



**Business plan for a DIN SPEC project
according to the PAS procedure on
“Entertainment Technology - General
Device Type Format (GDTF)”**

**Status:
For the preparation of DIN SPEC (PAS)
after adoption on 2019-12-03**

**Requests to participate in the project and/or comments on the
business plan are to be submitted by**

to michael.bahr@din.de¹

Recipients of this business plan are requested to name all patent rights known
to them to be relevant to the project and to make available
all supporting documents.

Berlin, 2019-12-13 (Version 2)

¹ Applications for participating in the project and comments on the business plan that are not received by the deadline do not need to be taken into consideration. Once constituted, the project workshop will decide whether or not to consider the comments received in good time.

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1. Status of the business plan

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

This business plan is intended to inform the public of a new DIN 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 michael.bahr@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 SPEC (PAS) after adoption on 2019-12-03 (Version 2).**

2. Initiator and other consortium members

- Initiator:

Person/Organization	Short description
Gerhard Krude MA Lighting Technology GmbH Dachdeckerstr. 16, 97297 Waldbüttelbrunn E-Mail gerhard.krude@malighting.de Telefon: +49 9314979417 Webseite: www.malighting.com	Since its foundation in 1983, MA Lighting has expanded to become an international leader for computer-controlled lighting consoles and networking components. This success is based on solid reasons: With its commitment and power to innovate, MA Lighting meets the growing demands of a constantly changing industry and develops product solutions for tomorrow.

- Other potential participants:

This DIN 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.

- Organizations that have registered for participation:

Person	Organization
Biplab Sarkar	Vectorworks Inc (USA)
Josef Valchář	Robe lighting s.r.o. (Czech Republic)
René Berhorst	Lightpower GmbH (Germany)
Michael Bahr	DIN

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

Person	Organization
René Berhorst	Lightpower GmbH (Germany)
Gerhard Krude	MA Lighting Technology GmbH (Germany)
Sebastian Krämer	Verband für Medien- und Veranstaltungstechnik (VPLT) (Germany)
Biplab Sarkar, Jeremy Powell	Vectorworks Inc (USA)
Josef Valchář, Petr Vanek	Robe lighting s.r.o. (Czech Republic)

3. Objectives of the project

3.1. General

Nowadays, in the entertainment industry lighting fixtures (luminaires and other controllable devices) have become more and more complex. Additionally, the development of these devices has become faster than ever. New devices are designed with very complex structures and multiple instances, they have more complex colour-mixing systems and mode dependencies. To give the user access to the enormous flexibility of the existing devices a way to provide the accurate Fixture Type data is needed to control and pre-visualize the particular devices as good as possible and as quickly as needed. GDTF is that measure.

There are many different lighting consoles and software manufacturers on the market and all of them are using different ways and different file formats to get the fixture control information into their systems. As the development of new high-end fixtures takes place at an amazing speed, this creates a `lack` of available control data on the side of the console and pre-visualization software manufacturers.

Also, fixture manufacturers are often approached by their clients directly to support them with accurate fixture types. As there are so many different

consoles and visualizers on the market this process requires vast knowledge of many different systems. Fixture manufacturers would need to understand how every console or visualizer works, and how to provide the required data. Moreover, a way of format description is needed that not only allows to provide all of the required control information, but also structures it already in a hierarchical way that follows the structure of the device to be described.

The lighting designer who would like to use these devices has to deal with such obstacles. They often receive the device control data of a specific new fixture later than expected. Also, the data may be incomplete, because it was not created with the latest information needed from the manufacturer of the fixture.

3.2. Planned scope

This DIN SPEC in accordance with the PAS procedure will be developed within a DIN SPEC (PAS)-consortium set up on a temporary basis. The document will be developed and approved by authors named in the business plan.

This Document specifies the 'General Device Type Format' (GDTF). It provides a unified way of listing and describing the hierarchical and logical structure and controls of any type of controllable device (e.g. luminaires, fog machines, etc.) in the lighting and entertainment industry. It will be used as a foundation for the exchange of device data between lighting consoles, CAD and 3D-pre-visualization applications.

The purpose of an existing GDTF-file is to reflect the real-world physical components of the devices and to provide control based on this information. It contains and is derived from the 3D geometry (real world or virtual) of the device.

This document is only applicable for lighting systems and equipment used in the entertainment industry.

3.3. Related activities

The subject of the planned DIN SPEC is not at present the subject of a standard. However, there are bodies, 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 - during this project:

- NA 149-00-07 AA „Medien- und Tontechnik“
- NA 149-00-04 AA „Licht- und Energieverteilungssysteme“

4. Work programme

4.1. General

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

The kick-off meeting took place on 2019-12-03 at DIN e.V, Budapester Str. 31, 10787 Berlin. The project duration will be about 6 months.

At this meeting, the consortium for developing the DIN SPEC has been constituted and further organizational issues and the subject of the work will was agreed on.

A draft for public commenting will not be published.

2 additional project meetings will also be held and 1 web conferences are planned, during which the content of the DIN SPEC will be presented, discussed and adopted. The content of the DIN SPEC can also 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 SPEC will be drawn up in English (language of meetings, minutes, etc.). The DIN SPEC will be prepared and published in English.

NOTE The calculation covers only one language version. Please keep in mind the fact that other language versions involve additional expenses; for this reason, they shall be agreed on separately. If another language version is desired, Beuth Verlag/DIN can provide a translation. Requests for translations are to be submitted after the DIN SPEC manuscript has been adopted for publication.

5. Resource planning

Each consortium member shall bear the costs 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 and Beuth Verlag.

The performance of this project will incur costs for DIN to a total of 24.100 €, excluding VAT.

Sharing the burden of these costs is a prerequisite for membership in the consortium.

By approving this business plan, consortium members declare their willingness to bear their share of the project costs, which is based on the number of consortium members.

Each consortium member is to declare this willingness to take on his/her share of costs by individual agreement with the initiator.

If the consortium is expanded later, the additional consortium members shall pay the initiator the same fee to cover costs as the original consortium members. Any surplus arising from this shall be managed in trust by the initiator and shall be used for any additional project-related purposes (e.g. testing, marketing activities, etc.). Should there still be a surplus once the project has been completed, this shall be divided up among all consortium members.

6. Rules of cooperation in the DIN SPEC (PAS) consortium

This project is governed by the rules of procedure for developing DIN SPEC PAS. 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 will be constituted during the course of the kick-off meeting. The kick-off meeting will not take place until the business plan has been published and approved by DIN's Executive Board. The consortium shall comprise at least three members from different organizations². 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, 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, not counting abstentions.

² Organizations are participating legal entities that send the experts to the DIN SPEC PAS 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.

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 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 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 core task of the consortium leader is content management.

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 SPEC or its draft is adopted, 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 SPEC or its draft, or who have abstained, may not be named in the Foreword.

The previous consortium members decide on a subsequent extension of the consortium. It is particularly important to note that

- a) the enlargement is conducive to shortening the duration of the project or to avoiding or averting an imminent delay in the planned duration of the project;
- b) the extension does not lead to an impending extension of the duration of the project;
- c) the new consortium member does not address any new or complementary issues beyond the scope of application defined and approved in the business plan;
- d) the new consortium member brings complementary expertise to the consortium in order to bring in the latest scientific knowledge and state of the art;
- e) the new consortium member actively participates in the manuscript work by submitting concrete but not abstract proposals and contributions.
- f) the new consortium member ensures an increased application of 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 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 SPEC project.

Subsequent changes to the scope of application (Section 3.2) or to the resource planning (Section 6) require, in addition to a two-thirds majority of all votes cast, the approval of DIN.

7. Contacts

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Annex: Project schedule (preliminary)

DIN SPEC project	2019					2020				
	Aug	Sep	Okt	Nov	Dec	Jan	Feb	Mar	Apr	May
Initiation										
1. Request and review										
2. Business plan drawn up										
3. Publication of business plan										
Development phase										
4. Kick-off meeting / consortium constituted										
5. DIN SPEC (PAS) drawn up										
6. DIN SPEC (PAS) adopted by consortium										
Publication										
7. Review and release by DIN										
8. Publication of DIN SPEC (PAS)										
Milestones										

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