

Security Challenges ZF Group

Sascha Teifke | Corporate Security (GS) | Governance

Key Figures Locations

Worldwide Presence – Production, Development, Sales and Service

230 Locations in 40 countries

20 Main development locations in 8 countries

120 Service locations

Over 650 service partners worldwide



Key Figures Overview ZF Group

ZF Group 2016

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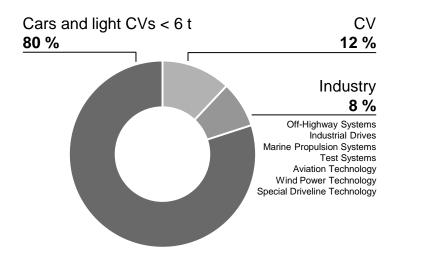
Sales	€ 35,166 million
Employees (end of the year)	136,820
Investments in property, plant and equipment	€ 1,185 million
Research and development (R&D)	€ 1,948 million

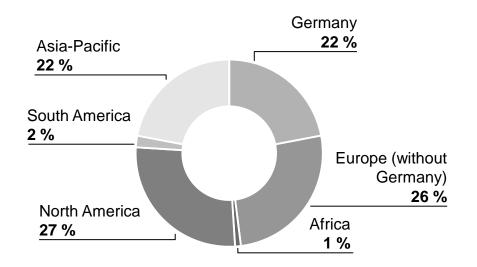


Facts & Figures ZF Group

Key Figures Sales by Branches and Regions

Sales distribution in 2016





ZF Group: € 35,166 million

Facts & Figures ZF Group

Key Figures Research and Development

A Brief Profile on 2016

Patent applications:

1,200 ZF is one of the top ten patent applicants in Germany

Internal invention disclosures: Approx. 1,720

Main development locations: 20 in 8 countries

Expenses: € 2 billion

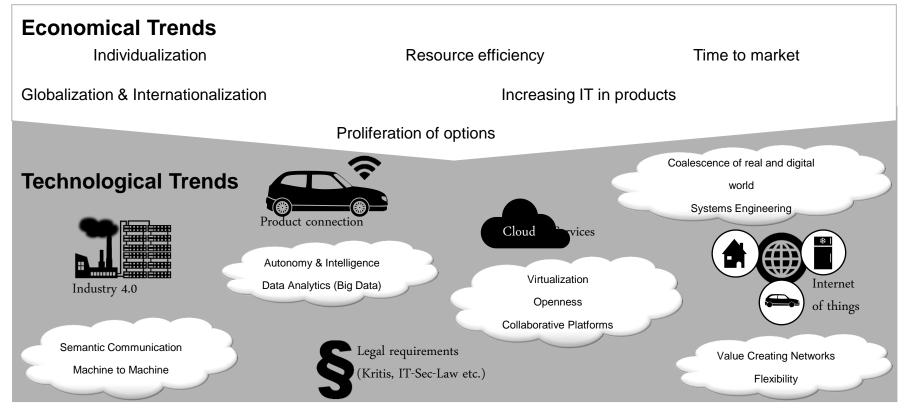
Employees:

worldwide 14,550 of which approximately 1,600 work in Corporate Research & Development at the locations in Friedrichshafen, Pilsen (Czech Republic), Shanghai (China), Tokyo (Japan) and Northville (USA)

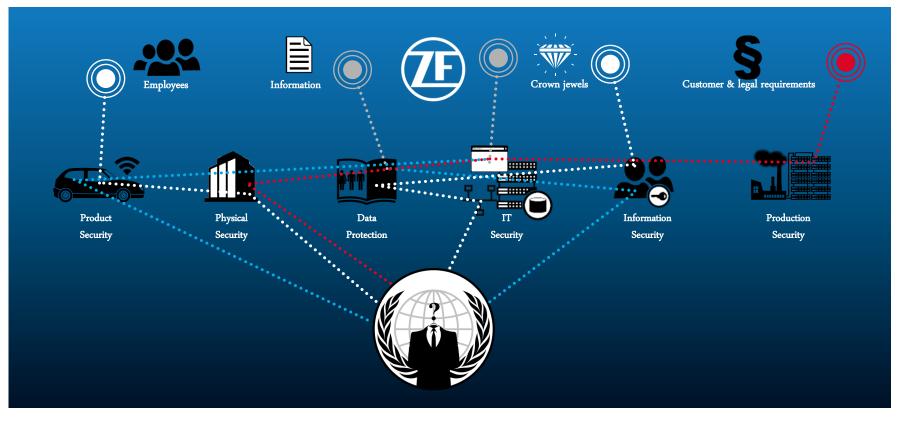


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Challenges for ZF in the context of security ZF's business environment: Global determining trends



PLEASE INSERT CLASSIFICATION HERE Multidisciplinary Challenges require multidisciplinary approach



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Crisis Management / Business Security Our mission





Main task protect employees, real estate and other corporate property against **physical threats** by

- implementing adequate measures to reduce security relevant risks
- increasing the safety of people and materials
- enabling a fast and effective reaction in cases of damage occurrences

Crisis Management / Business Security Departments and Tasks

(A) Crisis and Incident/ Emergency Mgt.	Operation of the ZF Group Security Situation Center Operation of the 24/7/365 Emergency and Incident Reporting Hotline: ZF Helpline Responsibility for the readiness of the ZF Group Crisis Management (Organization, Procedures (SOPs), Handbooks, etc.)	
Travel- & Expat Risk Mgt.	 Define and implement Travel- and Expat risk management processes and policies Individual Risk assessment and organization of security measures for business trips (e.g. training, transportation) Individual Support for international transfers (e.g. training, consulting regarding means of accommodation) 	
Physical and Personnel Security	 Define Physical and Personnel Security standards, processes as well as Best Practice Implementation Guideline Realization of measure to protect board members and other personnel exposed to threats Security Audits/Site Assessments, especially for high risk assets 	
Supply Chain Security Mgt.	 Liaison person between Business Security and Supply Chain Management Departments Define and implement security related processes and measures to meet the requirements of supply chain related programs like Known Consignor, AEO-F, and C-TPAT. Audits & Assessments to assure sustainable implementation Assessment of security risks related to Supply Chain Security Management 	

Corporate Security Risk Categories

Political risks

War, terrorism, coup, civil unrest, demonstrations, political arrests



Natural disasters

Flooding, storm, earthquake, heat wave or cold spell, forest fires, volcanic eruptions



Accidents & medical risks

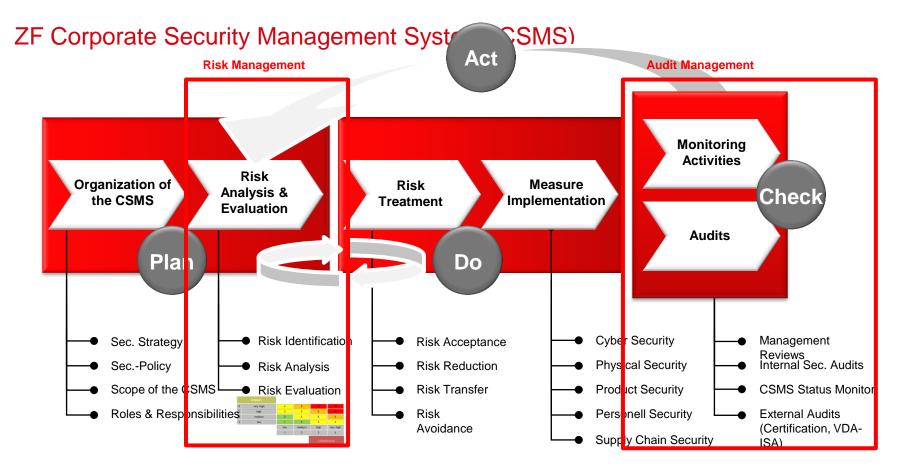
Airplane crashes, traffic & industrial accidents with severely injured persons or fatalities, epidemics, pandemics, large fires, accidents involving hazardous substances



Crime

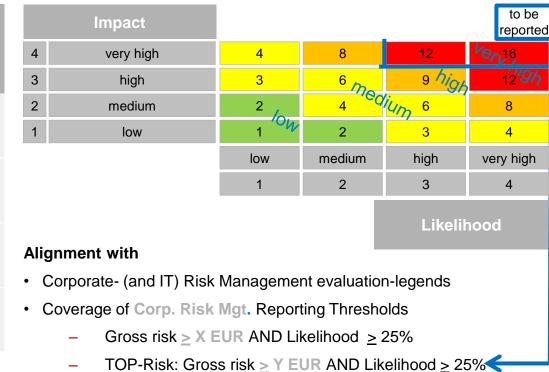
Cyber Crime, Threat, fraud, theft, corruption, kidnapping, blackmail, hostage-taking, armed robbery, homicide





Corporate Security risk reporting to Corporate Risk Mgt.

Corporate Security Risk Matrix	Likelihood	Impact
1 low	rare ≤ 1 occurrence in 10 years (≤ 10 %)*	minor < 100.000 EUR
2 medium	possible > 1 occurrence in 10 years (> 10 %)*	moderate < 500.000 EUR
3 high	most likely ≥ 1 occurrence in 4 years (≥ 25 %)*	severe ≥ 500.000 EUR
4 very high	will happen ≥ 1 occurrence per year (≥ 90 %)*	fundamental ≥ 1.000.000 EUR



* corresponding values acc. to Corporate Risk Management method

Natural disasters, adverse weather, political unrest, cargo theft – many disruptions with potential to harm

DHL Resilience360 is a cloud-based platform that helps companies manage these risks by mapping their end-to-end supply chain, building risk profiles and identifying critical hotspots, to ultimately initiate mitigation activities. In near-real time, the solution provides alerts on incidents that could harm employees disrupt the supply chain. With this new risk management tool, Deutsche Post DHL supports both small and large companies in maintaining and protecting their employees and business operations.





Risk Assessment

Rates your supply chain risks and resiliency, identifies risk hot spots and recommends suitable mitigations



Incident Monitoring

Monitors your supply chain 24/7 for incidents, determines your impact, filters relevant information and triggers follow-up

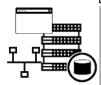


Risk Response

24/7 Risk Control Towers monitors your supply chain business continuity, highlights existing gaps and implements efficient mitigation actions

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DHL Resilience360 usage in ZF corporate security





ZF Objectives

- Ensure the safe, secure and reliable operation of a network spanning more than 240 operating locations in 40 countries
- Obtain accurate, timely information on risks and disruptive events from reliable sources
- Allow the in-house security to team to focus their monitoring, risk mitigation and management activities on the most relevant incidents and locations

R360 Solution

- Resilience360 Risk
 Management tools support
 ZF's internal risk and threat
 assessment activities and
 aid strategic supply
 management efforts
- Near real-time incident monitoring provides accurate, timely information on disruptive events and the sites, products and personnel affected







Brussels attacks – March 2016

1. Attack at BRU 8:00am - 8:30am 2. Attack on Maelbeek Station About 9:30 am

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3. Ongoing security operations throughout the day

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ZF incident management:

- Reached out to all personnel in the region to ensure safety quickly identified two employees near incident locations
- Using R360 mapping capabilities, ZF team pinpointed the position of personnel & evaluated optimal mitigation strategy
- Real-time traffic monitoring combined with incident alerts provided detailed information needed to manage a complex situation in Belgium from Germany



12:33pm: Authorities carry out controlled explosion along Rue de La Loi, Brussels

3:21pm: Operations continue at Berlaymont after reports of evacuation.

2) es-Midi Berckmans

8:28am: Passengers evacuated after smoke seen coming from terminal building
8:30am: The airport has been evacuated after two explosions; cause unknown.
8:42am: Flights being diverted, airport in lockdown

8:21am: There are reports of a possible

explosion and smoke at Brussels Airport.

Diegem

10:05am: At least 13 killed and 35 others injured in two explosions.

9:31am: There are reports of an explosion at the Maelbeek Metro Station 10:10am: At least one injured in bombing at

> the metro station. **10:28am:** Up to 10 killed in bombing at the

Maelbeek Metro Station **12:17pm:** Official reports 15 people killed, 55 injured from explosion. Wezemb Opper

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Thank you

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