



# **DB Guidelines on Integrated Plant Protection Management**

## 2<sup>nd</sup> UIC International Workshop on Vegetation Management

### Paris, May 24 and 25, 2016

# The Three Guidelines on Integrated Plant Protection Management of Deutsche Bahn AG are fixed within the DB Directive 190.0101A50 since August 28, 2014



## 1 Introduction and Aim

## 2 Legal Frame

## 3 Common Principle of Weed Control at Deutsche Bahn AG in Germany

## 4 Guideline Weed Control for unsealed Areas

### 4.1 Description and Characterisation

### 4.2 Need of Weed Control Measures

### 4.3 Operation of Weed Control Measures in Terms of the EU-Guideline 2009/128/EG Appendix III

## 5 Guideline Weed Control for unsealed Areas

### 5.1 ...

...

## 6 Guideline Weed Control for Railway Tracks

### 6.1 ...

...

## Introduction

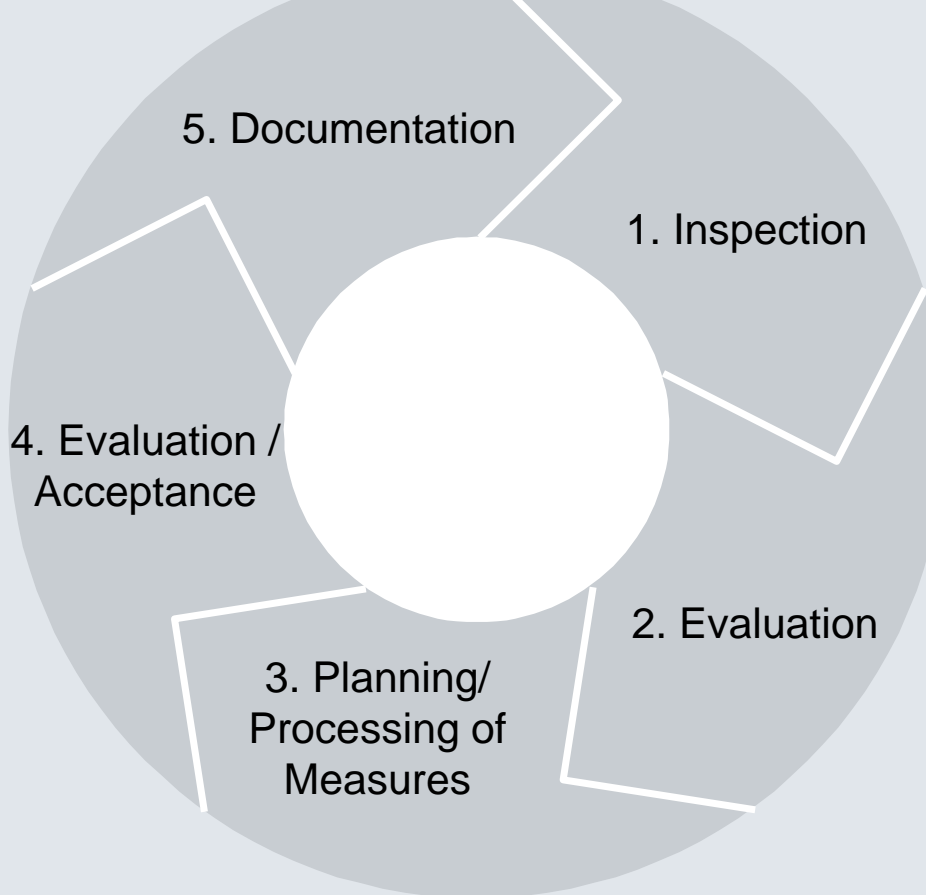
- Deutsche Bahn is one of the biggest land owners in Germany (approx. 1.100 km<sup>2</sup>):
  - Infrastructure Facilities like Railway Tracks, Railway Stations, Power Supply Facilities;
  - Areas, no longer used for Railway Transportation.
- Plant Cover may
  - have positive Effects e. g. Stabilisation of Embankments and Dams;
  - cause risks e. g. for a safe Railway Traffic/ opposite the safety of Third Parties;
- in general only Herbicide free Measures are used for Weed Control Reasons – exceptions are possible.

## Aims of DB

- establish a high transparency of Weed Control in Terms of the EU-Guideline 2009/128/EG beside an Agreement binding on the Contractors;
- contribute to the Aims of the National Action Plan for a sustainable Use of Plant Protection Products in Germany;
- underline its Role as a Pioneer in environmental Issues.

# Weed Control includes several Steps and is based on two German Laws: Railway Act and Civil Code

## The Workflow of Weed Control:



1. Inspection of Areas and Facilities in terms of Vegetation by DB Staff or Contractors
2. Evaluation in three Steps:
  - (1) Need of Weed Control Measures
  - (2) Determine the suitable Measure
  - (3) Consideration of recent Measures
3. Operative Planning (incl. Permissions) and Processing
4. Evaluation of Treatment/ Acceptance of Service by DB Staff
5. Documentation of processed Measures for future Planning and Communication Activities

# The Areas of DB in Germany are divided into three Sectors



## unsealed Areas



- all Areas without surface sealing outside the Railway Tracks like dams, embankments, incisions, rail triangles, forest areas, green lands, urban or other fallow lands, ...

## sealed Areas



- All Areas with sealed surfaces outside the Railway Tracks like water bounded surfaces, flagging, bitumen or concrete slab  
Example: duty stroke, walk paths, Parking places, storage areas, Platforms in Stations, emergency place, ...

## Railway Tracks



- Main Tracks of open lines (single or double track line);
- Main Tracks within platforms;
- Side Tracks within shunting yards or trans-shipment centre



# The Need of Processing Weed Control Measures is a Result out of the Demands from the different Areas

## unsealed Areas



- Underrun minimum distances of operational facilities, traffic areas, electrical installations, ...
- occupational health and safety
- Occurrence of Pest
- ...

## sealed Areas



- operational safety e. g. support structure
- safety to traffic e. g. within public walking paths und places
- operator protection and occupational health and safety
- Construction protection e. g. Tunnel portal
- ...

## Railway Tracks



- sighting distance
- occupational health and safety
- Track quality
- Frost instability
- Life span of railway tracks
- ...

# The Weed Control measures depend on the characteristic of the area treated

## unsealed Areas



- Mechanical measures like Mowing, Mulching, (Motor)saws, ...
- Thermal Measures like Infrared, ...
- in single cases **chemical Measures** like Herbicides against Giant Hogweed, Ambrosia e. g.
- Experimental stage: Cover with different materials

## sealed Areas



- Mechanical Measures like Mowing, Chipping, ...
- Thermal Measures like Infrared, Flaming, ...
- in single cases constructive Measures like low percentage of interstices in flagging areas, sealing the surfaces, ...
- ...

## Railway Tracks



- **Chemical Measures** with Spraying Train, Two-Way-Vehicle or Backpack Spraying

- Revise and update the Guidelines (in Process)
- Prove a Publication of the DB Guidelines within the National Action Plan of a sustainable Use of Plant Protection Products (NAP)
- continuously observation of the market concerning herbicide free measures
- Optimise Herbicide application by using GPS-/ Weed Detection Systems, because Herbicide free Measures will not be available for all Areas needed in the near future



Task: further Reduction of Herbicide Amounts



**Questions? At all Times - contact:**

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**Many Thanks for Your Attention**