



EFCA
YOUNG PROFESSIONAL OF THE YEAR
2016

Personal details

Full name: Jens Rosenville

Nationality: Danish

Age as of 31/03/2016: 32

Company: Ramboll

Location: Copenhagen

Contact details

E-mail address: JXR@ramboll.com

Office phone number: +45 51617147

Cell phone number: +45 51617147

Instructions for completing this form



Note to candidates

Each section and sub-section may be expanded as required. The completed entry form should be no longer than **16 pages in total**. Section A is to be completed by your employer, and Section C by the client.

All entries should be submitted in English. Any annexes in other languages should be accompanied by an English translation, or will not be taken into account.

The form should be returned to your national association. They will forward it to the EFCA Secretariat.

You will be informed of the results of the competition at end of April 2016.

Good luck!

Section A. EMPLOYER'S RECOMMENDATION



Meet Jens Rosenville

Jens Rosenville is known for his very talented, charismatic and at the same time down to earth approach to his surroundings. Even though Jens is only 32 years old he is already a Lead Engineer and has contributed to several successful project results in Ramboll Oil & Gas.

Seeking challenges and development

Jens graduated from Aalborg University in 2007 with a master's degree in structural engineering. He started his career at MT Højgaard in Aalborg, Denmark and joined Ramboll Oil & Gas in 2009. Jens was specifically interested in working with complex steel structures and had a strong focus on technical development and high professionalism in his work. According to Jens, the fascinating and challenging about the oil and gas industry is the fact that the steel structure designs need to be able to withstand extremely difficult and demanding conditions and also meet design and safety terms in regard to robustness, fire and the environment. Due to excellent performance, successful results and his winning personality Jens has quickly made himself an indispensable part of the jacket team in Ramboll.

An innovative approach to challenging projects

Jens has been technically responsible for several extensive and complex projects. One of these was the Culzean project which included a detailed design of the jackets for the central processing facility platform, the utilities and living quarter platform and associated piles for water depth of 90 metres (296 feet). These jackets were the largest and most complicated substructures designed by Ramboll for the North Sea, and Jens was instrumental in developing and delivering innovative solutions for the client.

A highly trusted advisor with a cooperative mind-set

What makes Jens unique is his cooperative and analytical approach, which not only leads to satisfying results, but also makes him a highly trusted and reliable advisor to clients. This credibility has enabled him to meet clients independently and make his own decisions with full support from his managers. Clients have specifically asked to work with Jens on future projects due to his extraordinary cooperative mind-set. It is highly unusual to find such a reliable and trusted advisor as Jens in such a young age.

Recommendation of Jens Rosenville**Managerial statement**

Jens Rosenville is one of our very promising young engineers. Jens has the right approach to our projects and is able to gather a large team for a joint project in order to make progress.

Jens Rosenville – A highly valued colleague

Jens has quickly made himself indispensable for the jackets department and is a very important part of our jackets team; he enjoys a high technical respect among his peers and has an exceptional capacity for collaboration. Additionally, he gladly takes young engineers under his wings, and ensures that they get quickly acquainted with the projects thus enabling them to perform successfully on the job. What makes Jens special is his ability to establish incredible relationships with clients and colleagues.

Project contribution and client relationship

In 2014 Jens was lead engineer on the Culzean Wellhead jacket project for Maersk Oil UK Limited. Ramboll's scope of work comprised the detailed design of the wellhead jacket and the associated piles for water depth of 90 metres (296 feet). This jacket was at that time the the largest and most complicated substructure designed by Ramboll for the North Sea, and Jens was instrumental in developing and delivering innovative solutions for the client.

Through his very dedicated performance Jens acquaints himself with the client's assets and challenges in order to deliver first class consultancy – and Jens really do deliver great consultancy. Jens' cooperative and analytical approach not only gave the client satisfying results but also a highly trusted and dependable advisor.

Both Maersk Oil and DONG Energy have expressed great satisfaction with Jens' results with both Culzean Well Head Platform and DONG's Hejre platform.

Managerial potential

Since the spring of 2015, Jens has been engineering manager on a project for one of DONG Energy's new platforms in the Danish North Sea. A project that started with a small team but now has reached 25-30 team members, who all have Jens as their central point. As a people manager he is very visible and interacts easily with both team members and clients. Jens' attentiveness, team spirit and outgoing approach empower his team members to deliver great results and support the pioneering working environment in Ramboll. Jens has great managerial potential and has already proven his worth as an excellent engineering manager at the DONG project.

Kind regards,



Bjørn V. Jønsson

Head of Department, Jackets
Ramboll Oil & Gas

1/1

Name: Bjørn V. Jønsson

Job title: Head of Department, Jackets

Managerial relationship to candidate: Manager

Section B. THE PROJECT

B.1 Project description:

The Culzean field was discovered in 2008 and is one of the largest gas fields in the British North Sea, which has the potential to meet around 5 per cent of the UK's gas demand in 2020/21. Located 242 km off the coast of Aberdeen, the Culzean field is Maersk Oil's first operated ultra-high-pressure, high-temperature field.



Figure 1: Illustration of the fixed installations on the Culzean field incl. a drilling rig near the wellhead platform.

With temperatures reaching 170 degrees C (338 degrees F) and the pressure being three times higher than average fields, a platform optimised for these conditions is paramount. The overall Culzean concept development consists of a wellhead platform (WHP), a central processing facility platform (CPF), and a separate utilities and living quarters (ULQ) platform. The platforms will be linked via two bridges approx. 100 metres (109 yds.) in length and will be located in water depth of approx. 90 metres (98 yds.).

In 2014, Ramboll was awarded the detailed design for the Culzean wellhead platform (WHP) jacket, associated piles and appurtenances. The detailed design included all primary installation aids, e.g. sling platforms, working platforms, spreader bars etc. including detailed design of all required sea-fastening.

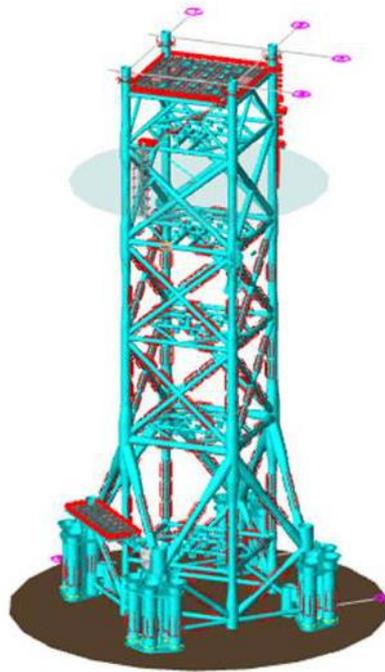


Figure 2: Artist impression of the Culzean WHP jacket

A significant part of the project work in the early phase was an evaluation of the FEED design and further improvements of the FEED design with respect to pile/soil interaction, fatigue performance, ship-impact, transportation and lifting arrangement. Ramboll worked in close collaboration with Maersk to ensure the optimum design.

In late 2014, after successful completion of the detailed design of the WHP jacket, Ramboll was awarded the FEED study and afterwards the detailed design of the jackets for both the central processing facility platform and a separate utilities and living quarter platform.

B.2 Innovative characteristics of the project:

The functionality and design requirements for the wellhead platform meant substantial challenges and several 'first' for the client. Hence, also notable challenges to the jacket design, which included:

- The topsides layout and weight driven by the ultra-high temperatures and pressure from the reservoir
- A twisted base jacket concept providing largest possible access for the high-specification, harsh-environment self-elevating drilling rig
- Required fatigue and ship-impact performance considering the harsh wave environmental conditions and allowable size of approaching vessels respectively
- The lift and sea-transportation operations relating to the jacket layout and weight conditions
- An under-leg pile system needed during installation of the jacket in order to respect strict installation tolerances
- The requirement of a robust design, among others relevant for the ultimate and accidental limit state, bounded by the weight restraints driven by the upper limit of maximum lift weight. The accidental limit state considers a wave with a return period of 10.000 years

The innovative characteristics of the WHP jacket design are in general to respect and incorporate the large range of high and strict design requirements from both the client and installation / fabrication contractor, though still making the project feasible in relation to function, cost and time. This work has been paramount for Maersk Oil and has required that Ramboll pushed the design to the limits though still respecting the required safety needed. Hence, during the design Ramboll initiated and handled several development projects in order to achieve the design and respect the requirements from both the client and certifying agency.



Figure 3: Production phase of the jacket construction in the Netherlands– The right part is being twisted 45 degrees , so the parts fit and can be welded together.

In general, the new facilities are expected not only to support production of the Culzean discovery, but also serve as a hub for a new development cluster in the surrounding area.

B.3 The YP's role in, and specific contribution to, the project:

Jens Rosenville had the responsibility as Lead Analysis Engineer for the detailed design, i.e. as lead for the analysis team, analysis responsible, handling all technical issues on the project with the client and sparring with the project manager and engineering manager.

Furthermore, Jens handled the coordination and analysis work during a large part of the follow-on engineering phase, i.e. working with client, fabricator and transportation and installation contractor. This has in general involved meeting different stakeholders' needs and wishes. Jens' responsibility was to make sure that even though Maersk had needs and wishes a fabricator and installation contractor may want to change certain things. To meet all stakeholders' needs, demands and wishes Jens had to re-analyse to see if Ramboll's design could handle all the changes after the design phase had ended.

During the design phase Jens handled several technical development projects in relation to the in-house FEM software (ROSAP) all relevant to succeed with the design requirements.

The technical development projects included implementation, benchmarking and design/verification work of specific theories relevant for spectral fatigue design (both in-service and transportation). Hence, without these tools, the design requirements could not have been met.

B.4 Communication with the client/end user:

Jens held a key role in the WHP jacket design and was one of the most client facing members of the Ramboll team with broad and frequent exposure to Lead Structural Engineer, Gareth Lindsay, Maersk senior management and the project financial partners BP and JX Nippon. Jens consistently held a highly proactive approach to client engagement with an extremely professional approach. His attitude and strong communication skills greatly assisted engendering a genuine feeling of a 'one team' environment working toward a shared goal with the client.

The work on the Culzean WHP resulted in a project win regarding the FEED and detailed design of the ULQ and CPF jackets. Furthermore, based on the project work, experience and technical development, Ramboll specifically won a large and critical design and assessment project for DONG Energy E&P (the project is still confidential) involving 25 to 30 engineers.

Jens' respectful manners, hardworking and positive approach have benefitted extremely well to loyal client relationships. These exceptional communication skills have highly contributed to a great dialogue between Jens and the clients as well as having a positive effect on further cooperation.

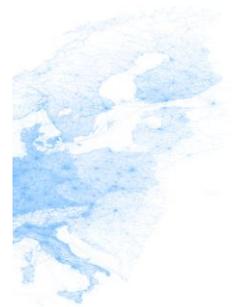
B.5 Describe the project end results and the benefits to the client/end user:

The jacket on the Culzean project is at the moment being fabricated in the Netherlands and the WHP will be installed in the summer of 2016. Everything is going as planned.

Ramboll has delivered a solid jacket design which both fulfils tough design criteria and strict transportation and installation requirements. Furthermore, Ramboll has delivered a high standard of project and engineering management providing Maersk Oil and its partners with transparent and clear updates of the project risks, e.g. weight trends, project progress and mitigation work for project challenges. Furthermore, Ramboll has respected the strict timeline set by Maersk Oil.

If Ramboll had not contributed to the project with their project expertise and technical knowledge, it may have been uncertain whether all the strict design requirements would have been possible to achieve within the given weight limit and according to the time schedule. The central part of the project has been the combination of all the requirements.

Section C. CLIENT'S APPRECIATION OF THE CANDIDATE



Statement of Recommendation – Jens Rosenville

Dear Sir / Madam,

I am writing to provide a statement of recommendation for Jens Rosenville in support of his highly deserved candidacy to EFCA's Young Professionals competition.

As a brief background I worked with Jens for over a year as Client (Maersk Oil UK) Lead Structural Engineer responsible for delivering the Wellhead Platform (WHP) jacket detail design and follow-on engineering for the ultra High Pressure, High Temperature (uHPHT) Culzean gas field development. This major capital project involves three new bridge linked manned fixed platform facilities, a drilling rig and a floating storage unit and constitutes the largest North Sea gas project in over a decade and the largest Maersk Oil UK project to date. The WHP jacket design was the first major project design activity and involved a number of innovative solutions and 'firsts' for Maersk Oil. These included incorporating a twisted base jacket concept, adoption of an under-leg pile system and far deeper water depth than any prior Maersk Oil fixed platform experience. Jens was fundamental in delivering this jacket design, developing these innovative solutions and supporting a number of broader project objectives in his capacity as Lead Structural Engineer with Ramboll Oil & Gas.

Jens held a key role in the WHP jacket design and was one of the most client facing members of the Ramboll team with broad and frequent exposure to myself, Maersk senior management and our project financial partners BP and JX Nippon. Jens consistently held an extremely professional and proactive approach to client engagement. His attitude and levels of communication skills greatly assisted engendering a genuine feeling of a 'one team' environment working toward a shared goal. Jens holds a particular ability to convey complicated concepts and issues in a practical and clearly understandable way which proved ideal for presenting to both technical and non-technical project stake holders.

In addition to his interpersonal and communication skills Jens consistently demonstrated exceedingly high levels of technical knowledge and competency which greatly contributed to the success of the design. His high quality delivery, demonstration of technical competence and highly collaborative approach inspired a great deal of confidence resulting in an atmosphere of cooperation and free and open exchange of technical dialogue with both myself and members of Maersk senior management making frequent ad-hoc phone calls to Jens for technical queries, updates and advice and guidance on a number of issues.

Due to the high level of technical innovation and Maersk Oil 'firsts' the WHP jacket design came under considerable scrutiny from both Maersk senior management and our financial partners. A critical achievement of Ramboll was in hosting an early partner development committee meeting at their engineering office through which a high level of confidence was placed both in Ramboll's technical experience and expertise and in Maersk's overall management of the project. This was a highly critical outcome for the project as a whole coming at a time when key financial approvals had to be agreed with partners to allow progression to the next project stage. Jens was instrumental in presenting the work undertaken, design progress and in explaining the key technical challenges and the solutions being pursued to resolve them. Preparation for this committee meeting was very much a combined effort between myself, Jens and the core Ramboll team and it was a pleasure working and cooperating together in this matter and a great sense of combined achievement at the highly successful outcome.

The jacket design as a whole was deemed a great success with all design requirements met through a series of high quality deliverables within the project schedule. Jens was fundamental in this outcome. Jens major achievements through the project included the

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trust and confidence he inspired within Maersk and our partners, successful delivery of his personal design, analysis and reporting requirements and effective coordination of the engineers and designers working with him to collectively deliver a great result.

Through the success of the WHP jacket design Ramboll has secured a strong reputation within Maersk and subsequently was awarded the FEED and detail design of the two further Culzean jackets. Jens was a key element of this success and will be actively sought after as a key member of any future Maersk project that Ramboll is engaged to execute.

It was a pleasure to work with Jens in both a professional and personal capacity. His high levels of dedication, technical competence, communication skills and approach to client interaction merits special recognition and as such I would strongly recommend him for said recognition and support him in his candidacy for EFCA's Young Professionals competition.

Regards,



Gareth Lindsay

Lead Structural Engineer, Culzean
Maersk Oil North Sea UK Limited

19/02/2016

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Name: Gareth Lindsay

Job title: Lead Structural Engineer

Company: Maersk Oil North Sea UK Limited

Section D. CV OF THE CANDIDATE

Curriculum Vitae



Personal information

First name(s) / Family name(s) **Jens Rosenville**
Business Address Hannemanns Allé 53, 2300 Copenhagen
Phone number(s) +45 51617147
E-mail address JXR@ramboll.com
Nationality Danish
Date of birth 20 October 1983

Work experience

Date	2016-
Occupation or position held	<u>Lead Consultant, Jackets</u>
Main activities and responsibilities	Consulting, business development and client development initiatives and portfolio's in order to assist with the development of sustainable and profitable client relationships, new resources of revenue and operational efficiency. Acts as a lead resource in technical and professional disciplines.
Name and address of employer	Ramboll, Hannemanns Allé 53, Copenhagen 2300, Denmark
Type of business or sector	Oil & Gas
Date	2014-2015
Occupation or position held	<u>Senior Consultant, Jackets</u>
Main activities and responsibilities	Acted as a resource in technical and professional disciplines. Was involved in the delivery, engineering/technical/functional design and coordination of client solutions and projects. Consulting on issues affected by change, client business challenges and complex client proposals. Assisted in the management of consulting projects of all sizes and client contacts.
Name and address of employer	Ramboll, Hannemanns Allé 53, Copenhagen 2300, Denmark
Type of business or sector	Oil & Gas
Date	2012-2014
Occupation or position held	<u>Senior Structural Engineer, Jackets</u>
Main activities and responsibilities	Provided specific contributions to consulting sales and business development initiatives. Was involved in the delivery, engineering/technical/functional design and coordination of client solutions and projects. Advised on issues affected by change, client business challenges and complex client proposals
Name and address of employer	Ramboll, Willemoesgade 2, 6700 Esbjerg
Type of business or sector	Oil & Gas
Date	2009-2012
Occupation or position held	<u>Engineer, Structures and Jackets</u>
Main activities and responsibilities	Assisted in the delivery and coordination of engineering/technical/functional client solutions and projects. Made specific contributions to consulting sales and business development initiatives
Name and address of employer	Ramboll, Willemoesgade 2, 6700 Esbjerg
Type of business or sector	Oil & Gas
Date	2007-2008
Occupation or position held	<u>Design Engineer, Building & Design / Engineering</u>
Main activities and responsibilities	Assisted in the delivery and coordination of engineering/technical/functional client solutions and projects. Made specific contributions to consulting sales and business development initiatives
Name and address of employer	MT Højgaard A/S, Danalien 1, 9000 Aalborg
Type of business or sector	Mining and Buildings

Education and training

Dates
Title of qualification awarded
Principal subjects/occupational skills covered
Name and type of organisation providing education and training
Level in national or international classification

EDUCATION

2002-2007
M.Sc. Civil Engineering
Structural Engineer
Aalborg University, Denmark
Master of Science



COURSES/CERTIFICATIONS

Dates
Title of qualification awarded
Name and type of organisation
2013
Financial project management and GLP
Ramboll

Date
Title of qualification awarded
Name and type of organisation
2012
Detailed calculations of steel connections
DKBI (Danish Construction and Concrete Institute)

Date
Title of qualification awarded
Name and type of organisation
2011-2012
Professional Project Management
Mannaz

Date
Title of qualification awarded
Name and type of organisation
2011
Seismic Design of Structures
DKBI (Danish Construction and Concrete Institute)

Date
Title of qualification awarded
Name and type of organisation
2011
Calculation of Steel Structures after Eurocode3
DKBI (Danish Construction and Concrete Institute)

Date
Title of qualification awarded
Name and type of organisation
2010
Understanding Structural Design
DKBI (Danish Construction and Concrete Institute)

Date
Title of qualification awarded
Name and type of organisation
2010
Application of Structural Vibration Analysis
DKBI (Danish Construction and Concrete Institute)

Date
Title of qualification awarded
Name and type of organisation
2009
Understanding Structural Behaviour
DKBI (Danish Construction and Concrete Institute)

Date
Title of qualification awarded
Name and type of organisation
2008
EN 1995: EC5: Design of timber structures
EN 1991: EC1: Actions on structures
EN 1997: EC7: Geotechnical design
EN 1993: EC3: Design of steel structures
EN 1990: EC0: Basis of structural Design
Law course in ABR 89
DKBI (Danish Construction and Concrete Institute)

Date
Title of qualification awarded
Name and type of organisation
2007
Proper Communication
MT Højgaard AS

Personal skills and competences

Mother tongue(s)

Danish

Other language(s)

English, German

Self-assessment

European level ()*

Language

Language

		Understanding		Speaking		Writing	
		Listening	Reading	Spoken interaction	Spoken production		
DK	C2		C2		C2		C2
UK	C1		C1		C1		C1
DE	B1		B1		A2		B1



Social skills and competences

- Has an exceptional cooperative approach
- Team player
- Hardworking
- High social awareness
- Dedicated
- Good sense of humour which can be used to loosens up tense situations
- Always friendly and helpful to his surroundings
- Outgoing
- Humble
- Attentive and empathic i.e. in his role as people manager

Organisational skills and competences

- Has the ability to use his time, energy, and resources in an effective way so that he accommodates the client's needs in a cost-effective and innovative way
- High level of cooperation skills with clients and colleagues
- Always delivers on time with a result of high quality
- Prioritising tasks in the most reasonable way
- Managerial capabilities i.e. taking the lead in managing consulting projects
- Gladly takes initiative to better processes to achieve operational efficiency
- Structural approach to tasks and problem solving
- Development of sustainable and profitable client relations
- Mentoring and coaching one or more members of staff within the PBU

Technical skills and competences

Jens has a proficient technical knowledge within the field of civil engineering and has through his studies and professional career handled several complex projects within the field of structural engineering.

During his studies he has successfully studied the fields;

- Analysis and Design of Load-Bearing Structures
- Structural Mechanics and Dynamics
- Material Modelling in Civil Engineering
- Fluid and Water Wave Dynamics
- Coastal, Offshore and Port Engineering
- Risk and Reliability in Engineering
- Fracture Mechanics and Fatigue

During his time at MT Højgaard and Ramboll Jens has built up a high expertise within:

- Structural design of both industrial plants and multi-storey buildings
- Offshore oil and gas structures, ranging from design and assessment of both jackets and topsides. Key knowledge and technical competences within Jacket structural analysis includes:
 - Detailed design handling both static and dynamic analysis; the latter both considering transient and spectral methods
 - Assessment of older platforms
 - Extension of existing platforms
 - Lifetime extension projects
 - Transportation and installation analyses
 - Technical development projects including program coding capabilities within MathCAD, Matlab, VBA and Fortran
- Project and engineering management

Computer skills and competences

- ROSAP (Ramboll's in-house FEM software)
- Staad Pro
- COMSOL Multiphysics
- MathCAD
- Matlab
- FORTRAN 95
- SACS
- MS.Office
- Autodesk
- AutoCAD
- VBA

Other skills and competences

Being a father to his 11 month old child

Hobbies and activities

- Spending time with his family
- Mountain biking
- Running
- Fitness
- Modern painting (doodle)

Papers published

Public speaking experience

TEACHING EXPERIENCE - 2013

Supervisor for 9th semester students from Aalborg University, Esbjerg during his internship at Ramboll. The course was called: "Design, experimental work and numerical code validation of slender structures"

Membership of professional organisations

- Member of LSU Group, Ramboll Oil & Gas from 2011-2015
- Member of the IT board at Department of Civil Engineering, Aalborg University from 2004-2007