

Operation & Maintenance Management Software for On-/Offshore Windfarms

GreenGate AG



Operation & Maintenance Management Software for On-/Offshore Windfarms



- 1. GreenGate AG – Software solutions**
- 2. Windfarm Management O&M**
- 3. Permit Management – HSE Certificates**
- 4. On-/Offshore Deployment Tool**

Durchführer

1. GreenGate AG – Software solutions



GreenGate AG is specialised in software for innovative and strategic maintenance solutions.

Based in Windeck (Germany) and Seengen (Switzerland)

- founded in 2000 as an independent corporation held by its employees
- in-house R&D
- currently 30 staff members, additionally more than 30 specialists in partner companies

Maintenance software GS-Service

- more than 300 customers exceeding 3.500 licenses
- analysis - consultancy - integration - training - support

Industries:

- Energy and water supplier, infrastructure providers, production industry



Durchführer



1. GreenGate AG – Software solutions



Technical Operation Management Software provides:



■ Strategic maintenance management



■ Technical management



■ Workforce management

1. GreenGate AG – Software solutions

Technical Operation Management Software provides:

1. Object management 
2. Resource planning 
3. Document management 
4. Warehousing 
5. Reporting 
6. Mobile devices 
7. Interfaces 

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2. Windfarm Management O&M



2. Windfarm Manage

- [=G001] Windenergieanlage 1 / Wind turbine 1
- [=G002] Windenergieanlage 2 / Wind turbine 2
- [=G003] Windenergieanlage 3 / Wind turbine 3
- [=G004] Windenergieanlage 4 / Wind turbine 4
- [=G004C] Speichern von Energie, Material oder
- [=G004M] Bereitstellung von mechanischer Energie
- [=G004MD] Windturbinensystem / Wind Turbine
- [=G004MDA] Rotorsystem / Rotor System
- [=G004MDK] Antriebsstrang / Drive train
- [=G004MDK10] Rotorwelle / Rotor Shaft
- [=G004MDK10BF001] Zuflussmesser
- [=G004MDK10BG005] Überwachung
- [=G004MDK10BS001] Drehzahlser
- [=G004MDK10BS001-BS001] Drehzahlser
- [=G004MDK10BS001-BS002] Drehzahlser
- [=G004MDK10BS011] Schwingung
- [=G004MDK10FR001] Intervallsch
- [=G004MDK10FR001-FR001] Intervallsch
- [=G004MDK10FR001-MA001] Intervallsch
- [=G004MDK10GP001] Pumpe Zer
- [=G004MDK10GP001-GP001] Pumpe Zer
- [=G004MDK10UP010] Rotorlager
- [=G004MDK10UP020] Rotorlager
- [=G004MDK10WQ001] Rotor-Hof
- [G004MDK10XP001] Kupplung zw
- [=G004MDK20] Drehzahlwandlung /
- [=G004MDK30] Bremssystem Antrieb
- [=G004MDK40] Momentenübertragung
- [=G004MDK51] Hauptstrom Getriebe
- [=G004MDK54] Rotorarretierung Ant
- [=G004MDK55] Rotordrehvorrichtung
- [=G004MDK56] Kühlsystem Antriebs
- [=G004MDL] Azimutsystem / Yaw System



Yearly security check Line 1/ST11-AK331 [1ST00

Task description	Yearly security check Line 1/ST11-AK331 [1ST001]		
Task number	WO180450323	Category	Safety
Date due	CW 18/2018	In charge	Marc Menzie
Start date	25.05.2018 08:00	Responsible	Tom Walters [P010]
Frequency	every 52. week on Montag (after execution)		

Name	ST11-AK331		
Staff			
	Personalnummer	Staff	Reservations
Maintenance	P010	Tom Walters	25.05.2018 08:00-25.05.2018 10:30

[Stamp] Line 1/ST11-AK331 [1ST001]

- ☒ Corrosion
- ☐ Screw loose
- ☐ Weathering
- ☐ abnormal noises
- ☒ paint damages

Functional check safety door on: 23.05.2018

OK Yes ☒ / No ☐

Functional check emergency switch on: 23.05.2018

OK Yes ☒ / No ☐

Optical check of electric connections on: 23.05.2018

OK Yes ☒ / No ☐

Functional inspection thickness measuring on: 23.05.2018

Completed: Yes ☒ / No ☐

Record operating hours Completed: Yes ☒ / No ☐

Current total operating hours 5874 h

Result of the inspection Completed: Yes ☒ / No ☐

Approval passed?

well passed
scrape passed
not passed

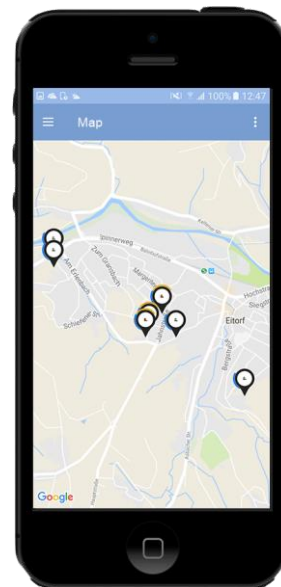
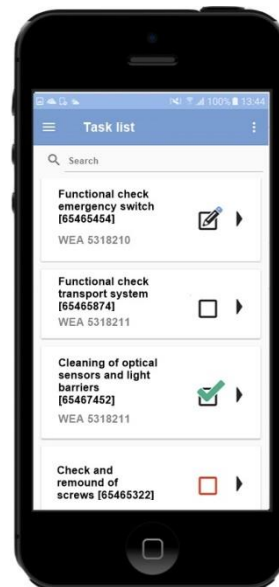
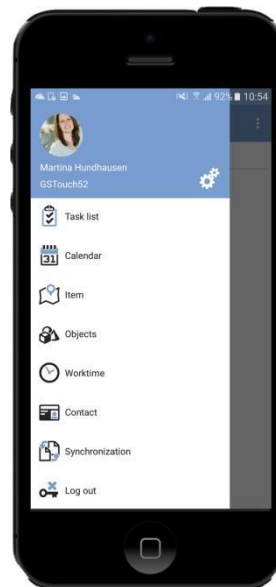


tem for Power Plants

Materialbuchungen		Arbeitszeit	Messungen/Zähler
Suchen			
	Objekt		
	[=G017] Windenergieanlage 17 / ...		
UMD82] Monopile G	[=G012UMD82] Monopile Gründ...		
	[=G002] Windenergieanlage 2 / ...		
	[=G080] Windenergieanlage 80 / ...		
	[=G011Y] Kommunikations- und I...		
	[=G031] Windenergieanlage 31 / ...		
7	[=G077] Windenergieanlage 77 / ...		
	[=G039] Windenergieanlage 39 / ...		
	[=G007MSE] Umrichtersystem / ...		
	[=G017MSE] Umrichtersystem / ...		
Anlagensteuerung	[=G017MDY10] Anlagensteuerun...		
2	[=G012] Windenergieanlage 12 / ...		
ind turbine 4	[=G046] Windenergieanlage 46 / ...		
ge 2 / Wind tu	[=G002] Windenergieanlage 2 / ...		
	[=G067] Windenergieanlage 67 / ...		
	[=G053] Windenergieanlage 53 / ...		
	[=G045] Windenergieanlage 45 / ...		
	[=G049] Windenergieanlage 49 / ...		
	[=G080UMD82FR001-FR001] Ak...		

2. Windfarm Management O&M

Mobile devices



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3. Permit Management - HSE Certificates

**First
Aid**



**Medical
Fitness**



**Basic
Safety**



**Fire
fighting**



**Sea
survival**



**Site
induction**



**Electrical
Safety**



**Radio
admission**



**Rescue
From
Height**



**Helicopter
Underwater
Escape
Training**



Durchführer

3. Permit Management - HSE Certificates

Overview of the about to expire information



	Person	Permit	First aid	Sea Survival	BOSIET	Rescue Hight
	Joseph Meier	expired	01.04.2019	08.12.2020		
	Paul Technik	shortly expiry	30.09.2019		08.12.2020	
	Werner Schmidt	before expiry	05.12.2019	07.01.2021		
	Rainer Müller	valid	08.09.2020	01.12.2020		04.12.2020
	Hans Schneider	valid	15.11.2020		11.11.2020	



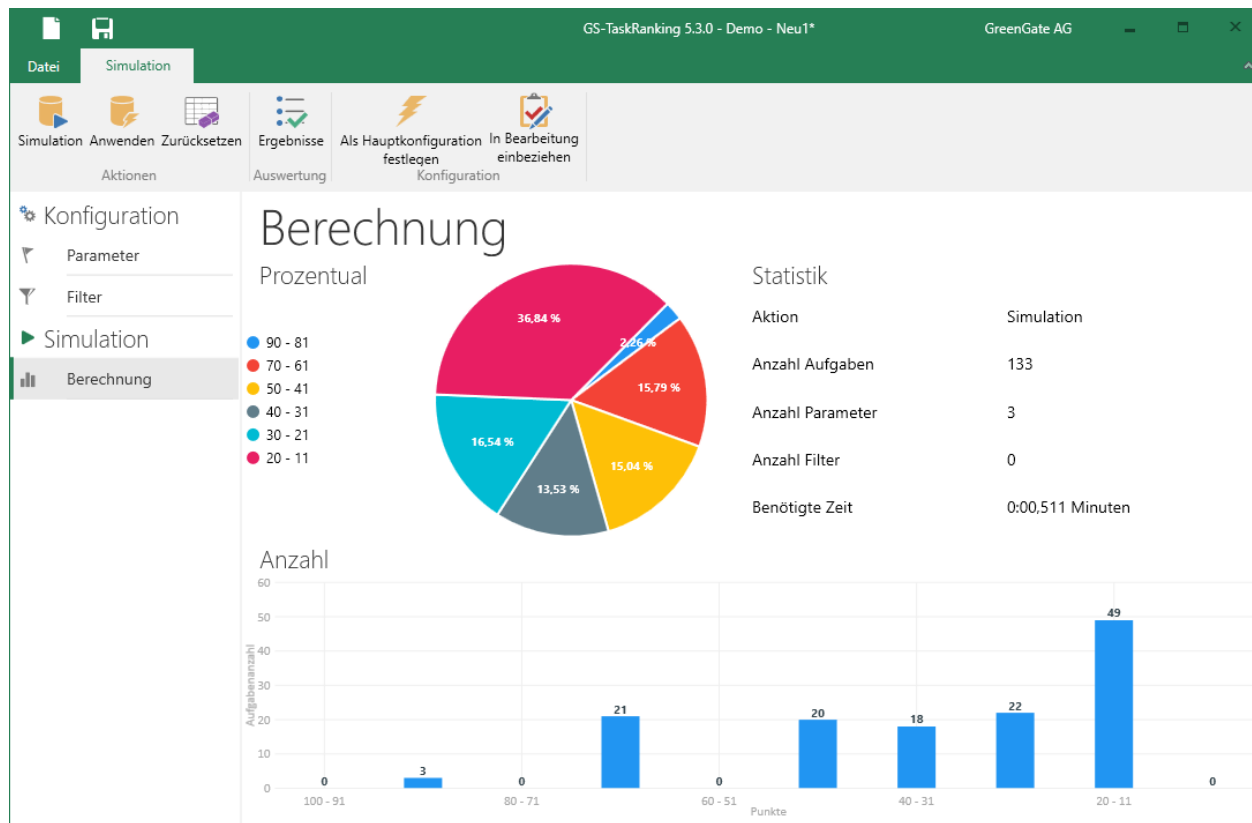


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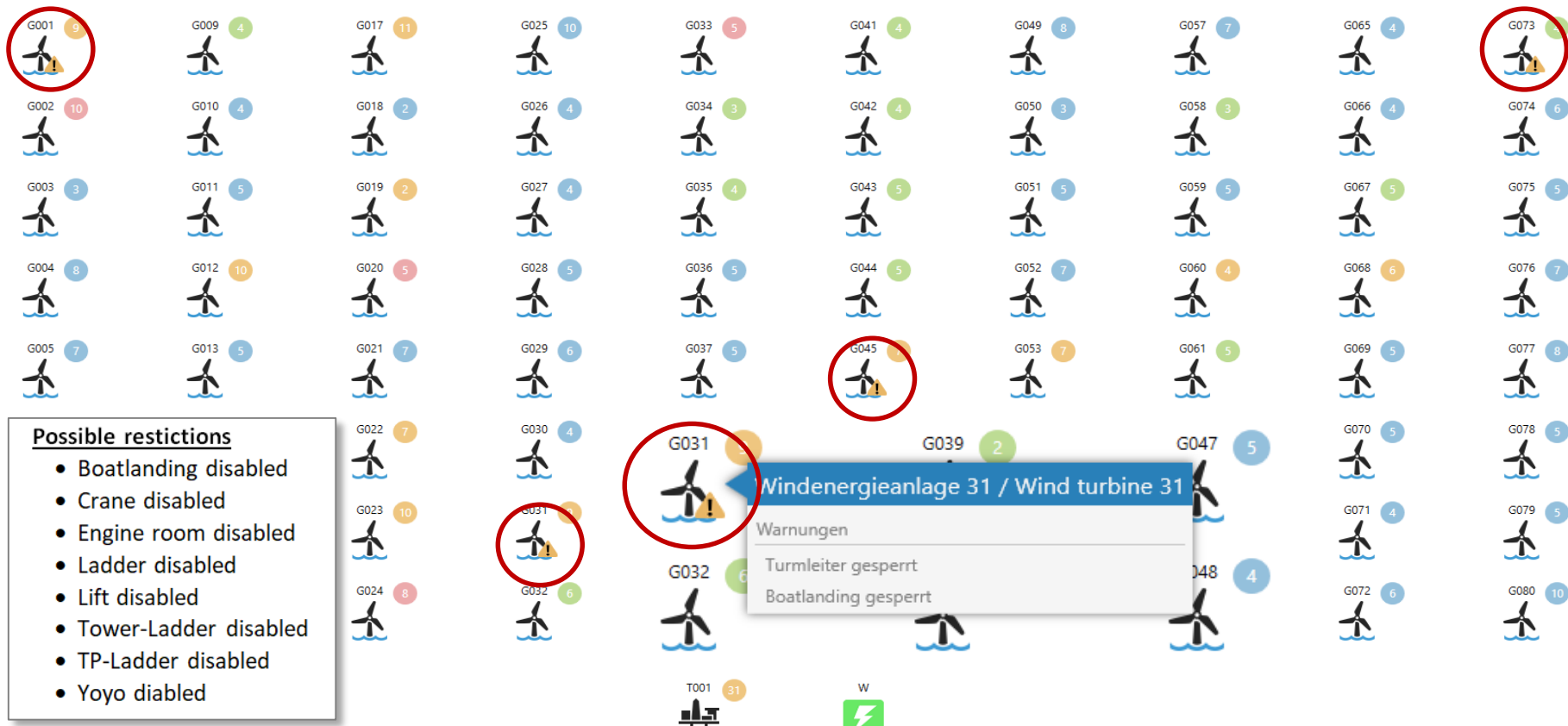


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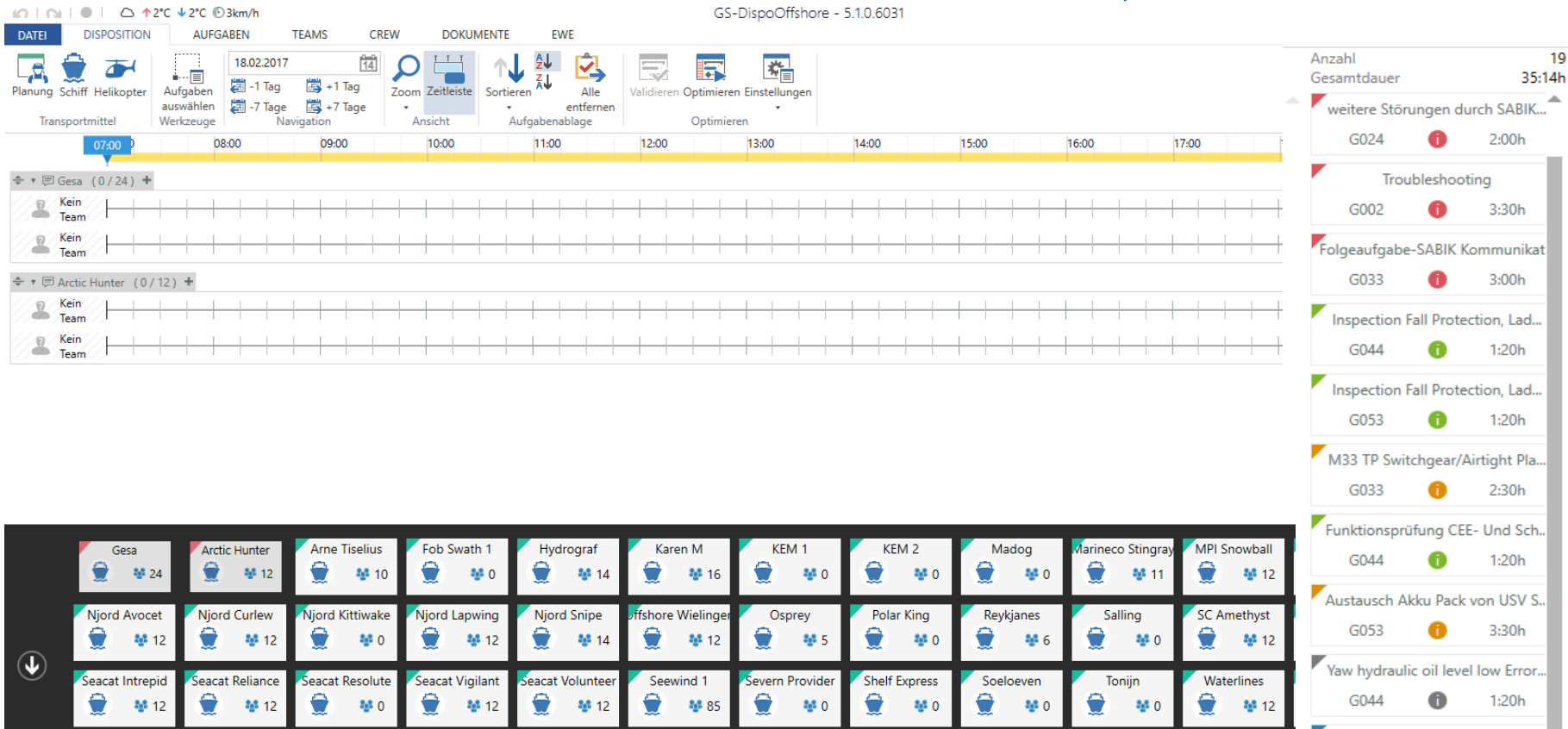
4. Offshore Deployment Tool



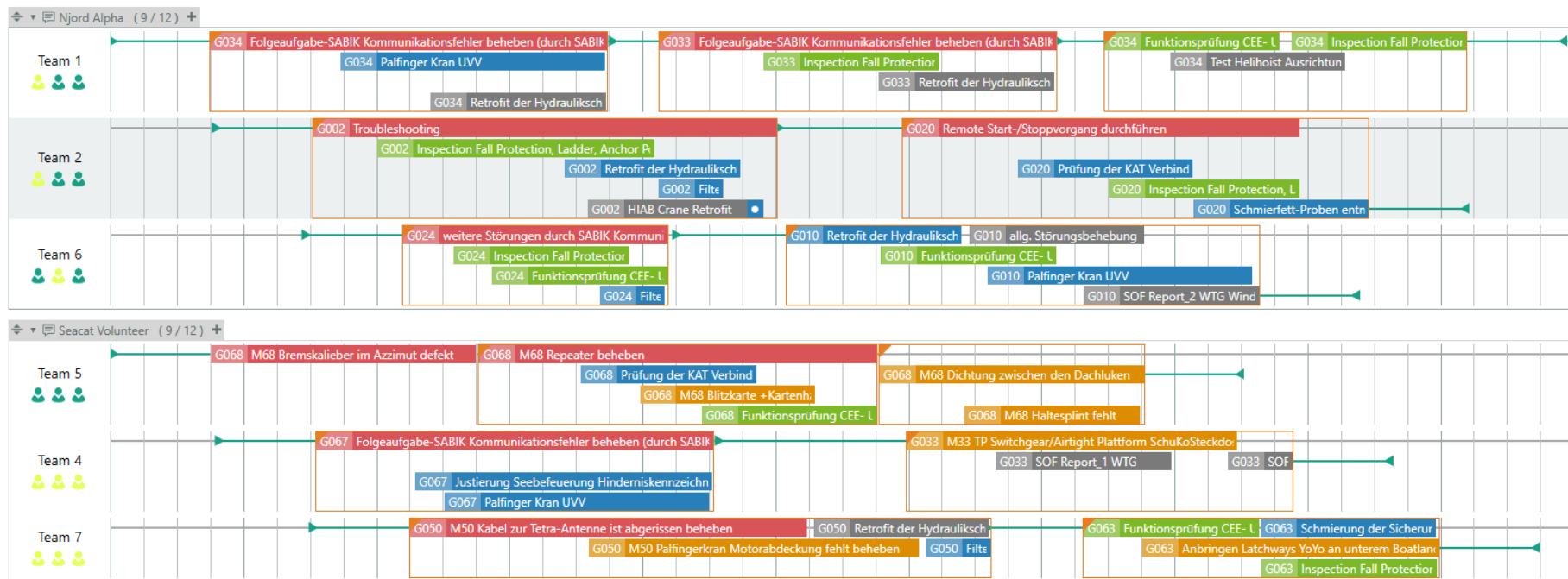
4. Offshore Deployment Tool



4. Offshore Deployment Tool



4. Offshore Deployment Tool



Durchführer

4. Offshore Deployment Tool

GS-Peopletracking



DATEI Überwachung Auswertung Bericht

Aktualisieren Vergrößern Verkleinern

Person suchen • Abbrechen

Eintrag hinzufügen

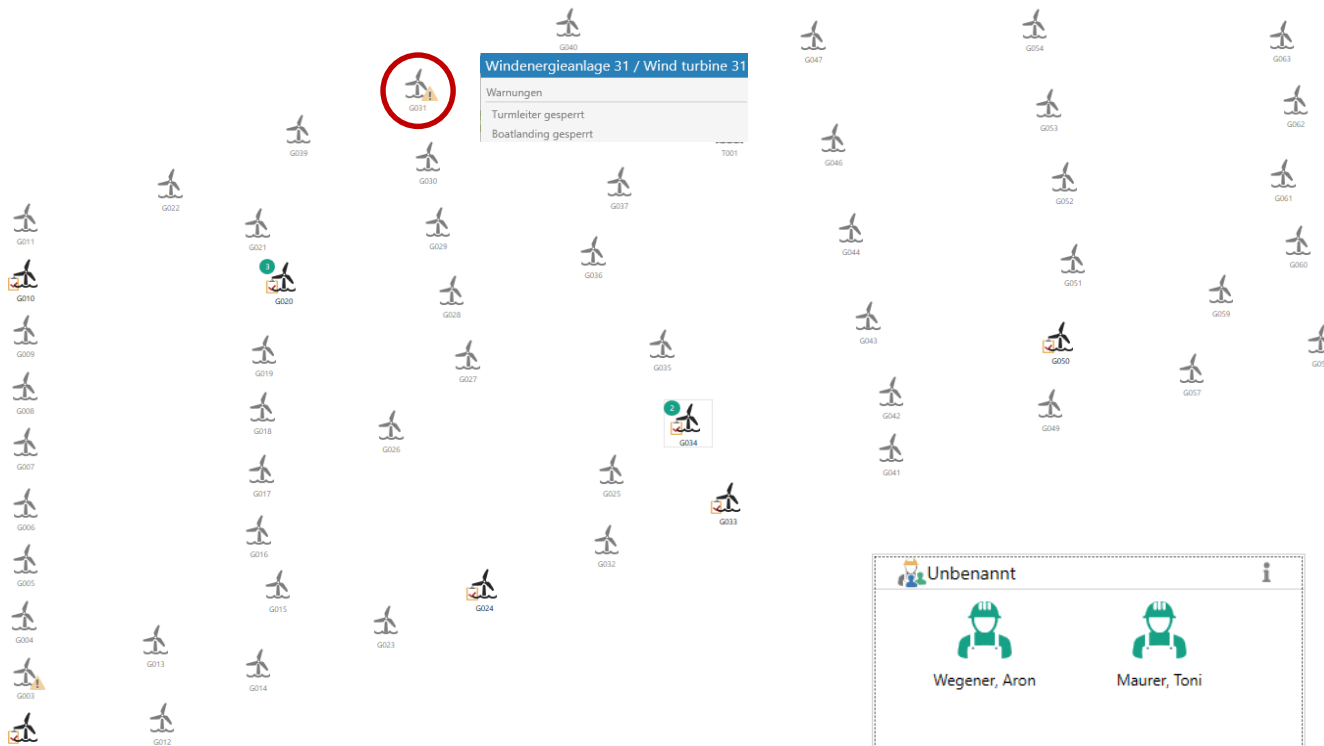
Arne Tiselius



Gesa

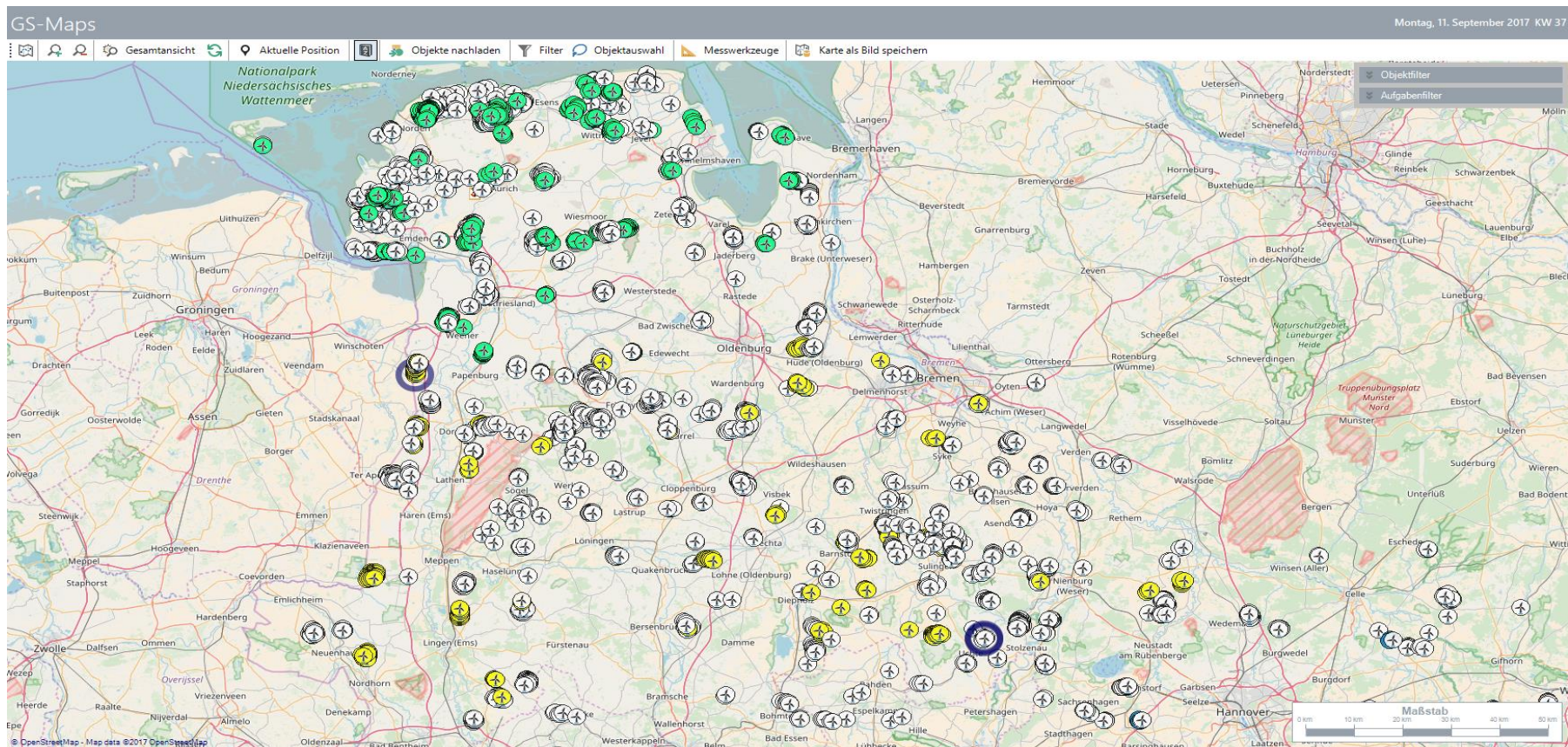


Sea Gale

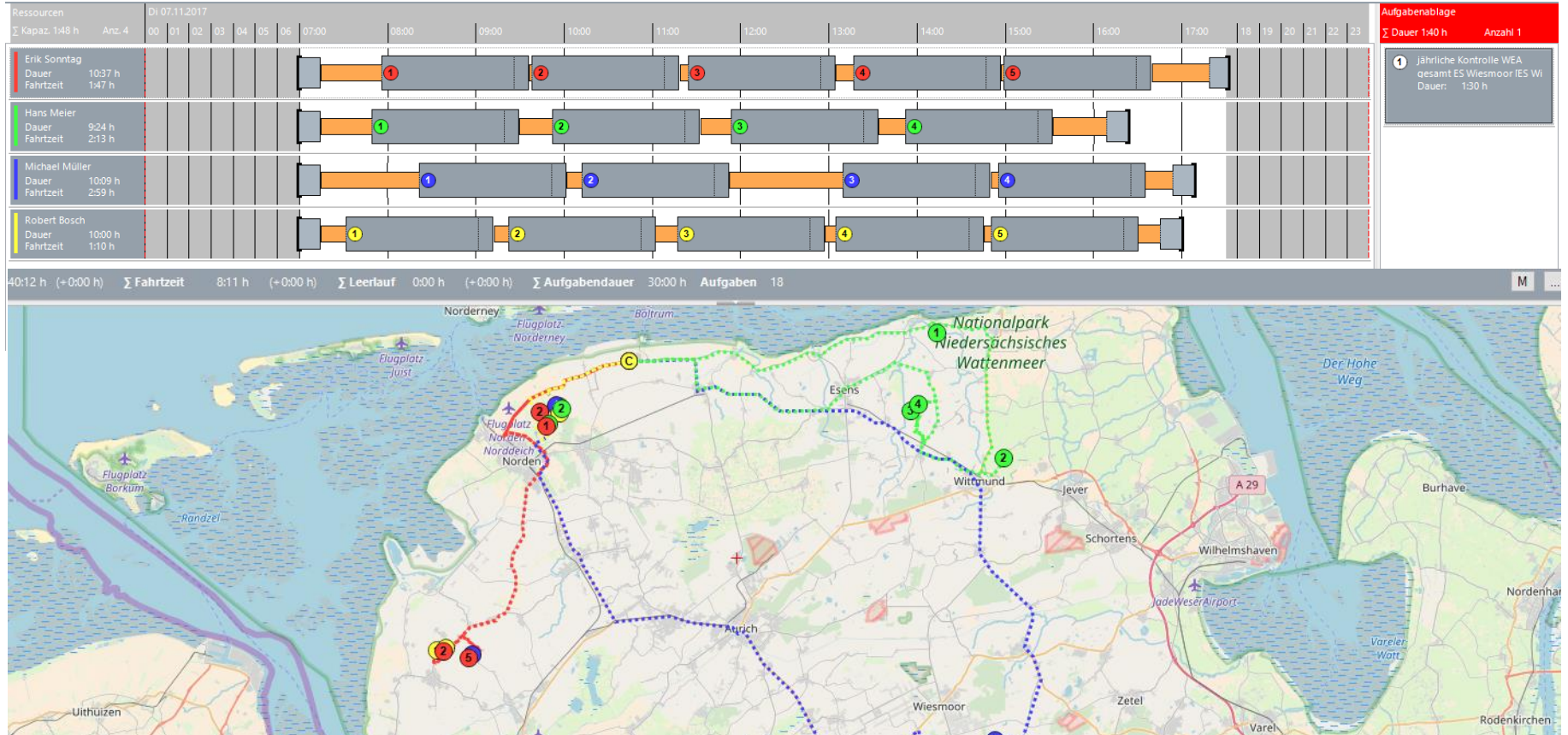


13:33 12.9.2017 UTC	Stephan	Gesa	G037
13:33 12.9.2017 UTC	Matthias	Gesa	G033
13:33 12.9.2017 UTC	Alexander	Gesa	G033
13:33 12.9.2017 UTC	Victor	Gesa	G033
13:33 12.9.2017 UTC	Gesa	Position: Stephan -> Windpark	
13:33 12.9.2017 UTC	Gesa	Position: Matthias -> Windpark	
13:33 12.9.2017 UTC	Gesa	Position: Alexander -> Windpark	
13:33 12.9.2017 UTC	Gesa	Position: Victor -> Windpark	

4. Onshore Deployment Tool



4. Onshore Deployment Tool



Summary



- GS-Service enables operators and service providers to manage their **assets, tools** and **employees**
- Optimizes **warehouse** management
- Management of **security certificates** of technicians
- Simple and clear team **deployment**
- Generate **evaluations** and reports

**Thank you
for your attention
and interest**



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Software for On-/Offshore Windfarms**



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