

Collaboration Agreement on Graduate/Diploma Student's Examination Project

entered into by and between

Student (name): Ottelien Bossuyt
CPR no.: 210393-3504
Address: Akademivej 100 A-211
Postal code/
Town: 2800 Kongens Lyngby, Denmark

(hereinafter called "the Student")

and

Department: DTU Wind Energy

Building:

Address: Frederiksborgvej 399

Postal code/
town: 4000 Roskilde

(hereinafter called "the Department")

and

Company (corporate form): Ørsted Wind Power A/S

CVR No.: 31849292

Address: Kraftværksvej 53, Skærbæk

Postal code/
town: DK-7000 Fredericia

(hereinafter called "the Company")

Clause 1 Basis and Objective of Agreement

- 1.1 The main objective of this Agreement is to ensure that the Diploma/Graduate Student carries out an examination project, as defined in Clause 1.3 below, to complete his or her graduate studies, with this objective taking precedence over conflicting considerations (hereinafter called "the Objective").
- 1.2 The examination project shall be carried out in collaboration with the Company and the Department by: Ottelien Bossuyt (hereinafter called "the Student").
- 1.3 The examination project:
Modelling and validation of wind turbine wake superposition -- Using wind farm data
Simple wake models are usually derived for a single turbine. Superpositioning principles are often assumed to apply the simple wake models for multiple turbine wakes in wind farms. Several different approaches exist, such as linear and quadratic superposition or taking the maximum wake deficit. The project aims to investigate how multiple wakes should be combined and merged. The analysis will include investigation of large scale measurements from the BEACON campaign as well as LES results.
Period: November 2017 – July 2018 (hereinafter called "the Examination Project"), as described in Exhibit 1.
- 1.4 The person named below shall act as the Department's supervisor for the Student:

Søren Juhl Andersen
- 1.5 The person named below shall act as the Company's supervisor for the Student:

Nicolai Gayle Nygaard
- 1.6 External supervisor from a company/institution:

Michiel Zaayer
TU Delft, Wind Energy Group – Kluyverweg 1, 2629 HS Delft, The Netherlands

Clause 2 Field

- 2.1 Field of research: Wind farm wake superposition, wind farm wake-wake interaction [Description of the field of research and scientific area of the Examination Project within which the Parties are to collaborate (hereinafter called "the Field"). This Field shall be defined very precisely and narrowly, and the definition shall not coincide with the project description. A department may not surrender rights to a scientific area extending beyond the subject matter of the Examination Project – See Clause 5].

Clause 3 Confidential Information

- 3.1 Any information that comes to the knowledge of the Department or the Student about the Company's business, operations, equipment, production methods, research and specialised know-how, etc. relating to these areas shall be considered business secrets and may be used only for the Objective set out above. This includes information exchanged exclusively between persons involved in the Examination Project. Upon disclosing such information, the Company shall inform the Department expressly in writing that the information is confidential where it is not apparent from the circumstances that the information shall be treated confidentially.
- 3.2 Any information that comes to the knowledge of the Company or the Student about the Department's research, know-how, research results, production methods, etc. in connection with the Examination Project shall be considered business secrets and may be used only for the Objective set out above. This includes information exchanged exclusively between persons involved in the Examination Project. Upon disclosing such information, the Department shall inform the Company expressly in writing that the information is confidential where it is not apparent from the circumstances that the information shall be treated confidentially.
- 3.3 The Parties shall be bound to maintain confidentiality with respect to business secrets received in the course of the Examination Project, to prevent such information from being passed on to any unauthorised third party. The Parties shall ensure that the persons involved in the Examination Project assume the same duty of confidentiality as the Parties themselves.
- 3.4 The duty of confidentiality shall not apply to business secrets that
- were in the public domain or otherwise made available to the general public at the time of receipt;
 - became part of the public domain or were otherwise made available to the general public after the information was received, unless this represents a breach of the duty of confidentiality on the part of the recipient;
 - were lawfully in the recipient's possession at the time the information was received, without any restrictions as to confidentiality;
 - were received from a third party who appeared to be entitled to lawfully disclose the information; or
 - were subsequently developed independently of the Examination Project by the Party receiving the information; or
 - are or will be comprised by legislation or executive orders, public law decisions, judgments, awards, etc. enjoining the recipient to pass on the information in whole or in part.

- 3.5 The Party receiving the information shall notify the disclosing Party in writing of its receipt of material it considers to be comprised by Clause 3.4. In the event of disagreement between the Parties, the recipient has the burden of proving that the material received falls under Clause 3.4.
- 3.6 The duty of confidentiality pursuant to this provision shall cease to apply three years after the Examination Project terminates. The duty of confidentiality shall also extend to Parties withdrawing from the Agreement for whatsoever reason. If the Parties' collaboration should cease prematurely, or if a Party withdraws from the Examination Project, the three-year time limit shall commence from the date of effective termination or the date of withdrawal.
- 3.7 In the event that material is subject to the exclusions stipulated in Clause 3.4 above or if the term of confidentiality expires, this Agreement shall not imply any consent for the recipient to use the material received in contravention of other provisions, including intellectual property rights.

Clause 4 Publishing the Examination Project Report

- 4.1 The Examination Project shall be completed by the preparation of an Examination Project Report ("the Report"). The supervisor shall submit the Report to the Company. No later than 14 days after receiving the Report, the Company shall indicate whether the Report shall be treated confidentially or whether it can be released without any restrictions.
- 4.2 If the Company has requested that the Report be treated confidentially, the examination shall be closed to the public.
- 4.3 If the Report is placed in the public domain, the Company shall accept that the Department's supervisor and Student are free to publish the results of the Examination Project, provided that they comply with the provisions of Clause 3 regarding business secrets.
- 4.4 If the Company requires the Report to be treated confidentially, the following guidelines shall be observed:
The necessary number of copies of the Report shall be kept in the Department's files, which shall be inaccessible to the public. In addition, the Student and the Department's supervisor shall keep one copy each. The external examiner may also borrow a copy of the Report. Any additional copying and distribution of the Report shall be agreed with and accepted by the Company for a period of max 3 years, after which the Report can be published without any restrictions.

Clause 5 Rights

- 5.1 Any rights to results and inventions made by the Department's supervisor within the scope of the Examination Project shall belong to the Department pursuant to the Danish Act on Inventions at Public Research Institutions from time to time in force, provided that the provisions of the Act are met. The Parties agree that any agreement on the assignment of rights shall be negotiated with the management of DTU and may only concern rights within the Field described, cf. Clause 2.1. The Parties agree that the amount paid for any results and inventions made by the Department's supervisor under this Agreement shall be a fixed amount of DKK 100.000.
- 5.2 Any rights to results and inventions made by the Company's supervisor within the scope of the Examination Project described shall belong to the Company pursuant to the Danish Employees' Inventions Act, provided that the provisions of the Act are met.
- 5.3 Any rights to results and inventions made by the Student within the scope of the Examination Project described and/or results and inventions based on or derived from Company confidential information shall automatically, by operation of this agreement, be transferred to Company without any further accounting to the Student.
- 5.4 In the event that an external supervisor from another company/institution takes part in the Examination Project, the Company shall be wholly responsible for making agreements with such supervisor regarding responsibilities, liability, distribution of rights, etc., and any claims advanced by an external company/institution against the Company shall be of no concern to the Department.
- 5.5 Results and empirical data, including inventions and other rights, that do not fall within the scope of this Examination Project shall belong to the Party producing them. This shall also apply in the event that the Act on Inventions at Public Research Institutions or the Employees' Inventions Act does not apply.

Clause 6 External Examiner

- 6.1 The Department's supervisor shall personally appoint the external examiner, who may borrow a copy of the Examination Project Report. The supervisor shall ensure that the report is returned after the evaluation of the project, and that the external examiner is aware that parts of the Examination Project Report are confidential. No formal agreement shall be made with the external examiner in this respect.

Clause 7 Public Access to Information about the Collaboration

- 7.1 Both Parties are free to make public references to their collaboration on the above-mentioned Examination Project, i.e. to mention the title and Objective of the Examination Project and the names of the Parties.

Clause 8 Alterations

- 8.1 Any alterations to this present Agreement shall be made in writing in order to be valid and binding on the Parties.

Clause 9 Liability

- 9.1 As the collaboration concerns an Examination Project, the Department shall have no liability for the Examination Project leading to a specific desired result.

Clause 10 Working at the Company

- 10.1 When working at the Company, the Student shall observe the instructions and safety rules applied by the Company.
- 10.2 The Company shall be responsible for instructing the Student, and the Department cannot be held liable for any damage or injury caused by the Student.
- 10.3 If, in connection with working at the Company, the Student is not comprised by the Company's industrial injuries insurance, the Company shall inform the Student hereof.

Clause 11 Governing Law and Venue

- 11.1 This Agreement is governed by Danish law, with the exception of international private law and conflict of law rules, to the extent that such rules would result in the application of another country's law.
- 11.2 Any dispute arising between the Parties in connection with this Agreement, including its interpretation and use, which cannot be settled amicably by negotiation between the Parties, shall be settled by the shall be settled by the District Court of Lyngby as the court of first instance.

Clause 12 Term of Agreement and Competition

- 12.1 This Agreement shall run until the Examination Project has been completed or ceases.
- 12.2 The provisions of Clause 3 regarding the non-disclosure of confidential information shall remain in force during the Examination Project period and for three years after the termination of the Examination Project; see also Clause 3.6 above.
- 12.3 Neither Party shall be subject to a covenant not to compete with the other Party as a consequence of this Agreement.
- 12.4 This Agreement shall in no way restrict the Department's right to collaborate with other companies.

Clause 13 Signatures

- 13.1 The duties imposed on the Department under this Agreement relate to the Department's supervisor exclusively. The Department does not guarantee the performance of the Student's duties under this Agreement.

Exhibit 1: Examination Project description

The Student

(Place) Kongens Lyngby, Denmark

The 3rd of December 20 17


Name Ottelien Bossuyt

For the Department

(Place) Roskilde

The 12/11 20 18



Head of Department

November 2017
Student Project agreement

For the Company

(Place) Skærbæk

The 19/11 20 18


Name/position Senior Lead Specialist

The following persons are not parties to this Agreement, but verify by their signatures that they accept its contents:

The Department's supervisor

(Place) Kgs. Lyngby

The 5th December 20 17

Søren Andersen
Name

The Company's supervisor

(Place) Skærbæk

The 19/11 20 17

Nikolaj
Name
Senior Lead specialist
Position

External supervisor

(Place)

The 20

Name

Position