## Questionnaire (Hydroelectric Power Stations and Dams)



EXPORT CREDIT GUARANTEES OF THE FEDERAL REPUBLIC OF GERMANY

**▶** Hermes Cover

# QUESTIONNAIRE FOR HYDROELECTRIC POWER STATIONS AND DAMS (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. Additional information on the applicable standards can be found on our <u>website</u>.

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. Hydrological and technical aspects (page 2)
- B. Site description (page 2)
- C. Environmental and social aspects (page 2)
- D. Other questions (page 4)
- E. Additional information (page 4)

## A. Hydrologische und technische Aspekte

Name of the river:	
Type of dam:	
Height of the dam crest:	
Length and cross section of the dam:	
Will a new dam be constructed or an existing one extended or modernized/rehabilitated?	
In the case of a modernisation/rehabilitation: What changes have been made to the dam?	
Purpose of the dam (power generation, irrigation etc.):	
Coordinates of the power station and/or the dam:	
Maximum area and volume of the reservoir:	
Total installed output in MW (or, in the case of an expansion, the additional output in MW)	
Energy generated in GWh per year	GWh/a (P90) <sup>1</sup> GWh/a (P50) <sup>1</sup>
GWh/a (P50) <sup>1</sup>	h/a (P90)¹ h/a (P50)¹

## **B.** Site description

- Please describe the project area with regard to climate and ecological situation as well as socioeconomic factors for the region.
- Please describe the seismic situation in the region, what studies have been carried out concerning this matter and how earthquake safety issues are judged as a consequence.

with a probability of 90% (or 50%).

<sup>&</sup>lt;sup>1</sup> The P90 (or P50) value represents the threshold the predicted long-term annual energy output is unlikely to fall short of with a probability of 90% (or 50%).

Please describe the planned infrastructure (e.g. roads, railway links, high-voltage transmission lines, quarries, cement plants) which are related to the project. Please describe the previous use of the project area, the reservoir and the river system (pasture land, farmland, commercial forest, natural forest, settlement areas, transportation routes, fishery, etc.). C. Einvironmental and social aspects Has an ESIA (Environmental and Social Impact Assessment) or a comparable study (e.g. on the project's impact on flora and fauna, water, cultural heritage, geology) been carried out? If so, please make them available provided that they are written in German or English (otherwise, please provide a summary translation of the relevant studies if possible). Have the recommendations of the World Commission on Dams been taken into account? Has the project been assessed in accordance with the Hydropower Sustainability Assessment Protocol of the International Hydropower Association (IHA)? Please describe the effects on the hydrological conditions downstream and the effects on the ecosystems existing there. Are any sensitive areas<sup>2</sup> affected by the project or its infrastructure? If so, please describe the expected impacts and the mitigation measures planned. Has there been an information and consultation process with all relevant stakeholders? Please describe the main features of this process. How high is the minimum, maximum and average flow rate of the river system in the project area? How high will the minimum, maximum and average runoff be after completion of the dam?

i09 4114e 1023

<sup>&</sup>lt;sup>2</sup> 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 wetlands, forests with high biodiversity value, areas of archaeological or cultural significance and areas of importance for indigenous peoples and other vulnerable groups.

- Please describe the nature of the vegetation in the area of the reservoir and what measures are planned prior to the flooding to reduce the generation of greenhouse gases.
- In the case that the project is to provide water for irrigation, please describe the type and size of the irrigation zone and the form of agricultural use in the catchment area.
- What is the maximum number of workers on site during construction and operation? How will they be accommodated?
- What measures will be taken during the construction to dispose of the waste generated (mainly excavation material) and where/how will it be deposited?
- How far is the nearest residential area away? How many people live in the area affected by the project?
- Are any noise mitigation measures during the construction phase necessary or planned? If so, what measures?
- Please state the noise impact on the nearest receptors (industrial estates and residential areas) in dB(A) for day and night during construction in accordance with the table below.

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

#### Notes:

<sup>&</sup>lt;sup>1</sup> Guidelines values are for noise levels measured out of doors. Source: Guidelines for Community Noise, WHO, 1999.

<sup>&</sup>lt;sup>2</sup> For acceptable indoor noise levels for residential, institutional, and educational settings refer to WHO (1999).

- Please describe any possible socio-economic and socio-cultural impacts as well as any possible human rights effects of the project taking into account the following aspects:
  - Working conditions (e.g. child labour, forced labour, freedom of association)
  - Medical care and safety
  - Land ownership, property rights
  - Standard of living (e.g. employment, housing)
  - Discrimination (especially at the workplace)
  - Data protection / right to privacy
  - Access to services (e.g. drinking water, sanitary installations, electrical power)
- Does the project involve resettlements<sup>3</sup>? If so, please state
  - how many people will be affected,
  - whether indigenous peoples are affected,
  - whether a Resettlement Action Plan has been drawn up and implemented,
  - how the people affected by the project have been compensated (money, material assets, land for land).

<sup>&</sup>lt;sup>3</sup> Resettlements refer both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood).

- Please describe the emergency management planned for the site and what emergency plans (with regard to disasters, evacuations, etc.) have been prepared and/or are planned.
- What positive aspects can be pointed out with regard to environmental and social impacts?
- What safety measures and/or control systems are planned to prevent accidents?
- How are subcontractors integrated into the occupational health and safety measures?

#### D. Other questions

- What multilateral financial institutions are involved in the project? Are there any plans to involve other export credit agencies?
- What political questions are related to the project (conflicts over use, international treaties)? Please also state the responsible public authorities involved.

## E. 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://www.exportkreditgarantien.de/en/sustainability/sustainability/ehsr-assessment.html

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

https://www.ifc.org/en/insights-reports/2000/general-environmental-health-and-safety-guidelines