



### QUESTIONNAIRE FOR ELECTRIC POWER TRANSMISSION (SECTOR-RELATED QUESTIONS)

The completion of this questionnaire is voluntary. However, replying to the relevant questions as completely as possible will facilitate and speed up the assessment of the environmental, social and human rights impacts of the project for which the German export supplies or services offered for cover are intended. This – together with the questionnaire not related to a particular sector, the completion and submission of which should also be considered in order to speed up the assessment procedure – can replace the description of the environmental, social and human rights impacts in the memorandum.

The questionnaire provides guidance on what information may be important for this sector. It is based on the World Bank/IFC General Environmental Health and Safety (EHS) Guidelines and the EHS Guidelines for Electric Power Transmission and Distribution. Additional information on the applicable standards can be found at the [AGA Portal](#).

This is a list of possible questions. Depending on the individual case only some of them, or perhaps also additional information, may become relevant in the course of the application procedure. Because of the specific features of each project further clarification may be required.

#### CONTENT

##### **A. Electric power transmission (page 2)**

##### **B. Additional information (page 4)**

## A. Electric power transmission

### A.1. Transmission lines

- Please describe type and scope of the project for transmission and distribution of electric power.
- Please describe what is to be linked by the lines, and provide details in particular on power generation facilities, power consumers and substations.
- Into what energy network are the lines to be introduced?
- Please illustrate the routes of the lines with a map.
- Will the electric power be transmitted via aboveground or underground power lines?
- Please state the length of the line.
- What forms of landscape and land use are affected by the construction (e.g. forest, farm land, water-courses)?
- Are the lines located near or do they cross a sensitive area? (*Definition: Sensitive areas include National Parks and other protected areas identified by national or international law and other sensitive locations of international, national or regional importance, such as e.g. wetlands, forests with high biodiversity value, areas of archaeological or cultural significance and areas of importance for indigenous peoples and other vulnerable groups.*)
- Is the area crossed by the lines the habitat of any protected animal and plant species?
- Who is responsible for construction, operation and maintenance of the lines? Please describe the ownership structure.
- Please describe the ownership situation and provide details on the required land and the acquisition of this land. Please explain here the planned compensation and/or resettlement proceedings and the relevant national standards if applicable.
- Is it necessary to clear forests or vegetation for the construction of corridors for the power lines? Will pesticides be used to construct and maintain corridors for the lines? Will corridors be constructed and maintained through fire clearance?
- What measures are taken to reduce the risk that birds and bats collide with overhead lines and are electrocuted?

### A.2. Transformers and substations

- What types and quantities of coolants and insulating agents are used (e.g. polychlorinated biphenyls (PCB), sulfur hexafluoride (SF<sub>6</sub>))?
- What measures are taken to prevent accidents, emissions or the contamination of soil and groundwater through spilled coolants and insulating agents?

### A.3. Noise

- Are noise mitigation measures necessary or planned? If so, what measures?
- Please state the noise impact (existing background noise level and additional noise emissions of the project) on the nearest receptors (industrial estates and residential areas) in dB(A) for day and night after completion of the project in accordance with the table below:

Noise Level Guidelines <sup>1</sup>				
Receptor	One Hour LA <sub>eq</sub> (dBA)			
	Guideline Value Daytime (07:00-22:00)	Project Value Daytime (07:00-22:00)	Guideline Value Nighttime (22:00-07:00)	Project Value Nighttime (22:00-07:00)
Residential; institutional; educational <sup>2</sup>	55		45	
Industrial; commercial	70		70	

**Notes:**  
<sup>1</sup> Guidelines values are for noise levels measured out of doors. Source: Guidelines for Community Noise, WHO, 1999.  
<sup>2</sup> For acceptable indoor noise levels for residential, institutional, and educational settings refer to WHO (1999).  
 Source: WORLD BANK/IFC GENERAL EHS GUIDELINES 2007, page 53

- Do the project's noise emissions lead to an increase of the background noise level at the nearest receptors by more than 3 dB(A)?
- How far is the nearest residential area away??

### A.4. Occupational health and safety

- What safety measures and/or control systems are planned to prevent accidents at work?
- How are safety and health (in particular with regard to risks of falls, electromagnetic radiation, confined spaces, electric hazards, fire and explosions, handling of toxic and dangerous substances, dust emissions, heat, noise) guaranteed at the workplace?
- How are subcontractors integrated into the health and safety measures on site?

### A.5. Health and safety of the population

- What measures are taken to minimize impacts and possible risks for adjacent communities, in particular with regard to electric hazards, storage and transport of chemicals, noise traffic, fire and explosions?
- Please state the maximum values for the exposure of the affected population to electric and magnetic fields caused by the project in the table below.

ICNIRP exposure limits for general public exposure to electric and magnetic fields.				
Frequency	Electric Field (V/m)		Magnetic Field (μT)	
	Guideline Value	Project Value	Guideline Value	Project Value
50 Hz	5000		100	
60 Hz	4150		83	

ICNIRP (1998): "Guidelines for limiting exposure to time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz).  
 Source: WORLD BANK/IFC EHS Guidelines (2007) ELECTRIC POWER TRANSMISSION AND DISTRIBUTION, Table 1, page 14

- How is the landscape altered by the power lines?
- What measures are taken in connection with overhead transmission lines to avoid a possible impairment of air traffic?

## B. Additional information

Additional information on the **Common Approaches**, our **environmental, social and human rights due diligence** and the **applicable standards** can be found at:

<https://agaportal.de/en/main-navigation/schnellzugriff-aga-konsortium/verantwortung>

The **World Bank/IFC EHS Guidelines** can be found on the website:

[http://www.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/ifc+sustainability/our+approach/risk+management/ehsguidelines](http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/our+approach/risk+management/ehsguidelines).