Storytelling using GIS

Environmental risk of oil and gas operations

ESRI UC 2015

Benedikte Oksrød, Senior Consultant DNV GL

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Short facts about us

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Industry focused organization

Det Norske Veritas Foundation

Mayfair

DNV GL Group

Headquarter: Oslo, Norway
Group President & CEO: Henrik O. Madsen

Marine Cybernetics

Software

Maritime	Oil & Gas	Energy	Business Assurance
Headquartered in Hamburg, Germany	Headquartered in Høvik, Norway	Headquartered in Arnhem, Netherlands	Headquartered in Milan, Italy

Research & Innovation

Global Shared Services

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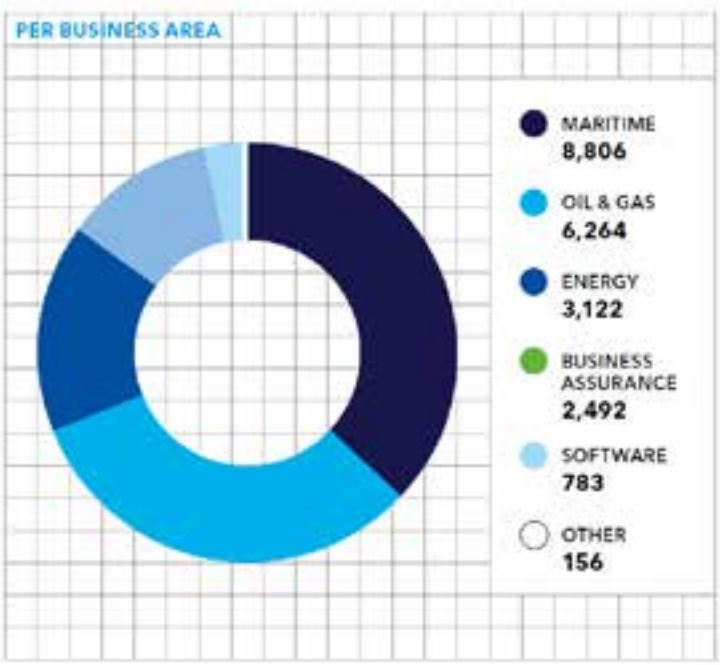
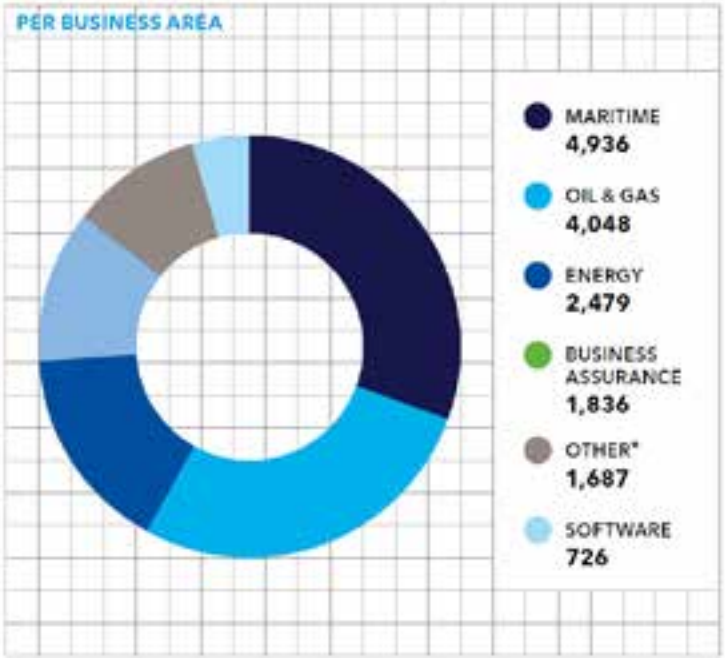
Revenue and people by business area / unit (as of 1.1.2014)

Revenue:
21,000 Mill NOK



Employees:
15 712



Highly skilled people all around the world

EMPLOYEES, LEVEL OF EDUCATION

Master	42%
Bachelor	39%
Basic education	9%
Doctorate	6%
2-year college	3%
Technical / professional	1%
Sum: Bachelor, Master or PhD level degree	87%

Education levels are largely captured through an employee self service system.

EMPLOYEES BY NATIONALITY AS PER 31.12.2014

Norwegian	2,756	Emirati	354
German	1,906	Brazilian	351
American	1,839	Polish	280
British	1,441	Danish	279
Chinese	1,048	Malaysian	237
Dutch	854	Spanish	180
Korean	543	Canadian	152
Singaporean	457	Japanese	132
Indian	399	French	130
Italian	357	Australian	126

Nationalities > 100 shown in table
Nationalities > 500 shown in pie chart

Environmental Risk Management

Oil Spill Risk Management

Leading provider on NCS of Environmental Risk and Impact Assessments and Oil Spill Response. More than 25 years of experience

Environmental Technology Advisory

International provider of environmental technology advisory services for development- and life-time extension projects; reducing environmental risk and planned emissions to air, discharges to sea and waste generation for drilling rigs and offshore installations.

Environmental Monitoring

Leading provider of monitoring and biodiversity mapping services on NCS. More than 25 years experience, and in-house accredited biology laboratory.

Environmental risk management – GIS

66 years

66 years of experience in GIS software , analysis and spatial data.

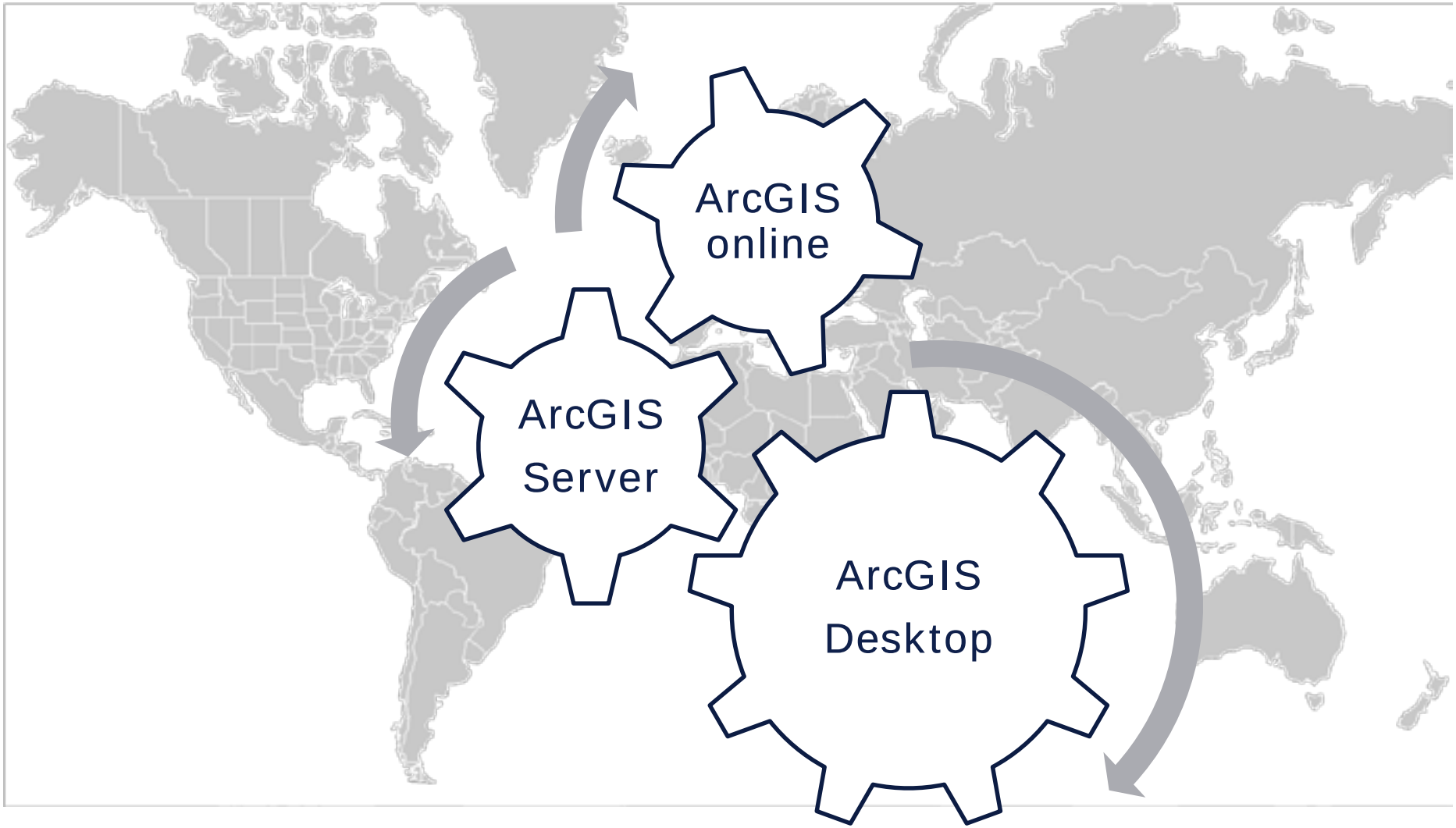
Software

We use ESRI software and have access to a suite of software products operating on desktop and server.

Data

We have access to a broad variety of spatial data from oil and gas related data to Arctic data from all over the world.

Our Product suite



Agenda

- Environmental Risk Analysis (ERA)
- Project Communication
- Storytelling using GIS
- GIS Briefing Book – "Story map"
- Q&A

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Purpose of performing Environmental Risk Analysis (ERA)

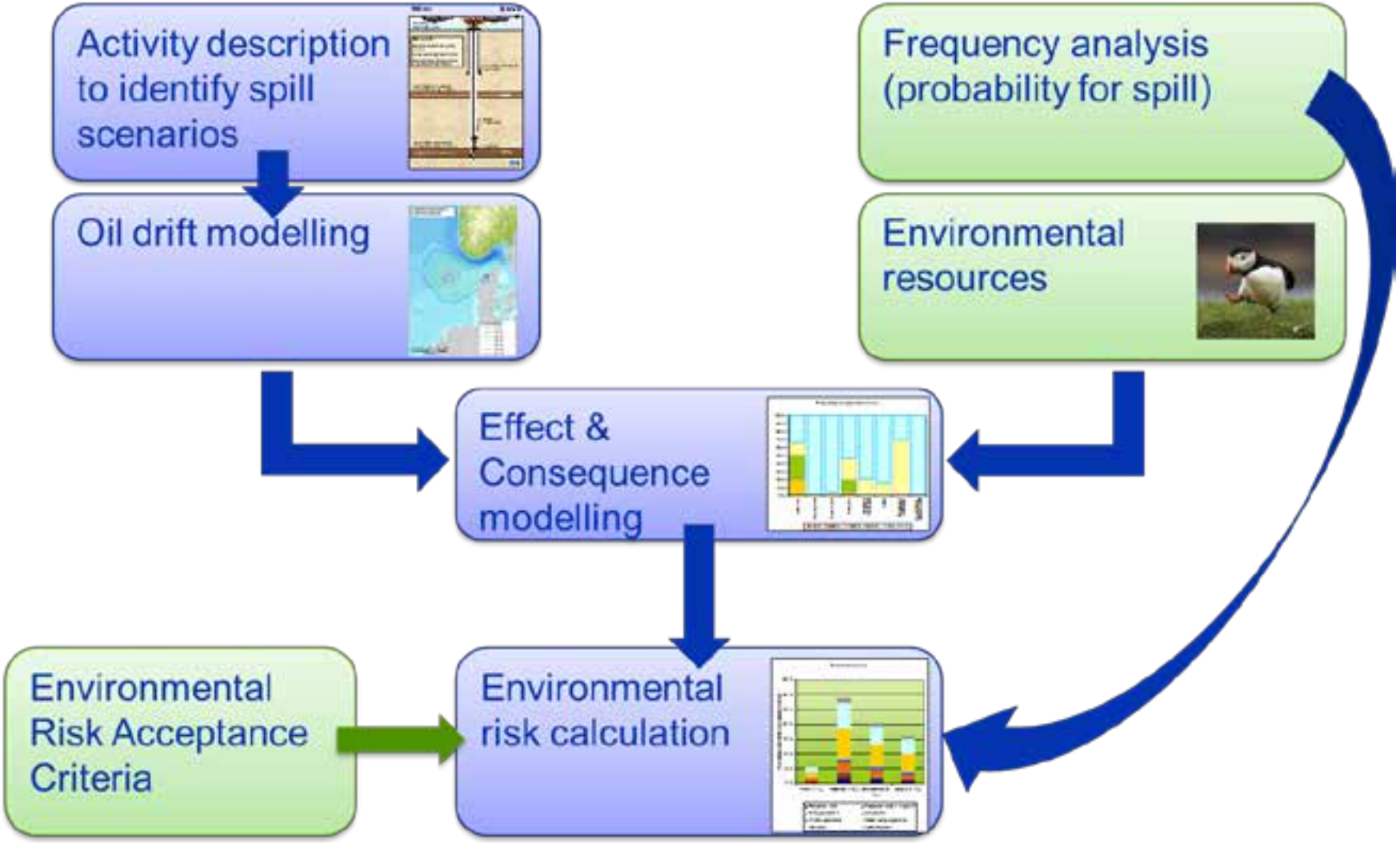
Calculate the environmental risk connected to the planned activity.

Use analysis of environmental risk as input to decision support and establishment of risk reducing measures.

Norwegian legislations require all operating companies with exploration and/or production of oil and gas in the Norwegian sector to assess the environmental risk connected with their activity.

The risk analysis is input to the application for consent from the Norwegian government for the activity.

Main elements in an Environmental Risk Analysis



From paper chaos to Web GIS structure

The rescue team

Easy to use

Easy to update

Easy to customise

Easy to share

DNV·GL

Story map

Oppsummering: Miljørisikoanalyse for Grane og Sv...
DNV·GL
Oppsummering: Miljørisikoanalyse for Grane og Svalin feltet
138 km
Norway
Norwegian Trough
Skagerrak
Kattegat
North Sea

No thanks!
We are too busy
Håkan Forss @hakanforss http://hakanforss.wordpress.com
This illustration is inspired by and in part derived from the work by Scott Simmerman, "The Square Wheels Guy" http://www.performancemanagementcompany.com/

Thank you for your time

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SAFER, SMARTER, GREENER