

DFBEW
ONLINE CONFERENCE
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legal framework for wind energy in germany with
regard to night marking, sound and radars



INTRODUCTION



2022

>4000 wind
energy plants;
second place
in germany



share our
many years of
experience to
reduce
barriers

1992

first concept
studies for
wind energy
plants in
Brandenburg



STRUCTURE

1. licensing barriers from our point of view
2. legal framework radar
3. legal framework night marking
4. legal framework sound

LICENSING BARRIERS

PLANNING PROCEDURES

are not reliable enough and delay the extension of wind energy..



LICENSING PROCEDURE

Discussion about the right topics to speed up licensing procedures.



DIGITIZATION

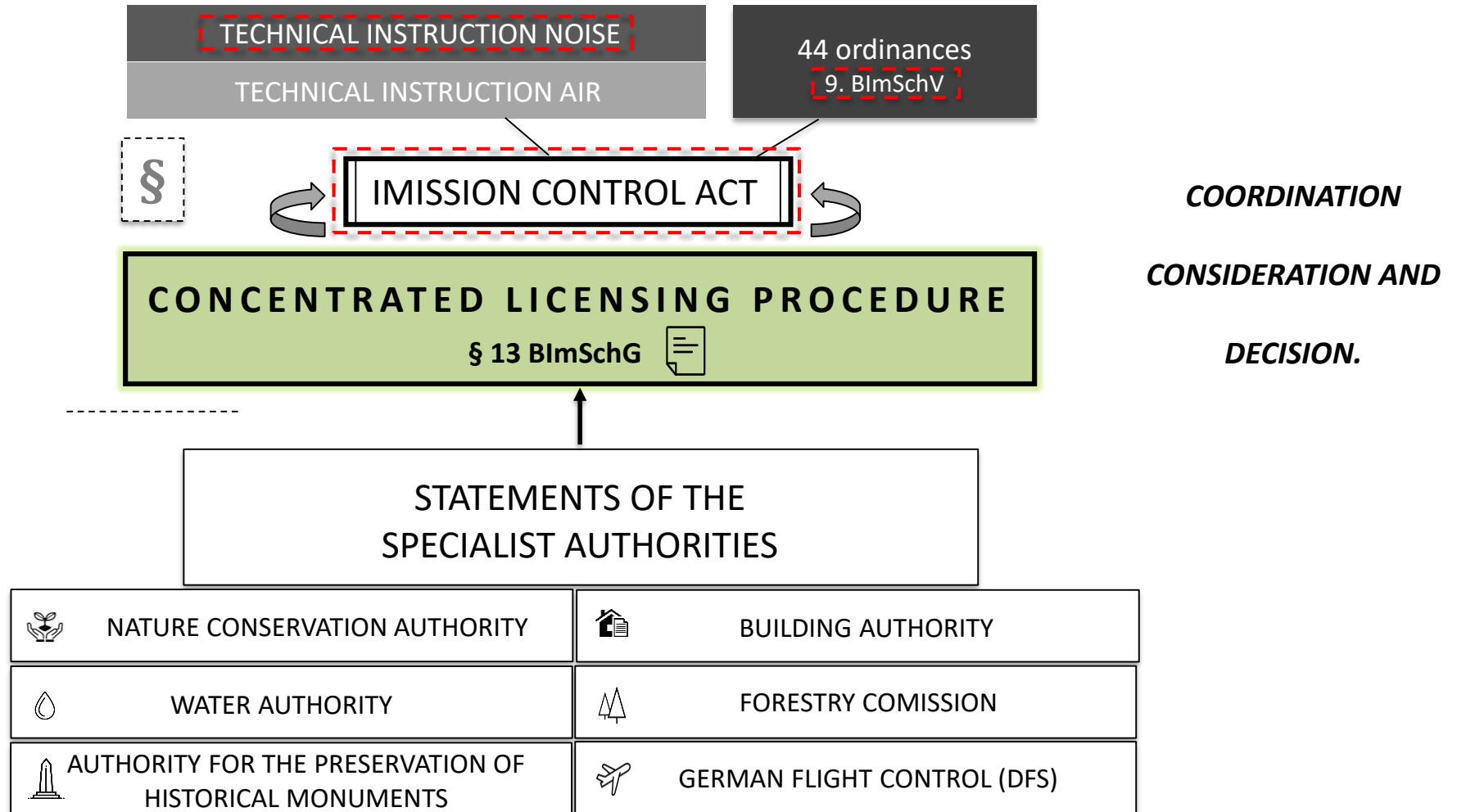
must be driven forward.



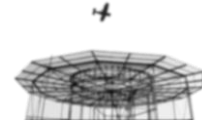
RADAR BARRIER

has to be fixed faster.

QUICK OVERVIEW LICENSING PROCEDURE



LEGAL FRAMEWORK: RADAR



during the public hearing procedure

- german flight control (DFS) checks if the plant might distort signals of navigation facilities like radio beacons
- radio beacons are an antiquated technology and need **restriction areas between 10 to 15 kilometres**
- if the DFS does not give its consent, the approval authority must reject the project
- there are plans to remove radio beacons and replace them with modern facilities with smaller restriction areas, but the realization takes a long time

55 GW

Installed

on-shore rated windpower in germany

7 GW

Prevented

by radio beacons atm.

71-80 GW

Goal

on-shore rated windpower 2030



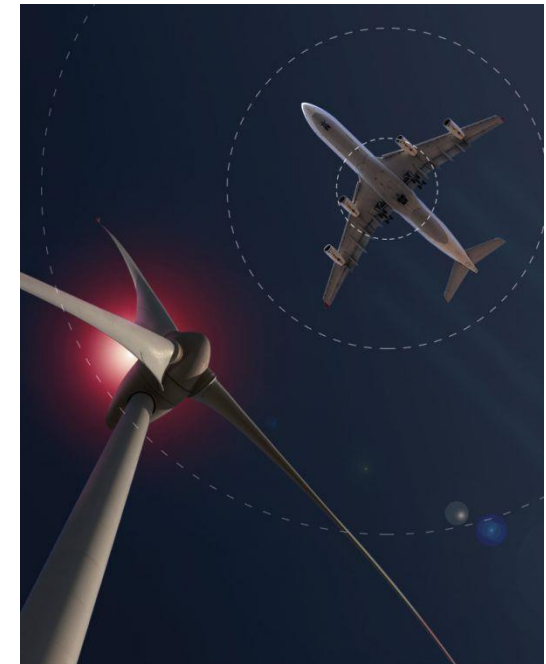
LEGAL FRAMEWORK: NIGHT MARKING

- wind energy plants must be marked above a height of 100 m with different marking lights
- with systems for demand-controlled night-marking (BNK) the light no longer flashes permanently, only when a flying object is approaching
- Federal Network Agency has extended the deadline for equipping and rearming plants with BNK to December 31, 2022
- that is a challenge, because the installation of an air-legally recognized night marking system takes time

§ 9 (8) EEG obliges to equip

13 000 wind energy plants need to change or install night marking systems

until **31/12/ 2022**



LEGAL FRAMEWORK: SOUND



- part of the application is a noise prognosis based on the TA Lärm (Technical Instruction on Noise)
- the "interim method" is used to calculate the sound propagation
- the calculation method had to be adapted because wind energy plants became higher and higher, but high-altitude sources have different propagation characteristics
- the interim method approaches the critical aspect of sound propagation at higher sources and essentially relies on a neglect of the ground attenuation as well as a frequency-dependent calculation

SOURCES

PICTURES :

all retrieved on 24/02/2022.

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- https://www.berlin.de/binaries/asset/image_assets/6008528/source/1576164519/624x468/
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- <https://thumbs.dreamstime.com/b/radio-beacon-tower-icon-line-colored-vector-illustration-isolated-white-background-radio-beacon-tower-icon-line-colored-vector-122491481.jpg>
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- https://cdn.mdr.de/wissen/infraschall-windkraft-102-resimage_v-variantBig24x9_w-1024.jpg?version=25619

TEXT :

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