



Training and Medical Requirements

DONG Energy Wind Power

Prepared CHBAA
Approved TRIBO

Sherlock: GI 08-01
Version: 10

Purpose:

- To define the minimum level of health and safety training as well as the minimum medical fitness that is needed to work on a DONG Energy Wind Power operated location, in order to ensure that personnel are appropriately trained and fit for work for the risks encountered in the environment in which they work.
- This General Instruction does not detail training required by individuals to be competent in the role for which they have been employed, i.e. technical training of technicians etc.

Scope:

This General Instruction applies to all DONG Energy Wind Power sites.

Responsibilities:**Regional Head of Ops / Directors / Programme Directors**

- Approve exemptions
- CC exemptions to Head of HSE Wind

Site Management

- ensure that all who are working at a DONG Energy Wind Power site are trained in accordance with this General Instruction.
- assess if the level of training detailed in this procedure is sufficient for
 - the local conditions and
 - specific task

HSE Manager

- assist the Line Management with professional advice on HSE issues.

General

It is the responsibility of all persons working at site to:

- comply with the requirements detailed in this General Instruction.
- be informed about site and task specific training requirements.

Contractors

Contractors are required to provide documentary evidence of their employees' qualifications and training. This include documentation proving that their employees, working at DONG Energy Wind Powers sites, are sufficiently and appropriately trained taking into account the work they perform including site specific conditions.

They are obliged to improve and maintain skills, training and competence which fulfil the minimum standards specified in this General Instruction as well as task and/or site specific training requirements.

Activity:

Creating a WINDA ID

From 17 October 2016 it is necessary to have a 'WINDA ID' to attend a GWO course. WINDA is a global database for storage of GWO certificates, and this is where all the GWO training providers will register new certificates after completing a training. New certificates will be uploaded to Windfarm Manager automatically.

Access Levels

The access levels relate to the minimum level of safety training and certificates required when working on DONG Energy Wind Power sites, It is primarily based on the risk personnel are exposed to.

The different Access Levels are described as:

Onshore Access 1

This Access Level applies to postmen, couriers, delivery drivers, taxi drivers and others who go to site on an infrequent basis. Persons accessing sites as Onshore Site Access 1, do not need neither Safety Induction nor Safety Training.

Conditions relating to Onshore access 1:

Persons accessing sites as with Onshore Access 1 must always report to gate/reception upon arrival and follow the directions given.

Onshore Access 2

Persons providing e.g. cleaning or waste handling services, must comply with the Onshore Site Access 2 requirements. Personnel carrying out any type of work on the premises will need a site induction to allow them limited access.

Conditions relating to Onshore Access 2:

Persons accessing sites with Onshore Access 2 are allowed to carry out approved and planned work in pre-defined areas and under supervision.

Onshore Access 3

This Access Level applies to all internal and external personnel, including onshore construction workers. This access level requires that all personnel are trained and inducted into the site to allow them full access

Conditions relating to Onshore Access 3:

Persons accessing sites as Onshore Access 3 are allowed to carry out, planned un-supervised work onshore.

Note: Further GWO training might be required to access e.g. offshore structures placed onshore within pre-assembly sites as use of fall arrest systems is required to e.g. access vertical access routes.

Offshore Access 1

This Access Level applies to personnel who will be allowed access to the offshore site and restricted to staying onboard either vessel or helicopter.

Conditions relating to Offshore Access 1:

This Access Level applies to visitors and others who go to site on an infrequent basis to carry out only e.g. administrative tasks including auditing and inspection. Safety Induction is required.

Personnel accessing the offshore site as Offshore Access 1 are not allowed to transfer to neither WTG, substation nor other vessel, including hotel vessel etc.

Note: GWO Basic Safety Training and HUET course (incl. EBS training: depending on the EBS system which is used on the relevant site) is compulsory for all persons on helicopter flights with more than 10 minutes offshore travel time in each direction and for all flights if any work is planned requiring landing or hoist offshore.

National and international legal requirements have to be fulfilled every time.

Offshore Access 2

This Access Level applies to personnel who will be allowed access to the offshore site and allowed to transfer to other vessels where no climbing or use of fall arrest systems is required.

Conditions relating to Offshore Access 2:

Personnel accessing the offshore site as Offshore Access 2 are allowed to transfer to other vessels, including hotel vessel etc. No climbing or hoisting to vessels or structures to form part of the access route.

Note: GWO Basic Safety Training and HUET course (incl. EBS training: depending on the EBS system which is used on the relevant site) is compulsory for all persons on helicopter flights with more than 10 minutes offshore travel time in each direction and for all flights if any work is planned requiring landing or hoist offshore.

National and international legal requirements have to be fulfilled every time.

Offshore Access 3

This Access Level applies to personnel who will be allowed access to the offshore site and allowed to transfer to other vessels and structures

Conditions relating to Offshore Access 3:

Personnel accessing the offshore wind farm as Offshore Access 3 are allowed to transfer from the vessel to structures. Vessel transfer, including hotel vessel, is allowed. Hoisting to vessels or structures ~~not to form~~ is not allowed as a part of the access route. Energised areas will require additional training as determined by DONG Energy Safety Rules.

Note: GWO Basic Safety Training and HUET course (incl. EBS training depending on the EBS system which is used on the relevant site) is compulsory for all persons on helicopter flights with more than 10 minutes offshore travel time in each direction and for all flights if any work is planned requiring landing or hoist offshore.

National and international legal requirements have to be fulfilled every time.

Offshore Access 4

This Access Level applies to This Access Level applies to personnel who will be allowed access to the offshore site and allowed to transfer to other vessels and structures.

Conditions relating to Offshore Access 4:

Personnel accessing the offshore wind farm as Offshore Access 4 are allowed to transfer from the vessel to structures. Vessel and helicopter transfer, including hotel vessel, is allowed. Access to WTG's is allowed. Energised areas will require additional training as determined by DONG Energy Safety Rules.

The specific details of training for Helicopter Transfers depends on the requirement agreed between DONG Energy Wind Power and the Helicopter Operator, but will as a minimum include Helicopter Underwater Escape Training (HUET) and Helicopter Hoist Training (HHT).

Offshore Access 5

This Access Level applies to personnel, including seafarers or surveyors, who will be allowed access to the offshore site and allowed to transfer to other vessels where climbing and use of fall arrest systems is required.

Conditions relating to Offshore Access 5:

Personnel accessing the offshore site as Offshore Access 5 are allowed to transfer to other vessels, using the TP or OSS boat landing and ladder. Energised areas will require additional training as determined by DONG Energy Safety Rules.

Training Requirements Matrix

The training requirements are linked to the Access Levels and follows this training matrix.

	Onshore Access 1	Onshore Access 2	Onshore Access 3	Offshore Access 1	Offshore Access 2	Offshore Access 3	Offshore Access 4	Offshore Access 5	Validation months
Site Induction		X	X	X	X	X	X	X	12
Medical Certificate					X	X	X	X	24
GWO Sea Survival					X ⁴	X	X	X	24 ⁶
GWO Working at Heights						X	X	X	24 ³
GWO First Aid			X ⁵		X ⁴	X	X	X ⁴	24
GWO Fire Awareness						X	X		24
GWO Manual Handling						X	X		24
HUET & EBS				(X ¹)	(X ¹)	(X ¹)	X		48
HHT							X		3 ²

1	GWO Basic Safety Training and HUET course (incl. EBS training: depending on the EBS system which is used on the relevant site) is compulsory for all persons on helicopter flights with more than 10 minutes offshore travel time in each direction and for all flights if any work is planned requiring landing or hoist offshore. National and international legal requirements have to be fulfilled every time.
2	Refresher course required if no hoisting performed within 90 days. (Training provider requirement)
3	In the German EEZ, a yearly refresher is mandatory for all persons entering an offshore installation according DGUV-R 112-198 & DGUV-R 112-199 or GWO in order to comply with national law. The yearly working at height refresher can be performed at site supervised by qualified personnel as long as German requirements are fulfilled.
4	Training could also be according to similar standards such as STCW 2010, OPITO approved BOSIET etc. STCW 2010 requires the seafarer to prove regularly participation in safety drills/training by documentation issued by the ship owner or master of vessel. Where evidence of on-board training and experience is not available the seafarer is required to undergo a five yearly refresher course in personal survival and fire prevention and firefighting.
5	Equivalent first aid qualifications are accepted and in line with the country specific guidelines.
6	Valid for all certificates made after the 1 st December 2015. All other certificates will be still valid for 48 months.

Safety Induction

The Safety Induction must be completed in accordance with *GI 08-02 Wind Power safety induction*.

Medical Certificates

In general the following medical certificates are accepted by DONG Energy Wind Power:

- OGUK (Oil & Gas UK) Medicals (UK certificate) incl. Chester Step Test for employees in UK and DK
- AWMF-Guideline 002 – 043 (German certificate, former DGMM recommendation) for employees in DE

Additionally different types of medical certificates are accepted by DONG Energy Wind Power for different groups of persons, including:

- STCW certificates - **for ship's crew only** - like:
 - MCA ENG 1 Seafarer Medical Examinations (UK certificate)
 - Medical Examination for Seafarers and Fishermen (DK certificate)
 - Seediensttauglichkeitsuntersuchung (DE certificate)
- BG Standards G 25, G 41 and G 26.2 or G 26.3 (German BG standards) in combination - for external technicians only
- Certificates of fitness for dive according national legislations - for divers only

All above listed medical certificates are valid for a maximum of 24 months in DONG Energy Wind Power. National legislations or physical fitness could reduce the period of validity for several certificates.

Acceptance of Chester Step Test

DONG Energy Wind Power implement the level “Good” as “acceptance level” for fixed cardiorespiratory fitness as listed in the tables below:

Male Age Groups

Fitness Rating	15 - 19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 65
Excellent	60+	55+	50+	46+	44+	40+
Good	48 - 59	44 - 54	40 - 49	34 - 45	35 - 43	33 - 39
Average	39 - 47	35 - 43	34 - 39	32 - 36	29 - 34	25 - 32
Below Average	30 - 38	28 - 34	26 - 33	25 - 31	23 - 28	20 - 24
Poor	<30	<28	<26	<25	<23	<20

Female Age Groups

Fitness Rating	15 - 19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 65
Excellent	55+	50+	46+	43+	41+	39+
Good	44 - 54	40 - 49	36 - 45	34 - 42	33 - 40	31 - 38
Average	36 - 43	32 - 39	30 - 35	28 - 33	26 - 32	24 - 30
Below Average	29 - 35	27 - 31	25 - 29	22 - 27	21 - 25	19 - 23
Poor	<29	<27	<25	<22	<21	<19

For persons with a cardiorespiratory fitness equal to the level “Average”, a probation period of 12 months is introduced. The persons get 12 months, during which they will be allowed offshore access, to improve their cardiorespiratory fitness. After 12 months they will be re-tested and if they do not meet the “Good” level at this point, they will not be allowed offshore access.

Persons with cardiorespiratory fitness “Below Average” will not be allowed offshore access.

If the persons are not allowed offshore access, it can have consequences for their employment (If offshore access is a demand to hold their position).

For contractors OGUK (Oil & Gas UK) Medicals (UK certificate) incl. Chester Step Test will be a mandatory requirement from 1 January 2018.

Weight restriction:

The WTG fall arrest system (Cabloc) has a maximum weight limit of 136kg. This complies with industry standard and includes technicians wearing all workwear & PPE. This weight limit must never be exceeded. It is the responsibility of the Site Management to make sure a process is in place ensuring that this requirement is complied with at all times.

Additional Training

In addition specialist training according to tasks and roles may be required. Such training may include but is not limited to:

- Confined space training
- Wind Turbine Safety Rules (rules to ensure processes are in place to provide safety from electrical, mechanical, hydraulic and pneumatic systems.
- Emergency rescue and casualty handling training
- HV (high voltage) training.
- Scaffold training
- Electrical Awareness
- Lift Operations

General exemptions:

- Divers engaged in diving activities, who possess a valid diving certificate, divers first aid and divers medical are exempted from Sea Survival, first aid and medical certificate as described in the training matrix.

Exemption requirements procedure:

Exemptions from any requirement of this general instruction can only be granted in extraordinary cases where training would be grossly disproportionate to the benefits of the training (costs, time, energy etc.). For visitors the requirements from *GI 08-03* are valid.

- Exemptions can **only** be granted by **Regional Head of Operations/Directors/Programme Directors**
- Exemption form *F 08-01-00-01 "Access exemption form"* is used for granting exemption.
 - the exemption has to be recorded
 - the **Head of HSE Wind Power has to be informed**

In assessing whether e.g. time, cost or effort would be grossly disproportionate to the benefits of undertaking training, regard should be had to best practice compatible with the operations being conducted.

A **risk assessment** according *GI 02-01* is mandatory for every exemption.

As a basic principle, exemptions for helicopter operations are not allowed! For VIP-overflights without any planned offshore work and/or without landing on an offshore-structure or a vessel, the national and international legal requirements for offshore leisure flights have to be fulfilled. As a minimum a safety induction by the helicopter operator has to be performed.

Exemption procedure

In **exceptional circumstances** individuals who do not meet the DONG Energy Wind Power requirements for working offshore at the wind farm may be granted an exemption allowing them to travel offshore to the wind farm. To ensure risks have been assessed, and control measures put in place for each individual visit, the following procedure shall apply.

Permit to Access Requested

A permit form shall be submitted to the DONG Energy Wind Power Site Management for consideration. In considering the application the Regional Head of Ops / Directors / Programme Directors shall consider the purpose and nature of the visit, as well as the individual involved.

Access will **not** be **granted** if:

- The specialist has previously been granted an exemption in the past 18 months to any DONG Energy Wind Farm.
- There are concerns regarding the specialist's health.
- The visit is deemed non-essential.

Permit to Access Approved

The Site Management shall appoint a "Responsible" person to organise and supervise the visit.

The "Responsible" person shall:

- Organise the arrangements for the trip
- Ensure resources are prepared and the specialist(s) are fully prepared for the trip.
- Plan an induction / task brief
- Ensure sufficient staff are available, minimum requirements are:
 - For a **boat trip** only - **1 trained** DONG Energy site staff aboard the boat to supervise.
 - For a **climb onto a turbine/substation** - **2 trained** DONG site staff to accompany 1 specialist.

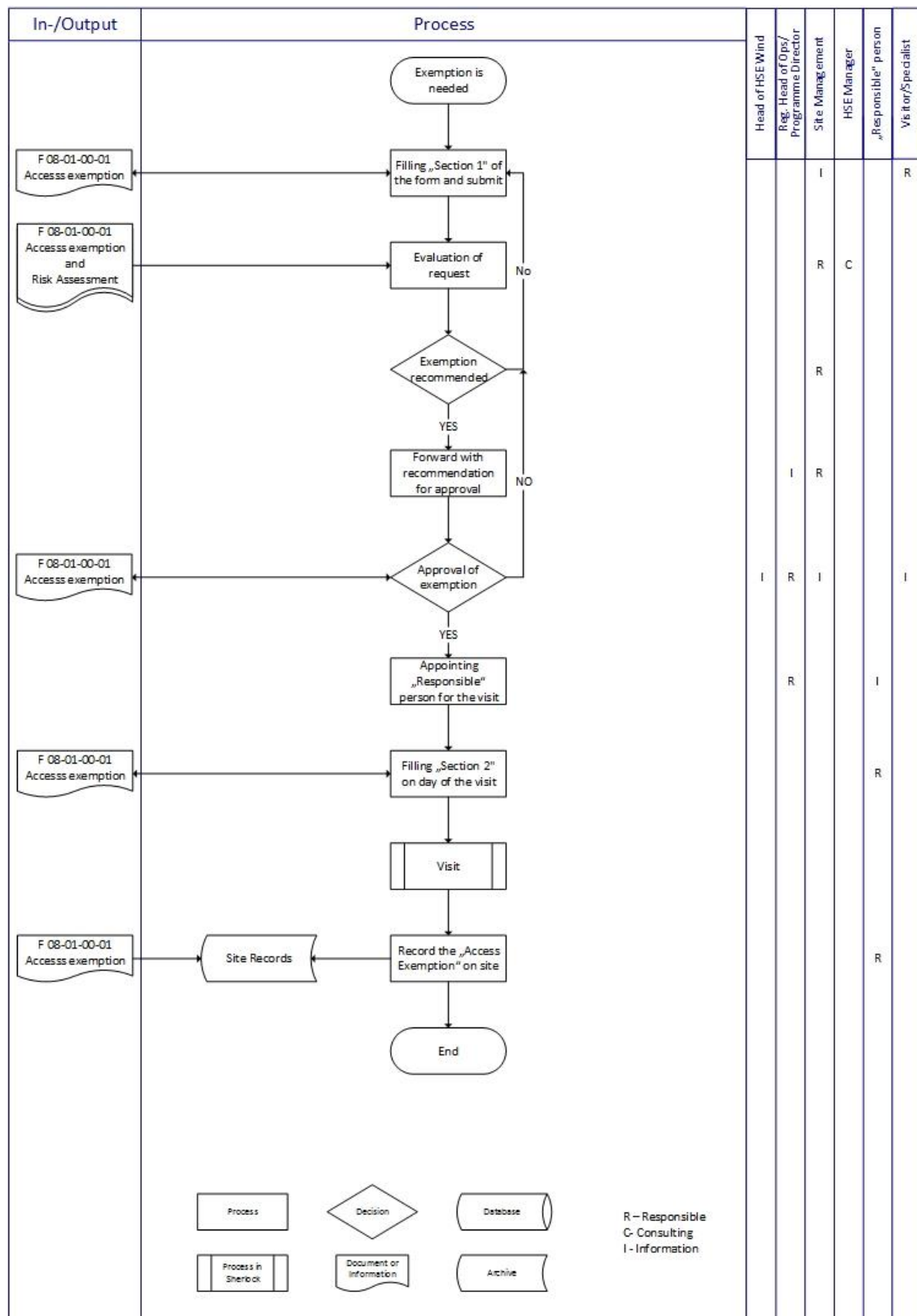
Undertaking the Trip

- On the day of the visit the responsible person shall:-
 - Complete the access risk assessment (Section 2 of F 08-01-00-01 "Access exemption form")
 - Ensure all necessary control measures are in place.

The responsible person shall be in full control of the visit and can call off the visit at any time.

Post Trip

- On completion of the trip the F 08-01-00-01 "Access exemption form" shall be returned to site for retention in site records.



Certificates and documentation

The competence and certification of sub-contractors will be checked, approved and filed in accordance to local procedure prior to commencement of work. Documentation must be filed in Windfarm Manager (or similar system). Contractors are responsible for uploading certificates to Windfarm Manager (or similar system) prior when they request an access pass.

Documentation

Registrations in Windfarm Manager (or similar system):

- Access request
- Access pass
- Competences
- Certificates
- Safety inductions
- NOK form
- Exemption form(s)

Definition

Site Management - is every Manager with responsibilities for employees like Managing Director, Head of ..., Site Manager, Construction Package Manager and similar functions

Responsible Site Management - is the responsible Management for that specific site which has to assess the exemption.