



Railroad Safety Advisory Committee



Dark Territory Working Group Update

Presentation to The 45th Railroad Safety Advisory Committee Meeting

December 8, 2011
Washington, DC



Dark Territory Task Statement



Safety Technology in Dark Territory

Required by the Rail Safety Improvement Act of 2008

Task presented On September 23, 2010 in Washington, DC

- **Task No.:** 10-02
 - **Purpose:** To prescribe **standards, guidance, regulations, or orders** governing the development, use, and implementation of rail safety technology in dark territory, as required by SEC. 406 of the Rail Safety Improvement Act of 2008 (Act).
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RSAC Task Statement

Description

- Review the **existing** signal and train control **regulations** and determine their application to the use of safety technologies in dark territory
- Review **other existing federal regulations** that are associated with the use of advanced technology and may provide additional insight/direction
- Assist FRA in **developing/identifying additional** appropriate/applicable **standards, guidance, regulations, or orders** responsive to the legislative mandate
- Help to ensure the **appropriate** and **safe development and use** of safety technologies in dark territories
- Help to determine a reasonable method for **safety technology inventory** and system awareness by FRA.

Review what we already have for conventional systems

Review what we already have for advanced technology

Develop new

Ensure adherence

Keep track



DT WG Task Interpretation



Available regulatory and non-regulatory tools

Type of technologies	New FRA regulations		Amending existing regulations			AAR standards		Orders	Safety Advisory	Guidance	Other
	Mandatory	Voluntary	236, A-G	236, H	236, I	W/FRA regs	W/out FRA regs				
Switch position monitors											
Power-assisted switches											
RCL zone limiting devices											
Track integrity systems											
Grade crossing video monitors											
Slide fences											
Hot box, and other detectors											
Other technologies											

Identify the types of technologies to be addressed and find appropriate regulatory and/or non-regulatory tools to govern their use



First DT WG Meeting

**Falls Church, Virginia
March 3 & 4, 2011**

Results:

- Discussed the Congressional mandate.
 - Identified some of the technology that exists in DT.
 - Defined the scope – Main Tracks and Main Track passing sidings outside of yards.
 - Agreed to use a data driven process.
 - Established that FRA has no preconceived notions.
 - Concentrate on existing/applied DT technology (1st Bucket) versus future DT Technology (2nd Bucket).
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Types of Technology to be Initially Addressed Based on Accidents Statistics

Types of Technology

Statistics

Chosen Types of Technology

- Hand operated switches #
- **Switch Point Monitored**
- **Power Operated Switches**
- **Track Integrity Systems**
- **Unusual Occurrence Detectors**
- High Water Detectors
- Slide Fences
- RCL Zone Limiting Devices
- Car Counters
- Scour Detectors
- Others

	Class 1	Short Lines
Hand operated switches #	6526	4341
Switch Point Monitored	13	227
Power Operated Switches	167	75
Track Integrity Systems	-- *	61
Unusual Occurrence Detectors	203	61
High Water Detectors	1	1
Slide Fences	5	3
RCL Zone Limiting Devices	1	0
Car Counters	0	17
Scour Detectors	9	0

**Existing arrangements only,
1st bucket**

Switches
Track Integrity Devices
Detectors



**For future consideration,
2d bucket**

**Voluntary Installation of Current Use
Devices**
Potential Risk-Based Required Installations
New or Novel Technologies

Applicability of Recommendations

Main Track
Main Track Passing Sidings Outside of Yards



Second DT WG Meeting



Washington, DC May 9 & 10, 2011

- Identified the highest priority issues based on safety statistics.
 - Assigned three Task Forces to explore each issue area.
 - Task Forces established for:
 - Switches led by Bob Scieszinski
 - Track Integrity Systems led by Gabe Neal
 - Detectors led by George Hartman
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Task Force Groups Formed



GROUP 1

Switches

GROUP 2

Track Integrity

GROUP 3

Defect Detectors

Each group consists of representatives of:

FRA
LABOR
CLASS Is
SHORT LINES
SUPPLIERS
OTHERS



Assignment for the Three Task Force Groups



- Make recommendation to the Working Group
 - Evaluate the existing safety technology
 - Review of existing Federal regulations for applicability
 - Review other existing standards or guidance for applicability
 - Consider whether to use the existing standards or develop new
 - **Consider FRA's oversight role**
 - Provide a detailed recommendation to the WG

3 Task Force groups worked over the summer 2011 using teleconferences and face-to-face meetings



Third DT WG Meeting



Chicago, Illinois September 6 & 7, 2011

- Reviewed information provided by each Task Force (All Task Forces met independently over the Summer).
 - Continued the discussion on standards, guidance, or regulations.
 - Dissolved the Switch, Track Integrity Systems, and Detectors Task Forces.
 - Established the Dark Territory Technology Task Force.
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Dark Territory Technology Task Force



Task Statement

Based on Section 406 of the Rail Safety Improvement Act and the Dark Territory Working Group Statement, develop a **document that outlines the basic principles or specific elements to be addressed in a railroad plan governing technology used in non-signal territory.**

DT Task Force met in October 2011 and developed the report to the WG outlining Railroad Plan content and Technology Specific Guidance for switches, track integrity devices, and detectors.



Fourth DT WG Meeting



Washington, DC November 17 & 18, 2011

Results:

- Reviewed the Dark Territory Technology Task Force document in detail.
 - Discussed positions held by industry, labor, and FRA.
 - Determine level of consensus of the working group.
 - Identified the future role/activities of the DTWG.
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Summary of Positions



Labor:

- Prefers prescriptive regulations requiring that technology be applied in Dark Territory (especially switch point monitoring).
- Feels that the RSIA requires regulations.

Industry:

- Prefer the use of guidance documents rather than prescriptive regulations.
 - Do not feel that the RSIA requires regulations.
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Summary of Positions



FRA:

- Prefers the use of guidance documents rather than prescriptive regulations provided that FRA has an oversight role.
 - Do not feel that the RSIA requires regulations.
 - Proposed an oversight role that would include some regulations combined with guidance documents and performance standards.
 - Railroads would be measured against their own Dark Territory Technology Plans.
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FRA's Proposal



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1. Railroads should create a Dark Territory Technology Plan for inspecting and maintaining the dark territory equipment.
 2. The plan will be required to address identified minimum requirements contained in the DT Guidance Document and will be approved by FRA.
 3. FRA shall audit the railroad against their Dark Territory Technology Plan.
 4. Railroads will be held accountable for following their plan and maintaining all required record keeping
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Current Status



- RSAC Dark Territory WG activity was suspended because of a failure to reach consensus on the issue of regulations versus guidance documents.
 - FRA will continue to work on the Dark Territory issue independently.
 - FRA may resume the RSAC DT WG activity at a later date.
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