Association of European Businesses

# Health & safety practices in Russia: tips from professionals

## 2 Junly 2014

## AEB OFFICE

Association of European Businesses

# Konstantin von Vietinghoff-Scheel

## Chair of Health & Safety Sub-Committee, Corporate Counselling Services

## *WELCOME ADDRESS*

**Health & safety practices in Russia: tips from professionals, 2 JULY 2014, MOSCOW**

# Kirill Katalevsky

## EHS Group Director, SAINT-GOBAIN Russia & CIS

## *Learning from the incidents: case study*


# Saint-Gobain in CIS

May, 2014

SAINT-GOBAIN

# Saint-Gobain in CIS

Net sales 2014: **> 400 m€**

21 companies (incl. 3 dormant cies)

**8** industrial sites in CIS

Employees by end 2014 : **3200**

**Moscow, LeFort**
**Headquarter Delegation in CIS**

ISOVER SAINT-GOBAIN
Gyproc SAINT-GOBAIN
weber SAINT-GOBAIN
vetonit
Ecophon SAINT-GOBAIN
PAM SAINT-GOBAIN
CertainTeed SAINT-GOBAIN
SHEERFILL
verallia
clipper
QUANTUM GLASS SAINT-GOBAIN
LINEROCK ТЕХНОЛОГИИ ЭНЕРГОСБЕРЕЖЕНИЯ

# Saint-Gobain in CIS

**Innovative materials**
-flat &automotive glass
-abrasives
-plastics and fabrics

**Construction Products**
-insulation
-plasterboards
-pipes
-mortars
-siding&roofing

**Packaging Sector**
-glass bottles & jars for the food industry.

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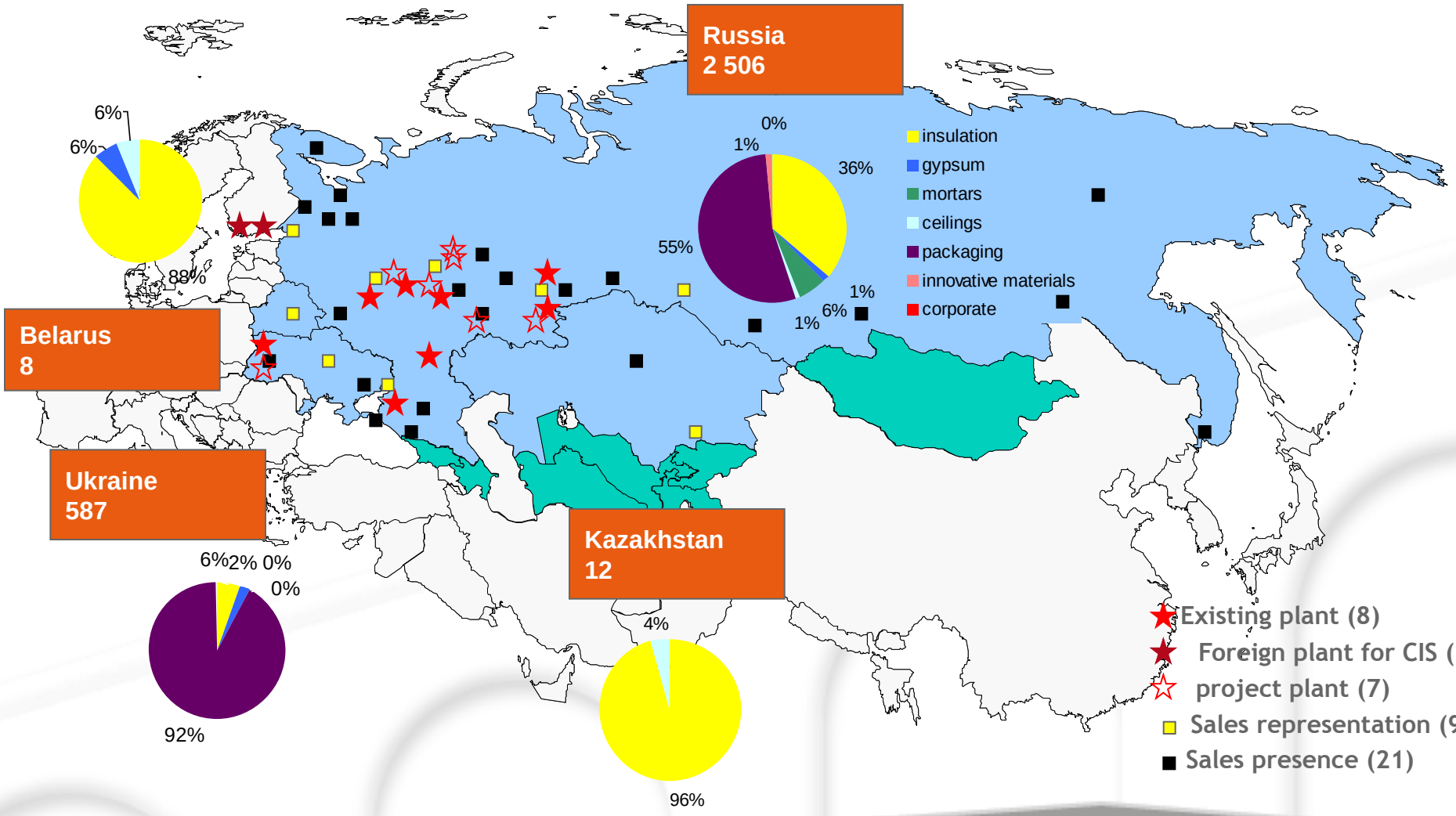
# Our presence in the region

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# Industrial footprint today

Existing plant (8)

project plant (8)

Podolsk Mortars

Gomzovo Gypsum

Polevskoe Mortars

Arzamas Mortars

Yegorievsk Insulation

Moscow Mortars

Chelyabinsk Insulation

Kamyshin Verallia

Zorya Verallia

Kavminstkelo Verallia



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# Few examples of projects

Russia, Moscow City

Russia, Kazan Tennis Academy

Ukraine, Kiev
Medical-rehabilitation center

Russia, Krasnogorsk
Skiing complex

Belarus, Minsk City Library

Kazakhstan, Astana
Highwill Astana

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# ‘Habitat’ adding value to customers

1st active house

1st Training Center


Joint exhibitions

Sochi Olympics


Hotel chains

Joint specification works

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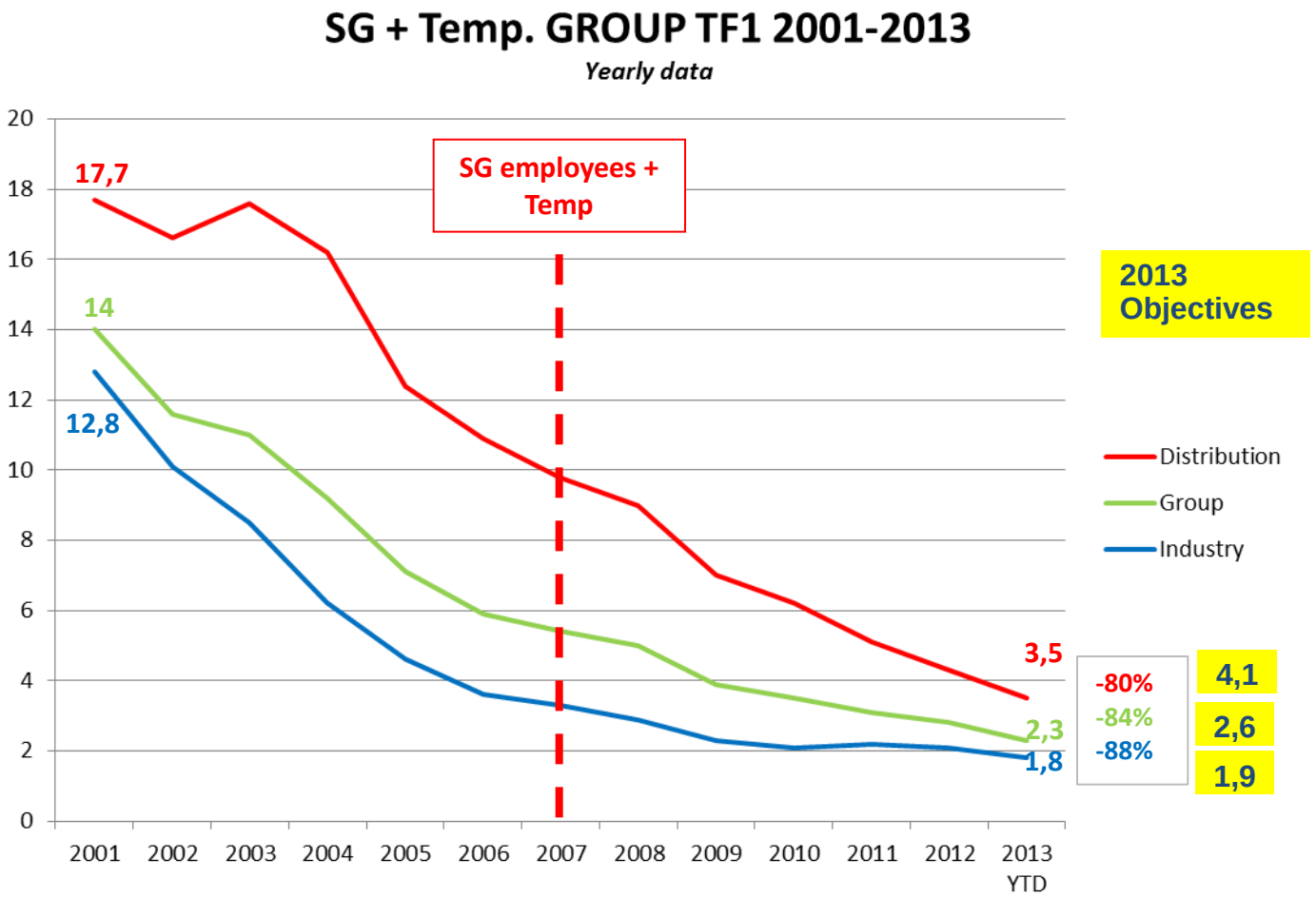
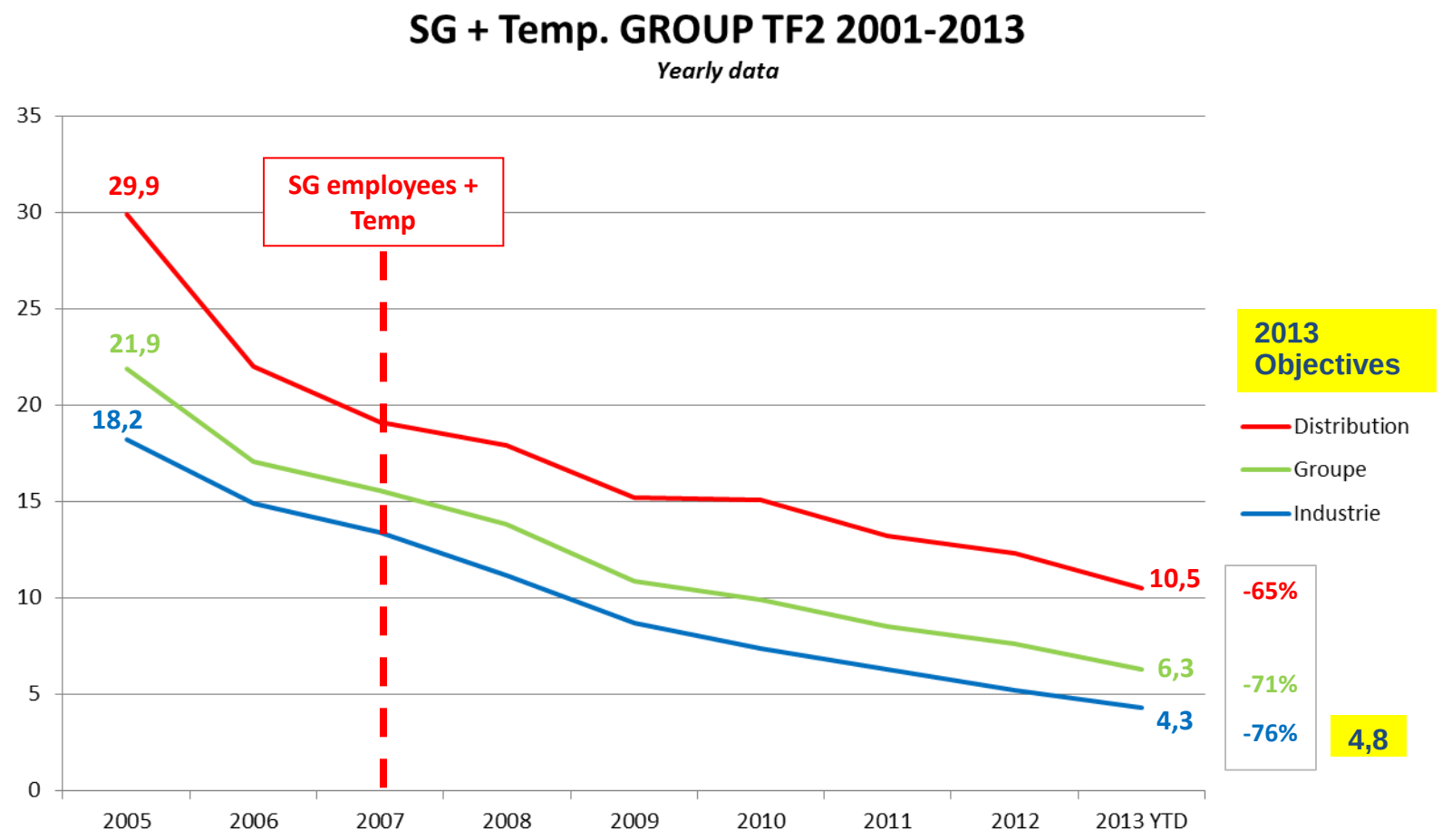
# LTA Reduction Dynamics



# NLTA Reduction Dynamics



# Conveyor Accident

## Lessons Learnt

**AEB, Moscow 2nd July 2014**

**Kirill Katalevsky, EHS Director Russia & CIS**

Placo - Rigips - British Gypsum - Gyproc - Certainteed - Decoustics - Ecophon - Eurocoustic

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# Objective

- To share learnings from a serious lost time accident happened at one of the SG Gypsum plants in Europe
- To understand what happened there and what the effect was on all the personnel involved
- To help you ensure that a similar incident could not happen in your business

# AGENDA

- Introduction
- Accident Description
- Root Cause Analysis
- Summary
- Questions and Comments

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# Works Manager's start of the day

# Work Manager's Start of the day

# Initial Description

- Normal production was running when an operator near the mixing area heard somebody screaming at the end of forming belt 1. An operator immediately went to the end of belt 1 and saw the injured person with the right arm squeezed between the tensioning drum and the forming belt. First aid measures were taken and ambulance was called. Production was stopped until initial investigation.

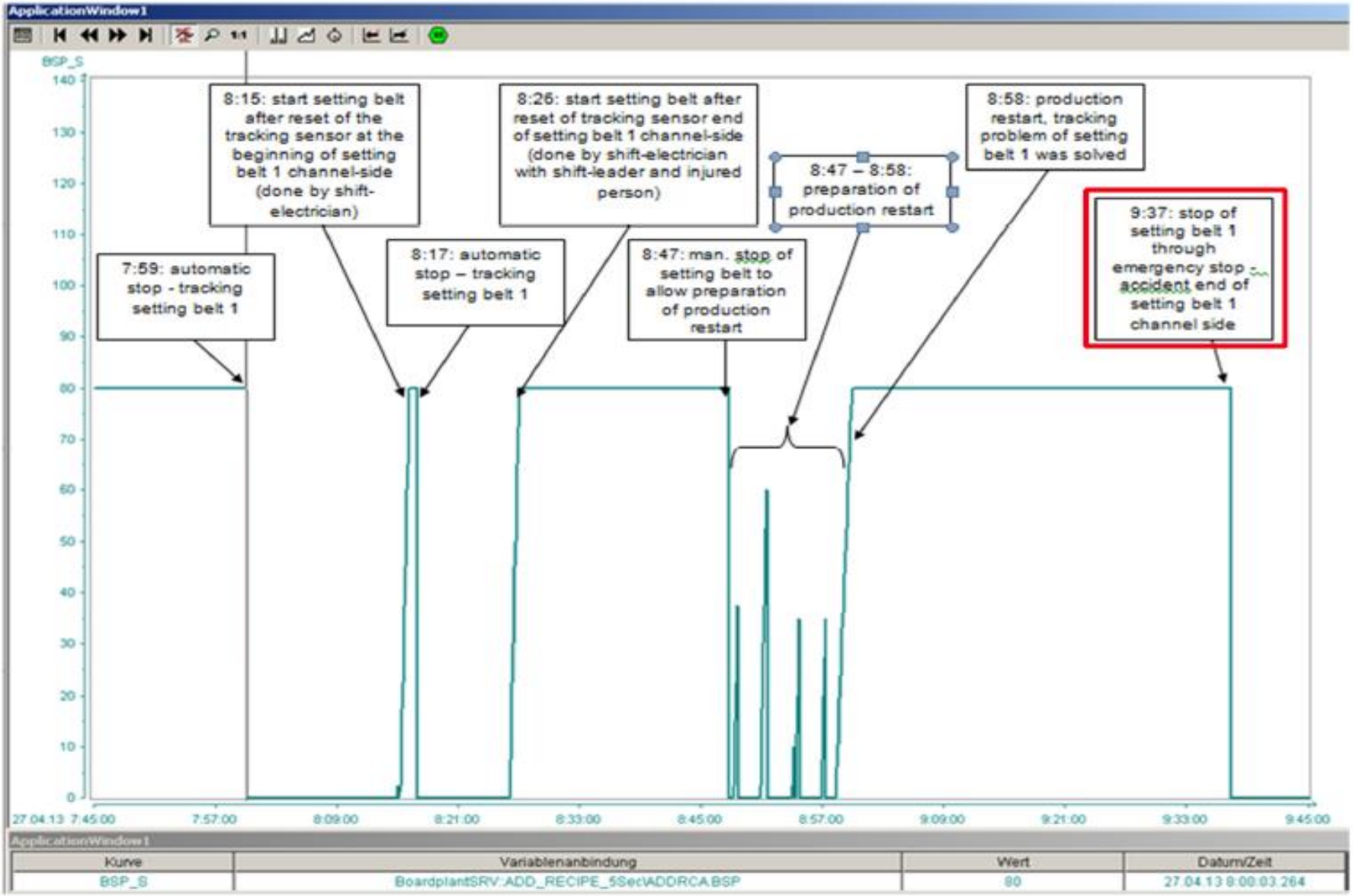
# Initial Description

- Medical treatment:
  First aid by plant (first aiders). Stabilisation of the injured employee by rescue team and fire brigade and decision of professional medicals to amputate arm

  First checks related to the incident:
  (with German safety authorities at 29/30th April)

# Reconstruction of the accident

# Event Log


ApplicationWindow1
BSP_S
8:15: start setting belt after reset of the tracking sensor at the beginning of setting belt 1 channel-side (done by shift-electrician)
8:26: start setting belt after reset of tracking sensor end of setting belt 1 channel-side (done by shift-electrician with shift-leader and injured person)
8:58: production restart, tracking problem of setting belt 1 was solved
8:47 – 8:58: preparation of production restart
9:37: stop of setting belt 1 through emergency stop - accident end of setting belt 1 channel side
7:59: automatic stop - tracking setting belt 1
8:17: automatic stop – tracking setting belt 1
8:47: man. stop of setting belt to allow preparation of production restart
140
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120
110
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27.04.13 7:45:00
7:57:00
8:09:00
8:21:00
8:33:00
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ApplicationWindow1
Kurve
Variablenanbindung
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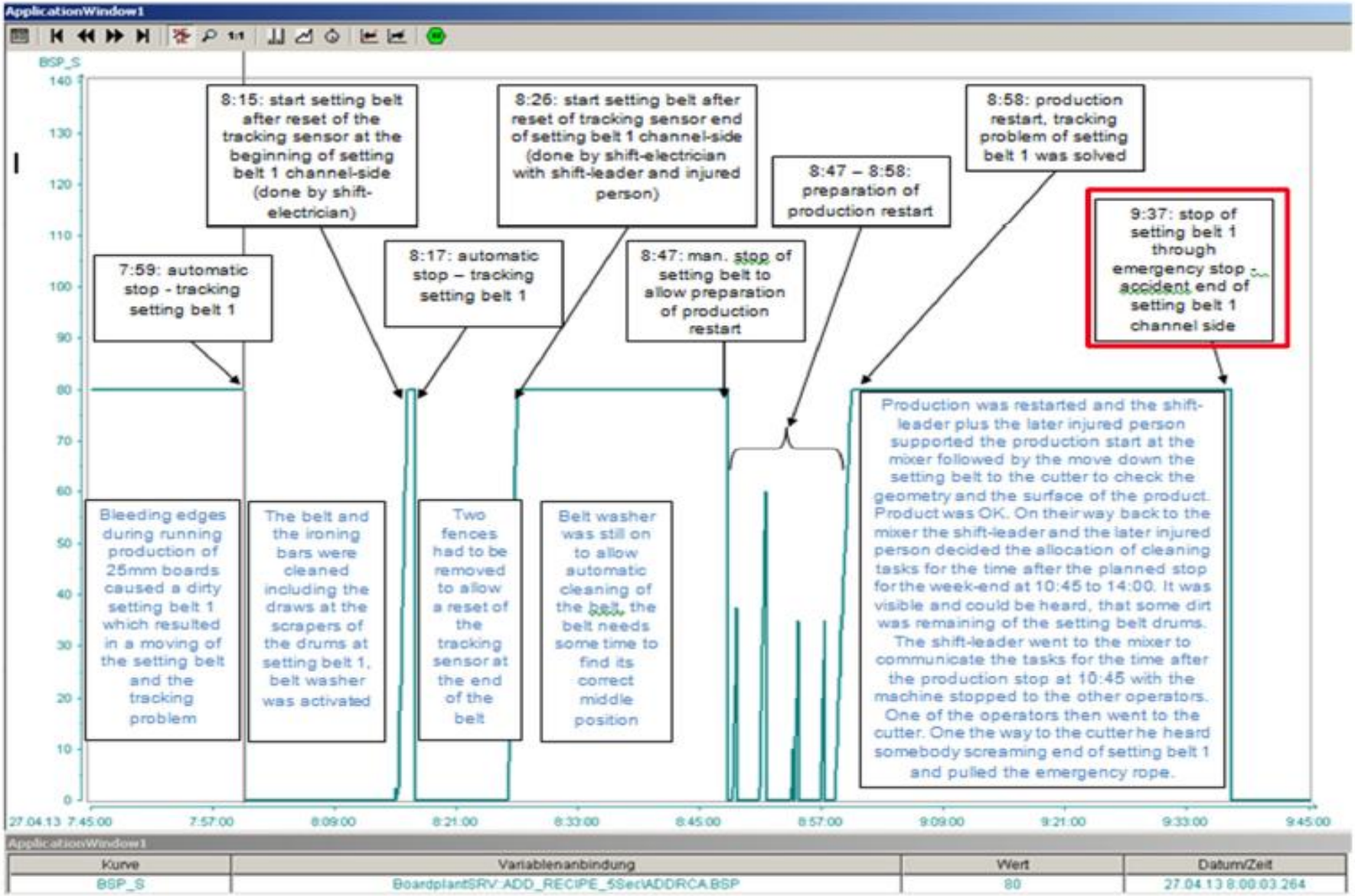
Datum/Zeit
BSP_S
BoardplantSRV:ADD_RECIPE_5Sec\ADDRCA.BSP
80
27.04.13 8:00:03.264

# Event Log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Bleeding edges during running production of 25mm boards caused a dirty setting belt 1 which resulted in a moving of the setting belt and the tracking problem
The belt and the ironing bars were cleaned including the draws at the scrapers of the drums at setting belt 1, belt washer was activated
Two fences had to be removed to allow a reset of the tracking sensor at the end of the belt
Belt washer was still on to allow automatic cleaning of the belt, the belt needs some time to find its correct middle position
Production was restarted and the shift-leader plus the later injured person supported the production start at the mixer followed by the move down the setting belt to the cutter to check the geometry and the surface of the product. Product was OK. On their way back to the mixer the shift-leader and the later injured person decided the allocation of cleaning tasks for the time after the planned stop for the week-end at 10:45 to 14:00. It was visible and could be heard, that some dirt was remaining of the setting belt drums. The shift-leader went to the mixer to communicate the tasks for the time after the production stop at 10:45 with the machine stopped to the other operators. One of the operators then went to the cutter. One the way to the cutter he heard somebody screaming end of setting belt 1 and pulled the emergency rope.
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# Injured Person

- 57 y, since 1996 working in production, co-shiftleader, qualification OK
- Technical education (craftsman) and on additional safety issues, OK
- Continuous safety training and instruction on regular basis (last instruction related to conveyors at Feb. 2012), OK

# Organization/Management

- Risk assessment for cleaning at rollers existing, OK
- Working procedure and RIS standard for roller station existing: R = Reinigung (cleaning), I = Inspektion (inspection), S = Schmierung (lubrication), OK
- LOTO procedure defined, OK
- Tagging system for irregularities existing, OK
- AM – Step 3, OK
- Check of emergency stops in place and checked on a regular basis (last check 2 weeks ago), OK

# Machinery

- Guarding fence construction at belt guiding (tension station), OK
- Emergency stop with rope along forming belt, OK
- Manufactures certificate (EU machinery directive) for the boardline from Grenzebach, OK

# Emergency Procedure

- Emergency plan in place and complete followed during incident, OK
- First aid intervention employees qualified on regular basis, OK

# Root Cause Analysis

- Production was restarted after the tracking problems without two fences at the tracking sensor remounted, operators were instructed by shift-leader to start the cleaning only after the machine stop for week-end (1:45 h later)
- The fence at the return drum of the tensioning system, where the accident happened, was not dismounted to reset the tracking sensor. It is unclear whether the fence was dismounted during production stop to clean or whether the injured person dismounted the fence during running machine. It is not possible to imagine how the accident should have happened with the fence on
- Inspection with the intention to clean with a scraper was performed at **the operating setting belt drum** without the fence mounted (see above, there is no evidence or witness to confirm that the fence was mounted)
- **Existing procedures and rules were broken with conscience!**

# Reconstruction of the accident

# Conveyor Incident

- Status of the Board Plant
  - Winner of Safety Trophy 2012
    - Highest Risk Reduction of WCM sites
  - Good
    - Safety
    - Customer Service
    - Yield
    - Availability
    - Quality
  - One of the ‘best’ in SG Gypsum Activity!

# Why Do We Take Risks?

- We all take risks
  - We drive cars
  - We cross the road
  - We play sports
  - We participate in ‘risky’ activities
- Why
  - because
    - We have to or
    - We want to
    - We don’t recognise the risk

# Simple Risk Taking Theory

- People can take a Risk if it seems attractive!
- Risks can be attractive if the **perceived** benefit is greater than the **perceived** risk
- The **perception** of risk and benefit differs from person to person
- If we are to prevent this type of incident happening again we have to change the employees **perception** of risk and benefit

# Conveyor Accident

- We may never know what thoughts our employee had in his mind!
- Here is a proposed example of what thoughts he could have had!

# Risk Perception Example

- **Perceived Risk -3**
- I am experienced
- I have run with guards off before
- Nothing has happened before
- Managers Not Here
- The team will not challenge me.
- Discipline risk unknown

- **Perceived Benefit +6**
- We need to see what is happening
- We have to check everything is OK
- We will be taking guards off in 2 hours for cleaning.
- A Scraper on a rotating roller is the easiest way to clean it.


# RISK PERCEPTION FLOW CHART

# Risk Perception Example
# What Could you Change?

- **Perceived Risk -3**
- I am experienced
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# Risk Perception Example

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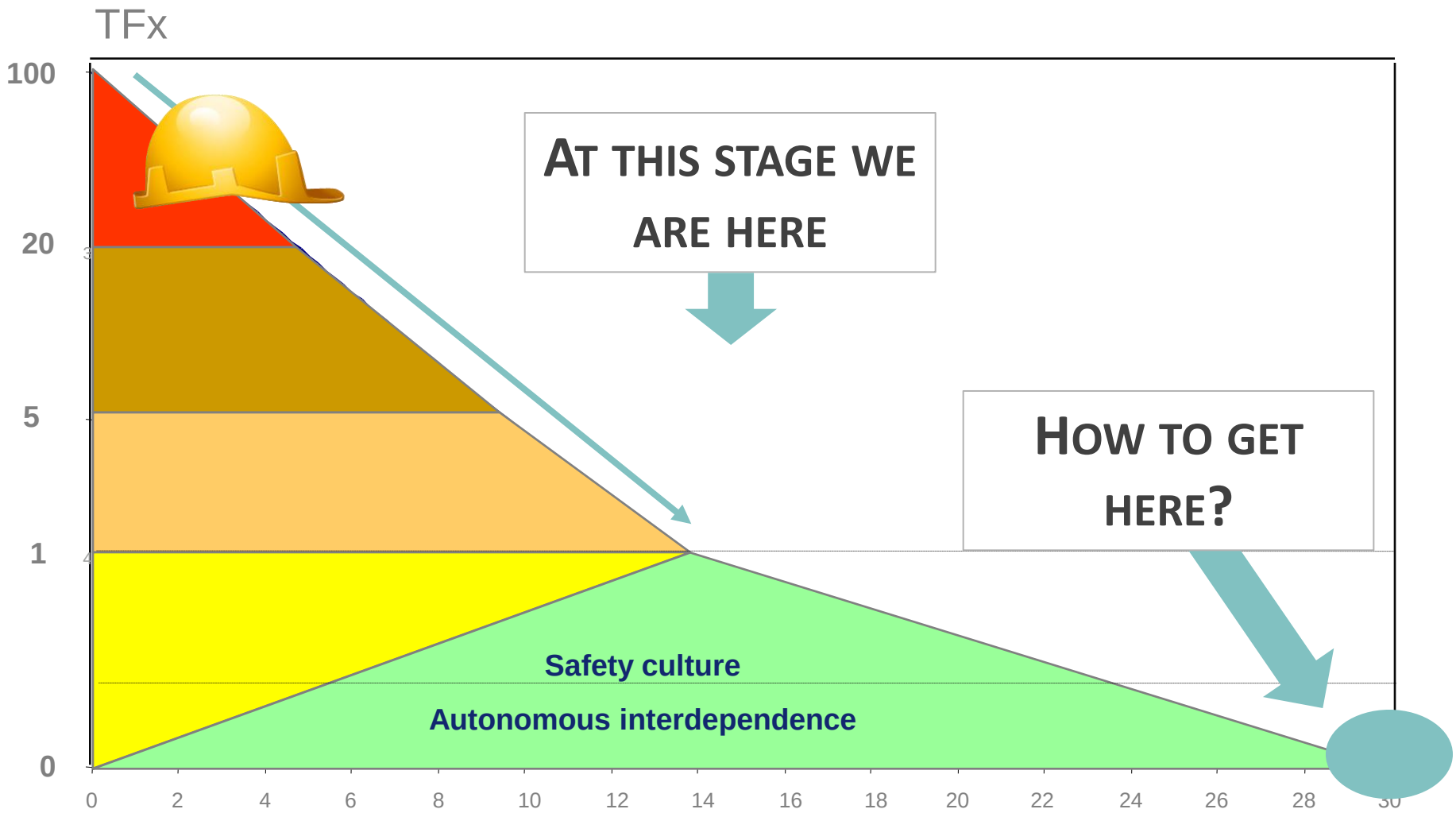
# Take Aways

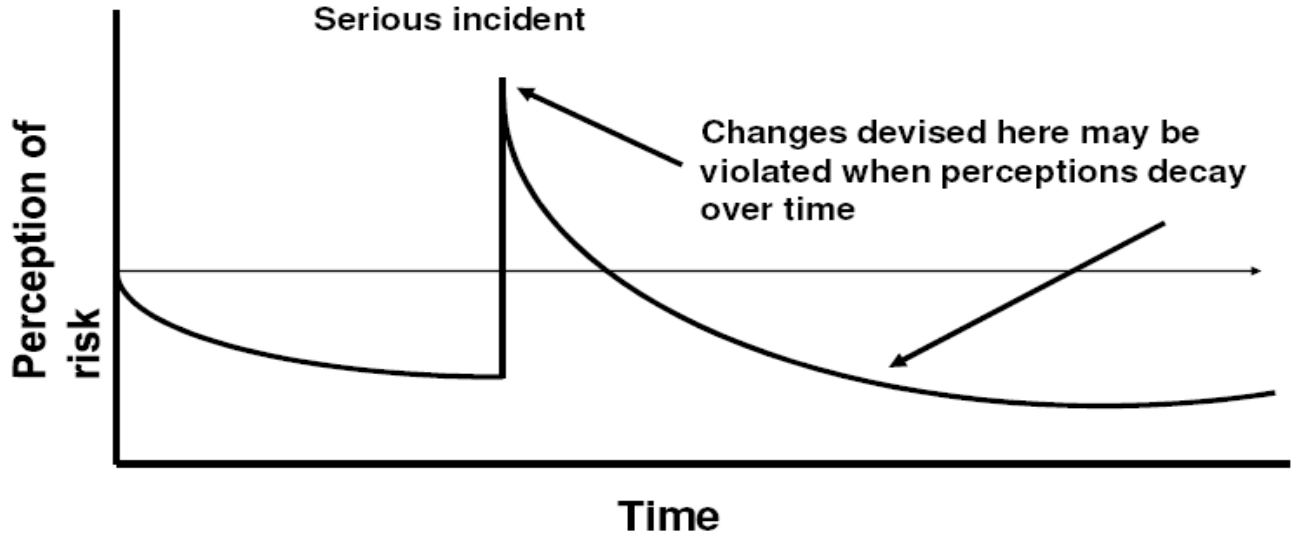
- We have a good Safety Culture
- We don't have a World Class Safety Culture
- People in our business are taking **'Attractive Risks'**
- We don't know **where, when, who** and **how often?**
- **The Challenge?**
  - **Sustain the Gains**

# EVOLUTION OF THE EHS MANAGEMENT SYSTEM



# Sustaining The Gains: Toughest Phase of the Journey?

- How effectively does the organization change over the long term?
- Does the organization require 'shocks' to facilitate change?




- These questions apply similarly to safety and to the wider strategic health of the firm

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# Take Aways

- Increase the Perception of Risks
- Decrease the Perception of Benefits
- How will you do this in your business?

# THANK YOU!

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# Elena Lopatova

## HR Generalist Russia and CIS, Hewlett-Packard

## *Wellness in HP: engaging, energizing, retaining*

**Health & safety practices in Russia: tips from professionals, 2 JULY 2014, MOSCOW**

Association of European Businesses

# Alexander Shtoulman

## General Director, Corporate Health

## *Mental health and risks for business*

**Health & safety practices in Russia: tips from professionals, 2 JULY 2014, MOSCOW**

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# Q&A