providing infrastructure and tracing solutions
- etc.

take part in the development of this DIN DKE SPEC.

- Organizations[1] that have registered for participation:

Person	Organization
Torsten Freund	BASF SE
Nikolai D'Agostino	Circulor GmbH
Tilmann Vahle	Systemiq GmbH
Sven Jantzen	Umicore AG & Co. KG
Gernot Boege	FIWARE Foundation e.V.
Patrick Zank	VDE Renewables
Michael Hofmann	cdmm GmbH
David Villamil	SEW-EURODRIVE
Sophie Leddig	Spectaris e.V.
Andreas Meyer	Siemens Mobility GmbH
Katrin Melzer	Siemens Mobility GmbH
Sebastian Käbisch	Siemens AG
Hannes Schneider	TWAICE Technologies GmbH
Sarp Güney Cimen	Siemens Mobility GmbH
Mark Heilig	Alfred Kärcher SE & Co. KG
Pauliina Harrivaara	Cleopa GmbH
Stephan Fertig	Panasonic
Richard Aumayer	Robert Bosch GmbH
Dominik Heisl	sonnen GmbH
Anna Martenyi	Instagrid
Johannes Simböck	acatech
Lisa Risch	acatech
Kerstin Sann-Ferro	Deutsche Kommission Elektrotechnik Elektronik Informationstechnik
Maria-Fernanda Sciulli	BASF SE
André Schmitz	BMW
Corinna Mutter	SPECTARIS e.V.
Josef Schön	Audi AG
Thomas Dittrich	Beratung Normung und Gefahrgut
Matthias Reiter	EnBW Energie Baden-Württemberg AG
Sebastian Eicke	HARTING Stiftung & Co. KG

- Organisations that have adopted this business plan (consortium members):

Person	Organization
Torsten Freund	BASF SE
Nikolai D'Agostino	Circulor GmbH
Tilmann Vahle	Systemiq GmbH
Sven Jantzen	Umicore AG & Co. KG
Gernot Boege	FIWARE Foundation e.V.
Patrick Zank	VDE Renewables
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Sebastian Käbisch	Siemens AG
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Dominik Heisl	sonnen GmbH
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Johannes Simböck	acatech
Lisa Risch	acatech
Kerstin Sann-Ferro	DKE Deutsche Kommission Elektrotechnik Elektronik Informationstechnik
Maria-Fernanda Sciulli	BASF SE
Corinna Mutter	SPECTARIS e.V.
Thomas Dittrich	Beratung Normung und Gefahrgut
Matthias Reiter	EnBW Energie Baden-Württemberg AG
Sebastian Eicke	HARTING Stiftung & Co. KG
Thomas Knothe	Fraunhofer IPK
Patrick Gering	Fraunhofer IPK

3. Objectives of the project

3.1. General

Batteries are a pivotal element for sustainable transition to low-carbon mobility and renewable energy. The digital battery passport has a legal foundation in the EU Battery Regulation on Batteries and waste batteries which was adopted on June 14th, 2023 in the first reading. The Battery passport is a core instrument to execute the intended impact of the regulation towards a sustainable and responsible circular economy. It aims to support the sustainable and circular management of batteries by requesting comprehensive data along the entire battery value chain to be documented and exchanged through a digital infrastructure.

The systemic approach to transparency enables responsible material sourcing, efficient production, as well as efficient and effective second-life and end-of-life management and processes. The battery pass serves as a key pioneering application of digital product passports for other sectors.

Since April 2022, the BMWK funds the project “Battery Pass” which transfers the anticipated legal requirements into applicable definitions of data points as well as the guidelines for technical implementation of a Battery Passport. The consortium has published the content guidance documents on April 17, 2023 specifying the legally required data points as well as those necessary to practically achieve the intent of the regulation or enable circular business models supported by digital models.

The elaborations of this guidance document now shall be translated into a DIN DKE SPEC to increase the acceptance of the work done and serving as a foundation of internationally applicable standards enabling worldwide interoperability.

3.2. Planned scope

The DIN DKE SPEC specifies requirements for battery pass data attributes.

1. *Potential categories for data attributes are: Battery Identification*
2. *General Battery and Manufacturer information*
3. *Market compliance, labels and certificates*
4. *Carbon footprint*
5. *Supply chain due diligence*
6. *Battery Material composition*
7. *Circularity Resource efficiency*
8. *Performance and durability*

3.3. Related activities

The subject of the planned DIN DKE SPEC is not at present the subject of a standard. However, there are committees, standards and/or other technical rules that deal with related subjects and thus need to be taken into account - and involved or incorporated, where necessary - in this project:
GERNE ANPASSEN / ERGÄNZEN

Normen & Standards

- DIN IEC 63330 VDE 0510-59 (2022-05-00) Anforderungen an die Umnutzung von Sekundärbatterien (IEC 21/1090/CD:2021)
- DIN 91252 Elektrische Straßenfahrzeuge –Batteriesysteme – Anforderungen an die Gestaltung von Lithium-Ionen-Batteriezellen

- PAS 7062 Electric vehicle battery cells. Health and safety, environmental and quality management considerations in cell manufacturing and finished cell. Code of practice

Technical Committees

- ISO TC22 SC 37 WG3 Rechargeable energy storage
- CEN/TC 301/WG 18 - Electric vehicles batteries
- IEC TC21 / CLC TC 21X / DKE K 371 Akkumulatoren insb. AK 371.0.16 Digitaler Batteriepass
- IEC TC35 / DKE K 372 Primärbatterien
- IEC TC 120 / DKE UK 261.1 Systemintegration von elektrischen Speichern
- IEC TC 69 / DKE K 353 Elektrostraßenfahrzeuge

Other organisations / initiatives

- Cirpass
- Global Battery Alliance
- CatenaX
- ConfinityX
- IDTA working group

4. Work programme

The aim of the project is to develop a DIN DKE SPEC according to the PAS procedure (see www.din.de/go/din-spec-en). The DIN DKE SPEC shall be consistent with the body of German standards and shall not be in conflict with any DIN Standard.

The kick-off meeting took place on 18. January as web conference. The project duration will be about 6 months.

At this kick-off meeting, the consortium for developing the DIN DKE SPEC was constituted, further organizational issues were clarified, and, work on the subject matter begun.

A draft for public commenting will not be published.

A total of 6 web conferences (kick-off meeting and work meetings) (1 Present 5 Web) will be held, during which the content of the DIN DKE SPEC will be presented, discussed and approved. The content of the DIN DKE SPEC can be drawn up by individual consortium members or in working groups.

Dates of further meetings and/or web conferences are to be agreed on within the consortium in consultation with DIN.

The DIN DKE SPEC will be drawn up in English if non german members participate (language of meetings, minutes, etc.). The DIN DKE SPEC will be written in English.

5. Resource planning

Each consortium member shall bear the expenses he/she incurs as a result of participation in the project.

If the DIN Executive Board approves the project, the initiator of the project will then conclude a contract with DIN.

Consortium membership and participation in the project meetings is free of charge, as the costs incurred by DIN throughout the performance of this project will be financed by funding from the research project "ELSTA – Förderung der Elektromobilität durch Normung und Standardisierung" funded by the Federal Ministry for Economic Affairs and Climate Action as per the funding announcement “ELSTA – Förderung der Elektromobilität durch Normung und Standardisierung” (funding reference no.: 01MV20003A)

6. Rules of cooperation in the DIN DKE SPEC consortium

This project is governed by the PAS procedural rules. All interested parties and consortium members are to inform themselves of these procedures by going to www.din.de/go/din-spec-en.

The consortium was constituted during the course of the kick-off meeting. Before the business plan has been published and approved by DIN's Management Board. The consortium comprises at least three members from different organizations[1]. It is not necessary that these members come from different areas and represent different stakeholders. By approving this business plan, the interested parties declare their willingness to participate in the consortium and will be formally named as consortium members, with the associated rights and duties. Participants at the kick-off meeting who do not approve the business plan are not given the status of a consortium member and are thus excluded from further decisions made during the kick-off meeting and from any other decisions regarding the project.

If an organization (e.g. an association) sends someone who is not an employee to the consortium, this person shall be authorized by the organization, who shall provide proof of this to DIN.

Each consortium member is entitled to vote and has one vote. If an organization sends several experts to the consortium, that organization has only one vote,

[1] Organizations are participating legal entities that send the experts to the DIN SPEC consortium and are assigned to a corporate structure as defined by § 15 of the German Stock Corporation Act or § 271 paragraph 2 of the German Commercial Code.

regardless of how many consortium participants it sends. Transferring voting rights to other consortium members is not permitted. During voting procedures, decisions are passed by simple majority; abstentions never count.

As a rule, the consortium is closed once it is constituted. The current consortium members shall decide whether any additional members will be accepted or not.

During the kick-off meeting, the consortium members shall elect a consortium leader, who is responsible for content management and any decision-making and voting procedures. The leader is supported by the responsible DIN Project Manager, whereby DIN will always remain neutral regarding the content of the DIN DKE SPEC. Furthermore, the DIN Project Manager shall ensure that DIN's rules of procedure, rules of presentation, and the principles governing the publication of DIN DKE SPEC have been observed. Should a consortium leader no longer be able to carry out his/her duties, the DIN Project Manager shall initiate the election of a new leader.

The DIN Project Manager is responsible for organizing and leading the kick-off meeting, in consultation with the initiator. Further project meetings and/or web conferences shall be organized by the DIN Project Manager in consultation with the consortium leader.

If consortium members cannot be present when the DIN DKE SPEC or its draft is approved, an alternative means of including them in the voting procedure shall be used (e.g. in writing, electronically).

All consortium members who voted for the publication of the DIN SPEC or its draft will be named as authors in the Foreword, including the organizations which they represent. All consortium members who voted against the publication of the DIN DKE SPEC or its draft, or who have abstained, will not be named in the Foreword.

Any expansion of the consortium at a later date is decided on by the members making up the consortium at that time. It is particularly important to consider these aspects:

a) expansion would be conducive to shortening the duration of the project or to avoiding or averting an impending delay in the planned duration of the project;
b) the expansion would not result in the project taking longer to complete;
c) the new consortium member would not address any new or complementary issues beyond the scope defined and approved in the business plan;
d) the new consortium member would bring complementary expertise into the consortium in order to incorporate the latest scientific findings and state-of-the-art knowledge;
e) the new consortium member would actively participate in the drafting of the manuscript by submitting concrete, not abstract, proposals and contributions;
f) the new consortium member would ensure wider application of the DIN SPEC.

To allow the legal reproduction and distribution of results for the purposes of project work, the consortium members grant DIN rights of use on the basis of the copyright that will accrue to them for the results of their work on the DIN DKE SPEC. The transfer of these utilization rights does not prevent the consortium members from using and further developing the knowledge, experience and findings they bring to the project.

Consortium members are requested to inform DIN of all patent rights known to them to be relevant to this DIN DKE SPEC project.

Subsequent changes to the scope (Section 3.2) or to the resource planning (Section 5) require, in addition to a two-thirds majority of all votes cast, the approval of DIN.

7. Publication under Open Source License (CC-BY-NC 4.0)

Insofar DIN is entitled to do so, DIN will have the content of the document published under a Creative Commons License Attribution-Non-Commercial 4.0 International (CC BY-NC 4.0). However, this does not apply especially for the DIN-reference (logo etc.) or where otherwise noted in the document.

8. Contacts

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Annex: Project schedule (preliminary)

	2023			2024						
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Initiierung										
1. Antrag und Prüfung										
2. Erstellung des Geschäftsplans										
3. Veröffentlichung des Geschäftsplans										
Erstellungsphase										
4. Kick-Off / Konstituierung des Konsortiums										
5. Erstellung der DIN DKE SPEC										
6. Verabschiedung DIN DKE SPEC im Konsortium										
Veröffentlichung										
7. Prüfung und Freigabe durch DIN										
8. Veröffentlichung der DIN DKE SPEC										
Meilensteine				**K/ W**	**W**	**W**	**W**	**W**	**M/ A**									

K Kick-off **M** Project meeting **W** Web conference **A** Adoption of DIN DKE SPEC