# **World and Continental Gliding Championships**

## **Initial Bid Form**

All the information sought in this bid document must be completed prior to its submission. Details, such as a diagram of the airfield, may be included as an Annex. When completed an electronic copy of this form must be sent to the IGC Bid Specialist (rbradley@telkomsa.net) before the closing deadline of September 30 of the year prior to the presentation of the Bid to the IGC Plenary. When the information on this form has been checked and amended as necessary, the IGC Bid Specialist will forward it to the IGC Secretary.

## Applicant:

Deutscher Aero Club e.V. (German Aero Club, "DAeC"). The DAeC has 35,000 active members.

Date of Application: September 25, 2016

#### Organising Gliding Club or other organisation:

AERO-Club Stendal e.V. Luftsportverband Sachsen-Anhalt e.V.

Osterburger Straße 250 / Flugplatz Alte Landebahn 27 / Am Tower

39576 Stendal 06846 Dessau-Rosslau

Germany Germany

#### Name and address of National Aero Club:

Deutscher Aero Club e.V. Bundeskommission Segelflug Hermann-Blenk-Straße 28 38108 Braunschweig Germany

#### **Proposed Competition Director:**

#### Henning Schulte

- Chairman of one of the organising organisations (Luftsportverband Sachsen-Anhalt)
- 11 times competition director (including German Nationals 2015 and 2017)

- experienced competition pilot since 1981
- Professional background in insurance industry

## **Proposed Organisation of the event:**

Based on the experiences gained with previous gliding competitions, we propose the following milestones:

- Spring 2017: IGC decision on the bid
- End of 2018: Determination of local procedures, so that they can be used and trained during the international training competition in 2019
- Organization of an international training competition in 2019 in order to test infrastructure, organising team and local procedures

#### Airfield:

Stendal-Borstel / EDOV

## Contact person (for the applicant):

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#### 1. Event and Year

This bid is about the 36th World Gliding Championships in 2020, in Open, 18m and 20 metre Multi-Seat Classes.

## 2. Site

2.1 Name of the airfield: Stendal-Borstel (ICAO: EDOV)

Stendal is located about half-way between Berlin and Braunschweig, about 100km west of Berlin. The huge airfield contains three runways, the main concrete runway (2000x52m), a glider strip (1800x100m) and an additional grass strip (700x40m). About 4000m² of hangar space are available, as well as aviation fuel (AVGAS, JET A1, unleaded 95ROZ gas). During competitions, the whole area is accessible by car.

The airfield was built in 1934 and saw military usage until 1992. The AERO-Club Stendal started civil aviation operations in 1994. A restaurant opened up in the late 90s, attracting people from the local area since then. In 1997, a public airfield operations company was established. This company is funded by the city and county of Stendal, providing continuous public support for the airfield operations. The AERO-Club also holds a share in it. This public company took over the responsibilities of the AERO-Club as the airfield operator. With now public support, new state-of-the art facilities were raised (e.g. the new tower building).

From 1998 on and starting with regional contests, gliding competitions were held at Stendal-Borstel airfield. The first competitions on a larger and international scale were the Dutch gliding nationals in 2007 and 2008. The latter included participants from all over Europe as a preparation for the WGC in Lüsse. National competitions on a qualification level took place in 2010, 2012, 2014. 2015 saw the first German nationals in Open and 18m-Class to be held at Stendal, in 2017 the next German nationals will be held. The Dutch competitions were organised by a team from the Dutch NAC, supported by members of the local club. The German competitions were organized by a team of members of the local AERO-Club as well as members of the gliding committee of the state of Saxony-Anhalt (which Stendal is located in). Since 2007, those facilities relevant for gliding competitions were continuously improved.

During the time of a gliding competition, the competition itself has priority over other aviation activities.

- 2.1.1 Coordinates: 52°37,65' N, 11°49,11' E
- 2.1.2 Direction and distance to nearest town, population of this town: The airfield is about 3km north of Stendal, a town of 38,000 inhabitants. Larger cities around are Magdeburg (60 km), Wolfsburg (80 km), Berlin (100 km).
- 2.1.3 Experience of airfield staff in organising championships
  - Dutch gliding nationals 2007
  - Dutch gliding nationals 2008
  - Qualification for German nationals 2010, 73 competitors in Club, Standard. 18m-class
  - Qualification for German nationals 2012, 84 competitors in Club, Standard, 18m-class
  - Qualification for German nationals 2014: 102 competitors in Club, Standard, 18m, Open class
  - German nationals 2015, 75 competitors in Open- & 18m-class
  - German nationals 2017, 115 competitors in Open-, 18m, 15m-class
  - Vintage Glider Club Rallye, 2018

## 2.2 Proposed period for the event

## 2.2.1 Training Dates

Training will be possible starting on Sunday, July 19 2020 until Saturday, July 25 2020.

## 2.2.2 Competition Dates

Opening Ceremony: Saturday, July 25, 8pm local time Competition: Sunday, July 26 - Friday, August 7, 2020

Closing Ceremony: Saturday, August 8, 2020

# 2.2.3 Alternate dates for championship

In order to stay in the timeframe promising favourable meteorological conditions, the competition can start one week earlier or later. This allows an early and a late scenario:

## Early scenario:

Opening Ceremony: Saturday, July 18, 8pm local time Competition: Sunday, July 19 - Friday, July 31, 2020

Closing Ceremony: Saturday, August 1 2020

#### Late scenario:

Opening Ceremony: Saturday, August 1, 8pm local time Competition: Sunday, August 2 - Friday, August 14, 2020

Closing Ceremony: Saturday, August 15, 2020

#### 2.3. Airfield operating data

#### 2.3.1 Surface of airfield, number and directions of runways

An overview of the three runways, the taxiways as well as aerial pictures can be found in Annex A. All runways have an orientation of 08/26, in accordance to the main wind direction in northern Germany. All runways may be used for glider operations.

## 2.3.2 Number of towplanes that will be employed

There will be at least one towplane for 8 non-self launching gliders. Based on experience with previous competitions, this number ensures a swift and smooth starting procedure.

# 2.3.3 Meteorological facilities that will be provided

A meteorologist with extensive experience in gliding competitions will permanently be on-site in order to provide daily and if needed ad-hoc meteo information. High-speed internet access is available at the airfield, ensuring all necessary access to public and non-public meteorological information.

## 2.3.4 Parking facilities for gliders

The large apron and space besides the runways provides enough space for rigging and parking gliders outside.

## 2.3.5 Repair facilities for gliders

The club workshop is available for small repairs. Germany's main glider manufacturers will provide support for larger repairs. In addition, there is a commercial repair facility based at Schoenhagen airfield, about 100km SE of Stendal.

## 2.3.6 Repair facilities for radios and instruments

Electronic instruments can be repaired at Schoenhagen airfield, about 100km SE of Stendal.

- 2.3.7 Oxygen requirements and supply facilities, if required Since gliding is limited to the airspace below FL 95, oxygen will not be required for the competition.
- 2.3.8 What plans do you have to implement the FAI Environmental Code of Conduct during your event?

Our airfield is one successful example for efficient use of resources via conversion: We use an old military airfield for civil aviation. This includes the re-naturalization of unusable parts of the former military infrastructure.

We operate energy and water saving measures f.e. off peak electricity for heating. There is a strict waste management with selective waste collection. If ever possible we choose food and beverages in multi- cycle systems and make extra collection for the so called "Green dot" packaging.

We are only using a minimum of space of the very large airfield and allowing grass and wild flowers to grow on the camp site and beside the RWY and TWY. Over the years we establish large areas of dry grassland. Furthermore, we established a small park surrounded with traditional orchard meadows.

The grassland is cultivated by grazing sheep when ever possible to prevent extensive use of mowing machines.

To protect the apron, RWY and TWY from weed we use no Chemicals. In 2015 we establish a non chemical "Hot Foam" weed-control without herbicides.

#### 2.4 Airfield Infrastructure

## 2.4.1 Briefing Room

Briefings will be held in one of the large hangars. The briefing space will provide enough room for up to 250 people and contain all necessary pieces of equipment. It is easily accessible from the camping ground and a parking lot will be established to ensure quick transportation to the grid after briefings.

## 2.4.2 Common Room(s) for the competitors

Besides the hangar including the briefing space, an additional facility will be available as a common room for the competitors. There will be room for up to 120 people and an open air terrace. In addition, the local restaurant on the airfield provides a spacious terrace.

## 2.4.3 Meeting Room for the International Jury

A private conference room is available for meetings of the Jury.

#### 2.4.4 Press Centre

A press centre will be established at the airfield.

## 2.4.5 Communication and internet equipment

The airfield is equipped with a high-speed internet access. WiFi is available across the camping ground and the apron. The access code will be made available to the participants of the competition. In addition, there is high-speed internet access available through all major German mobile network operators.

#### 2.4.6 Post and Banking

Post and Banking facilities are available in Stendal city centre, about 4km from the airfield.

#### 2.4.7 Insurance availability

Same as post and banking.

#### 2.4.8 Toilets, wash rooms and shower rooms

There are toilets and showers permanently installed on the camping ground. Additional facilities will be provided during the competition. There will be separate toilets and showers for women and men.

## 2.4.9 Car parking

Extensive parking lots for the competitors and their teams are available on the spacious camping ground. During gliding operations, the cars can temporarily be parked close to the grid. An additional parking lot for visitors is available next to the tower building, close to the apron.

## 2.4.10 Emergency (including fire)

The city of Stendal provides a fire brigade and a regional police centre. A rescue plan exists, ensuring fast reaction times. In addition, a rescue car is available at the airfield

#### 2.4.11 Medical and First Aid

A hospital is located 3km south of the airfield. A rescue helicopter is available on demand. In addition, there are several practicing doctors located in Stendal.

2.4.12 Conference and office rooms for the OSTIV Congress, if required The OSTIV congress can be held in a conference room within the nearby town of Stendal.

## 3. Accommodation and food for competitors

## 3.1 Accommodation facilities available in the local area

There are several hotels, guest houses and youth hostels located within Stendal. This adds up to 300 beds within 10 minutes driving distance. There are additional 300 beds available within 20 minutes driving distance from the airfield.

## 3.2 Camping facilities at the airfield

The camping ground is located north of the apron, within 2 minutes walking distance to the briefing room. It provides space and electrical facilities for up to 200 caravans or tents.

## 3.3 Catering for competitors at the airfield

Catering service will be provided by members of the club and the airfield restaurant. Additional restaurants and facilities are available close by in Stendal. For self-catering, there are a couple of supermarkets available in Stendal, within 5 minutes driving distance.

## 4. Competition area

## 4.1 Topography in the contest area

Stendal is located in the Altmark-region, about 10km west of the Elbe river in the northern half of Germany. This part of the country is mainly flat with a maximum elevation of up to 200m MSL. It contains large part of sandy soil, stretching from Poland across the Altmark up to Hamburg. This provides excellent thermals.

The hills of the Harz, Thuringian Forest and the Erzgebirge are forming the southern boundary of the contest area. In the west, the competitors may expect flights up to the hilly regions of the Weserbergland, southwest of Hannover. Flights to the north stretch across the Lüneburger Heide and the Mecklenburg lake land. Containing many smaller lakes as well as sandy soil, this area is well known for excellent

thermals. In the northern direction, the contest area is limited by the Baltic sea and the airspace of Hamburg international airport. Towards the east, tasks may be set up into the Polish airspace which gives access to excellent thermals provided by sandy soil and large coniferous forests.

## 4.2 A comprehensive survey of meteorological conditions

The Altmark-region is located between areas that are mainly influenced by atlantic-maritime and continental climatic conditions. Compared to the more western areas of the Lüneburger Heide (south of Hamburg), the Altmark shows significantly less amount of precipitation and on average up to 30% more summer-days with a maximum temperature for >25°C. The reason for the reduced amount of precipitation is the covering effect of the southern mountain ranges of Harz and Thuringian Forest. Additional information about climatic conditions are provided in Annex B.

From a gliding perspective, the Altmark region provides favourable meteorological conditions in both, maritime or continental influences. Troughs crossing the area towards the east leave cool unstable air that comes along with long soaring days, thermals starting around 9:00 local time with 600m cloud base, rising to 1800m in the afternoon. In such conditions, flights of >10h duration and >1000km in length already started in Stendal.

In summer, high pressure areas over central Europe regularly move dry and warm air into the contest area. Such conditions usually start with good Cu-Thermals in the first days and blue thermals up to 1300m in the days thereafter. Common cloud bases are around 1300-2000m AGL. In case of high temperatures and marginal lability, cloud bases >2500m AGL can be expected. While these conditions do not allow long flights, they are commonly quite stable and ensure several contest days in a row.

Some competitors may have experiences from the WGC2008 in Lüsse, about 70km SE of Stendal. The meteorological conditions between Stendal and Lüsse are largely comparable, while the airspace situation at Stendal provides a higher degree of flexibility. Tasks may be set in all directions.

During the previous competitions, the share of scoring days on overall available contest days was on average 61%.

## 4.3 Airspace restrictions in the contest area

In most parts of Germany, gliding is limited to altitudes below FL95. Besides that, there are no other airspace restrictions over the airfield itself. Within a 50km radius, there are three restricted areas. These were given access to by the military during previous competitions (ED-R71, 73, 74) and the organising team will negotiate on gaining clearance for these restricted areas with the German military during WGC2020.

Larger airspace limitations are caused by Berlin international airports. Berlin is covered by CTR airspace and surrounded by class C airspace down to 3500 feet. The lower border of 3500 feet for Berlin class C airspace starts about 55km east of Stendal. The higher parts of Berlin airspace extending farther away from Germanys capital to not affect gliding under most conditions. Although the new international airport of Berlin will be in action until 2020, the airspace situation is not expected to change significantly for contests held at Stendal.

The airspace situation around Stendal allows setting tasks in all directions, which has proven to be of significant advantage in previous competitions.

Please also refer to Annex C for an airspace map of 2016.

## 4.4 Typical tasks to be expected

Typical task lengths for a competition with 100 participants in late July range between 200 and 700km. On a good day, competitors may expect a 500km task to be set around Berlin.

## 4.5 Road and traffic conditions

Stendal is located at a crossing of two federal highways. In general, the roads fulfill the highest standards and due to the low population, the traffic is very light. Furthermore, Stendal possesses a well frequented railway station and can be reached by train from Berlin central station within 50 minutes.

## 5. Rules

- 5.1 Indicate the options intended to be used from Annex A for:
  - 5.1.1 Starting procedures: 7.4.2 a Start Line
  - 5.1.2 Tasks: 6.3.1 (Race Task) and 6.3.2 (AAT)
  - 5.1.3 Finish procedures: 7.7.2 a Finish Ring
  - 5.1.4 Scoring: 8.1 (1000 points system) and 8.1.1 (Team Cup)

5.2 Indicate any particular conditions or possible restrictions that may be applied:

#### 5.2.1 For pilots and crews

Pilots must have a valid ICAO compliant glider licence including the starting method chosen for the competition. Depending on the country of origin, pilots without an EU license may have to transcribe their license in accordance to EU regulation 1178/2011 Annex III. Furthermore, for some countries visa regulations apply for visits to the European Union.

## 5.2.2 For sailplane and equipment

An entry permission must be granted by German aviation authority LBA for sailplanes registered under a restricted type certificate outside of the EU. Flight documentation must be conducted using IGC approved flight recorders. This also applies to backup devices. Any type of collision avoidance-equipment must be compatible with such equipment used in Europe (e.g. FLARM).

## 5.3 Number of competitors:

5.3.1 State the maximum number of competitors that may enter the competition:

20m Multi-Seat class: 40

18m class: 50Open class: 45

Overall, the maximum number of gliders during the competition is 130.

## 5.3.1.1 Provide explanation for this number

The large dimensions of the airfield allow setting up one long grid that includes up to 130 gliders of all classes. Starting rows include 2 open class or Multi-Seat gliders or three 18m-class gliders. The takeoff-track is obstacle-free in both directions. For landing, all available runways may be used to the full length of the airfield. This adds up to a landing area of approx. 2000x200m in size.

#### 5.3.2 Indicate how the classes will be separated for:

## 5.3.2.1 Starts

Starting points will be separated by >10km for all classes. Starting times will be different for all three classes.

## 5.3.2.2 On task

There will be different tracks for each class.

## 5.3.2.3 Finishing and landing

The last turnpoint will be set to align the pilots for a straight landing. The large landing field and approaches free of obstacles ensure safe landing of many gliders in a short timeframe. Pilots are encouraged to make long landings to give way for others.

#### 6. Costs

6.1 Entry fee: 850€ per glider (single or multi-seater)

- 6.1.1 Services included: The entry fee covers the operational costs of the organiser, such as facilities, airfield preparation and usage, grid operations, turnpoints database, transfer & availability of towplanes, water ballast facilities, meteo service, tasks and results, scoring, communication system (SMS or equivalent), trophies and prizes, media and press, Multiple WiFi internet access points on the airfield
- 6.1.2 Cost of aero tows: 50-55€ (600m release altitude)
- 6.2 Price of car fuel per litre/gallon as of September 2016:

Petrol (ROZ95): EUR 1.30/I

Diesel: EUR 1.10/I

AVGAS 100LL: EUR 2.50/I

6.3 Rental cars

Car rental fees depend on the type of car. Average daily fees start around 40€ per day. Larger cars equipped for airfield usage (tow hook) cost around EUR 100 per day.

- 6.4 Accommodation
  - 6.4.1 Hotels: 25-60€ (single room), 45-80€ (double room)
  - 6.4.2 Apartments: from 50€ per day (2-4 persons)
  - 6.4.3 Bed and Breakfast: 30-40€ per day
  - 6.4.4 Camping: 300€ camping fee on the airfield per pilot and up to two crew members for the training week and the two contest weeks. Camping fee for additional crew members is 80€ per person. Depending on the size, caravans or campers can be hired at a cost of 30-80€ per day.
- 6.5 Catering
  - 6.5.1 Hotels

Breakfast is included in typical hotel room rates.

6.5.2 Restaurants

Approx. 20€ per meal.

6.5.3 Airfield

20€ per day, including breakfast, lunch and dinner

6.6 Provide an indicative example for the expected total costs during the contest period for a pilot with 2 crew members

Entry fee: 850€

Aerotows: 600€ (12 tows x 50€)

Accomodation: 1,920€ B&B 40€ per day, 3 persons, 16 days

Catering: 840€ (3 persons, 16 days, 20€ per day)

Car rental: 1,400€ (50€/car, 2 cars, 16 days)

Sum: 5,610€

Savings are possible through self-catering and camping on the airfield. Additional expenses may apply if a glider needs to be rented or transported to Germany.

## 7. Glider Hiring

- 7.1 The availability of local gliders for hire: Hiring competition gliders is common in Germany, hence a variety of gliders is available. The DAeC will assist in brokering glider hires as needed.
- 7.2 The costs of hire: Depending on the type of glider, costs range from 1000-2000€ per week.
- 7.3 Any restrictions on hire To be determined.

## 8. Glider Import

- 8.1 Ports or cities of entry To be determined.
- 8.2 Customs requirements To be determined.
- 8.3 Customs brokers To be determined.
- 8.4 Estimated costs and fees, including cost of transport of containers To be determined.

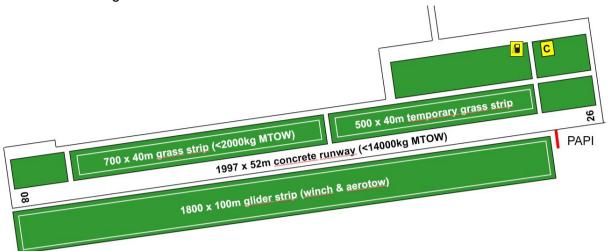
# 9. Training

8.1 Provide details of any proposed training opportunities for teams and individuals prior to the Championships.

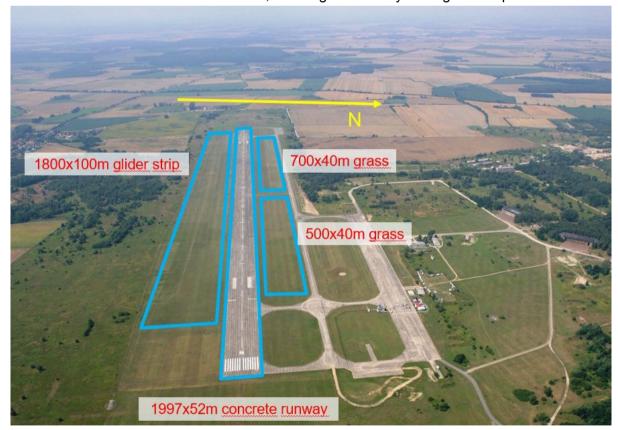
In 2019, an international gliding competition will be organised at Stendal-Borstel. The training competition will be held according to Annex A rules and the local procedures as for the 2020 WGC. Besides that, individual WGC competitors may familiarise themselves with the region and the airfield during glider camps that are organised every year at the airfield.

# Annex A: airfield overview and contest operations

Schematic drawing of airfield Stendal-Borstel:



Airfield view from the east towards west, showing the runways and grass strips:



Airfield view from north during starting phase, 2014 competition - the town of Stendal being located south of the airfield



The grid during qualification contest "Altmarkpokal" in 2010; see also the video about the contest in 2012: <a href="https://vimeo.com/47899563">https://vimeo.com/47899563</a>



A view from above during the German nationals 2015, showing spacious camping and glider storing capacity (on the apron and between apron and the hangars to the left)



Rigging area for 15 and 18m gliders on the apron



The terrace of our airfield restaurant "Zum Fliegerhorst"



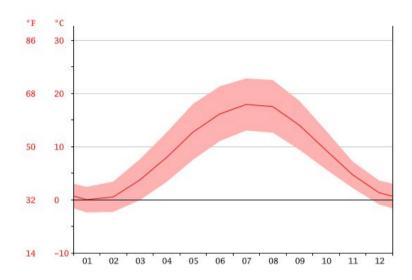
View above Stendals historic town centre - it's a 5 minutes drive to the airfield:



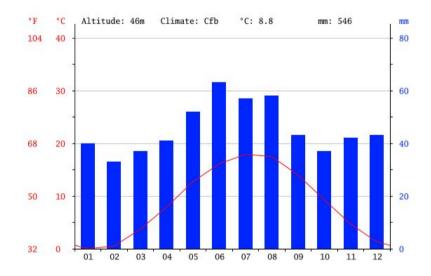
# **Annex B: climate**

Source: de.climate-data.org, data shown for Bismark (15km west of Stendal)

# Temperature chart:



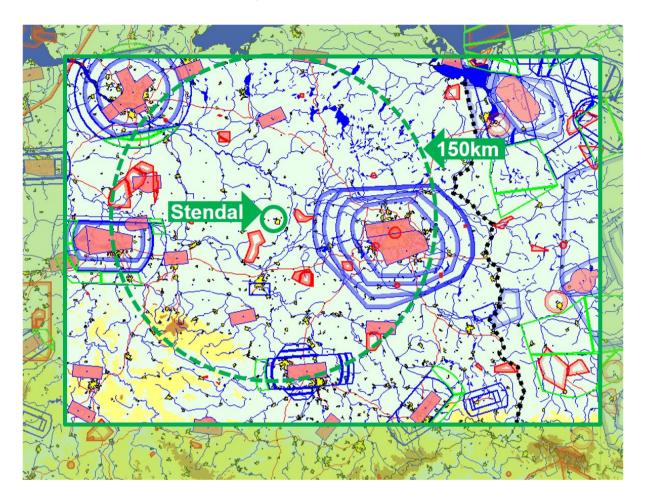
# Precipitation:



# Temperature-data:

month	1	2	3	4	5	6	7	8	9	10	11	12
mm	40	33	37	41	52	63	57	58	43	37	42	43
°C	0.0	0.5	3.7	7.9	12.7	16.1	17.9	17.5	14.0	9.3	4.7	1.3
°C (min)	-2.4	-2.3	-0.1	3.3	7.5	11.0	13.0	12.6	9.4	5.7	2.2	-0.9
°C (max)	2.4	3.4	7.6	12.6	18.0	21.3	22.8	22.5	18.6	13.0	7.2	3.6
°F	32.0	32.9	38.7	46.2	54.9	61.0	64.2	63.5	57.2	48.7	40.5	34.3
°F (min)	27.7	27.9	31.8	37.9	45.5	51.8	55.4	54.7	48.9	42.3	36.0	30.4
°F (max)	36.3	38.1	45.7	54.7	64.4	70.3	73.0	72.5	65.5	55.4	45.0	38.5

Annex C: Airspace NE-Germany 2016, contest area German nationals 2015



Restricted areas: red outline (may be opened for the championship)

Class C CTR: red areas

Class C non-CTR: blue outlines Class D non-CTR: thin blue outlines