Work Package 2:

The Pan-European In-Depth Accident Investigation Network

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Special Session 15: Development of the European
Road Safety Observatory – The DaCoTA Project

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DaCoTA
Work Package 2

Developing The New Pan-European In-Depth Accident Investigation Network

What are In-depth Accident Investigations?

- Detailed and factual (almost microscopic) information determined obtained from independent investigations of accidents

- Conducted by trained experts using multi-disciplinary approach

What are In-depth Accident Investigations?

- The detailed information involves
  - The vehicles
  - The road environment
  - The road-users
  - The interactions of these

Road **Human**

Vehicle
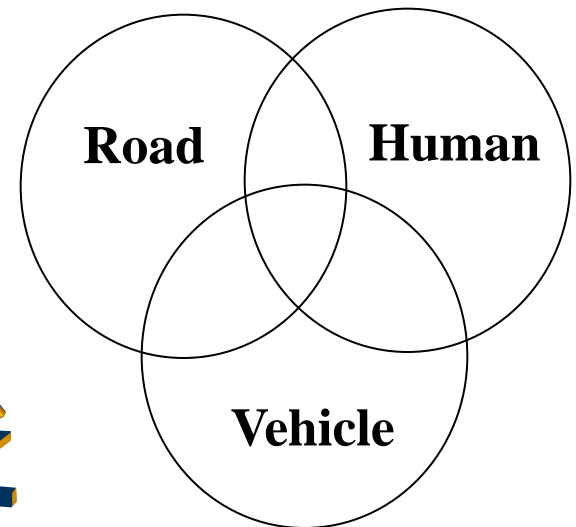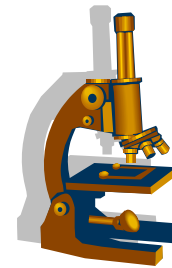
Why Investigate Accidents in the Real World?

- Most accidents do not occur in laboratories, tests or trials

- Crash tests and simulations do not cover the full range of road accidents

- People are not exactly like crash test dummies

In-Depth Investigations

- Scenarios
  - Detailed descriptions
  - Speeds, trajectories
- Vehicles
  - Structural damage & performance
- Safety technologies
  - Identify
  - Effectiveness

- Vulnerable road users
  - Characteristics
  - Injuries
- Causes of accidents
  - Road user factors
  - Vehicle factors
  - Roads & conditions
- Injuries
  - Descriptions
  - Mechanisms
  - Long-term consequences

Who Needs the Data and Why?
Consultations

- European Commission
- National Experts
- Automotive Industry
- Powered Two Wheeler industry
- National in-depth projects
- DaCoTA in-depth experts

Conclusion Findings

- In-depth data needs:
  - A high demand for in-depth data voiced across Europe
  - A detailed "photograph of what is happening"
  - Essential to complement CARE/macroscopic data
  - Only way to understand causes of accidents and injuries
  - Support for policy making decisions

Conclusion Findings

- ## In-depth data needs:

  - Motor industry requires detailed data to understand performance of new safety technologies

  - The sample should be representative of Europe

  - Ultimately high case numbers
    (minimum 2000 cases
    per year, beyond
    DaCoTA)

The Aim of Work Package 2

- "DaCoTA WP2 will harmonize in-depth crash investigation protocols and at an EU level, identify and train crash investigation teams who will prepare for investigations according to these harmonized protocols"
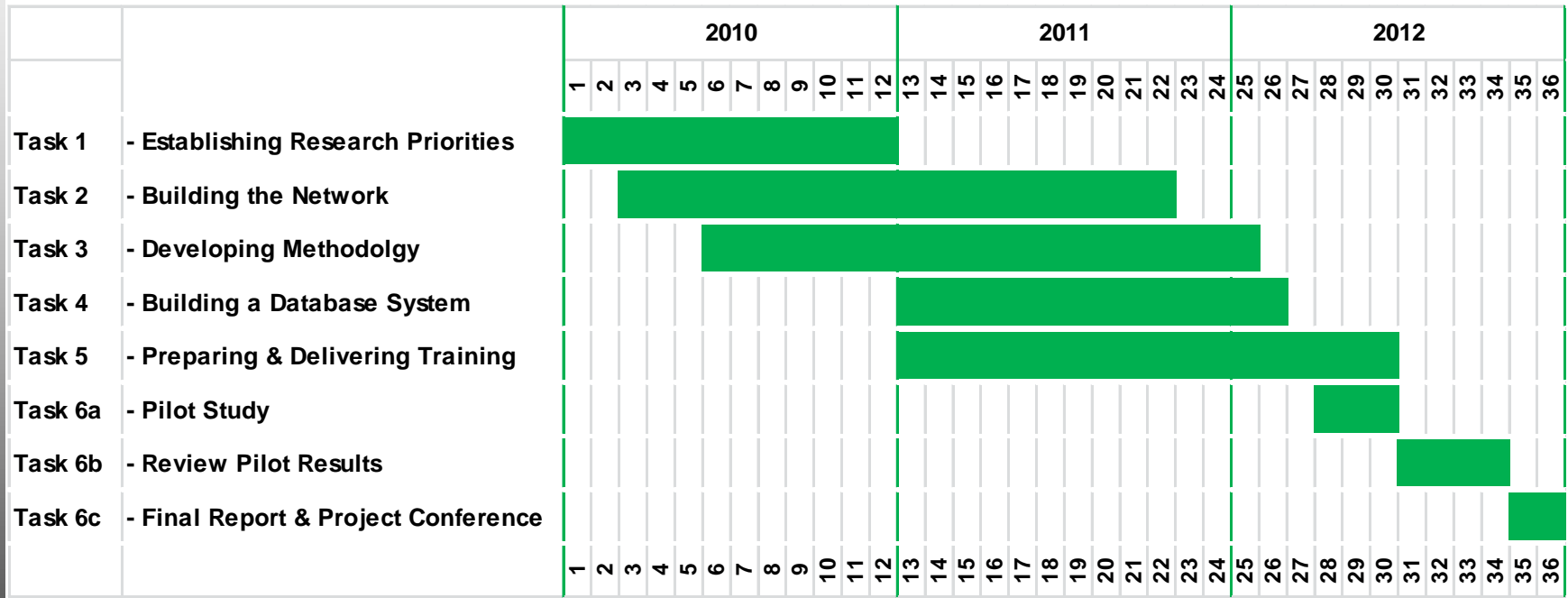
The vision beyond 2012 (beyond DaCoTA)

- The vision beyond 2012
  - A comprehensive, pan-European network
  - A large scale, on-going accident investigation programme

WP2 Schedule 2010 -2012

		2010												2011												2012										
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Task 1	- Establishing Research Priorities	█	█	█	█	█	█	█	█	█	█	█	█																								
Task 2	- Building the Network		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█														
Task 3	- Developing Methodolgy					█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█											
Task 4	- Building a Database System													█	█	█	█	█	█	█	█	█	█	█	█	█	█										
Task 5	- Preparing & Delivering Training													█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█						
Task 6a	- Pilot Study																												█	█	█						
Task 6b	- Review Pilot Results																															█	█	█	█		
Task 6c	- Final Report & Project Conference																																			█	█
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

In-Depth Investigation Methodology

- Accident scene and road examinations

- Vehicle examinations

- Vulnerable road user investigations

- Road user behavioural data

- Medical data collection & analysis

- Analysis of the information to:

  – Calculate speeds and trajectories

  – Code causes of the accidents

  – Code cause of injuries

Some Important Considerations

- Statistical case sampling plans to adequately represent European accidents

- Quick access to the scene of accidents to capture information

- Data protection and ethical permissions

- Staffing suitable multi-disciplinary teams

- Safety of the investigating team personnel

On-line Manual

On-line Database Login

Example Data Entry Screen
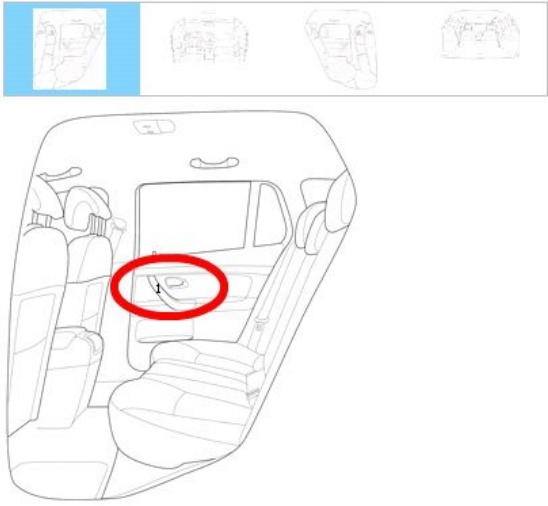
Developing a Pan-European In-Depth Data Collection Network

- Teams identified in 18 countries

- Assisting with local infrastructure challenges

- A first network established

The Pan-European In-Depth Road Accident Investigation Network

Countries represented by a DaCoTA Network investigation team
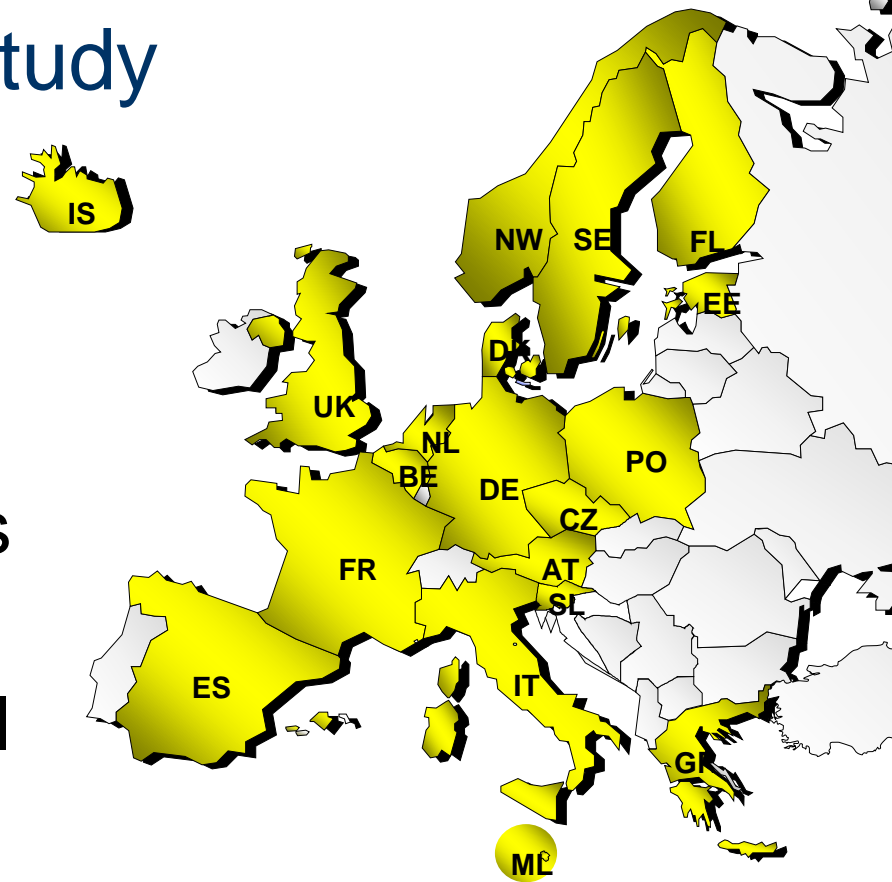March 2012
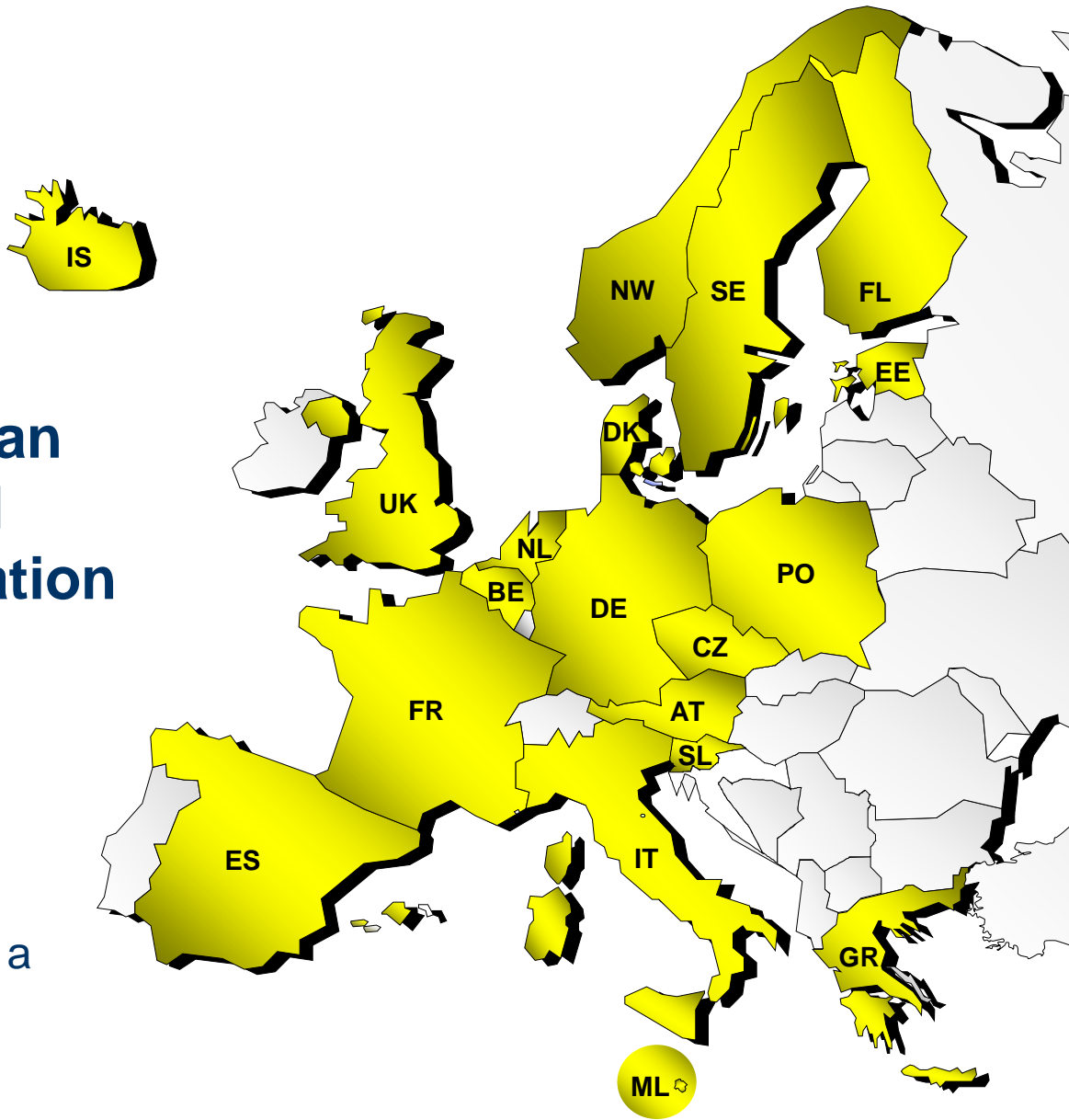
Team Training in March 2012

Pilot Study

- Experienced teams / newly trained teams
- Local plans /procedures in place
- Investigations over April to June 2012

Conclusions & Next Steps

- Strong need for European in-depth data

- To a common method and format

- 18 countries trained and participating in the current pilot study

- Pilot will validate the method and demonstrate the value of a harmonized European data collection system

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