



APROSYS

Final Event



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Workshop Session 3

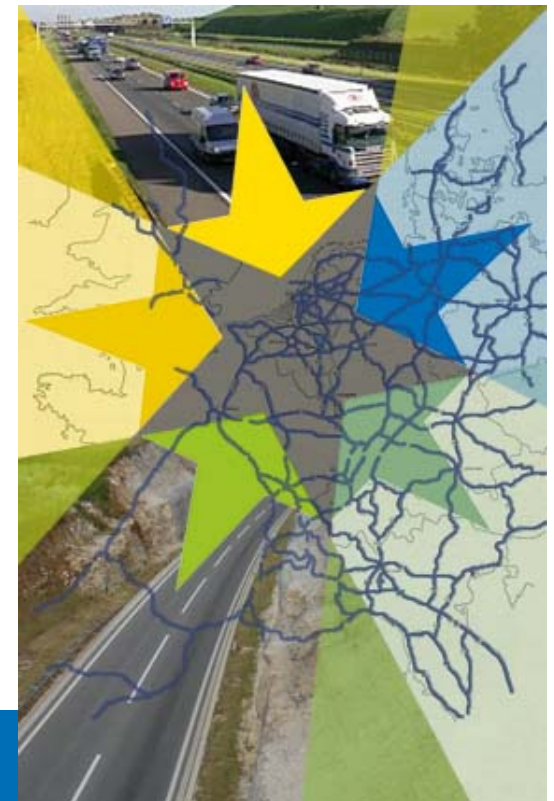
Field Operational Testing

Potential for system development
and evaluation methodology for
Intelligent / Integrated
Safety Systems

Chairman
Trent Victor



APROSYS Final Event – February 17 & 18 2009





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Christian Mayer

**Results of the APROSYS FOT / Real Traffic System Evaluation.
Focus: Technical assessment of safety systems in real traffic.**

Aria Etemad

**EuroFOT – The current European naturalistic driving study.
Performance and efficiency of active safety systems in real traffic.
Focus: Analysis based on naturalistic driving data**

Prof. Brian Fildes

**The TRACE project - Results and methodology
Focus: Evaluation of system benefit and efficiency of safety technology.
Development of a prediction methodology.**

Ann Brach

**Naturalistic driving studies within the SHRP2 Program
Focus: Objectives and outlook on methodology**



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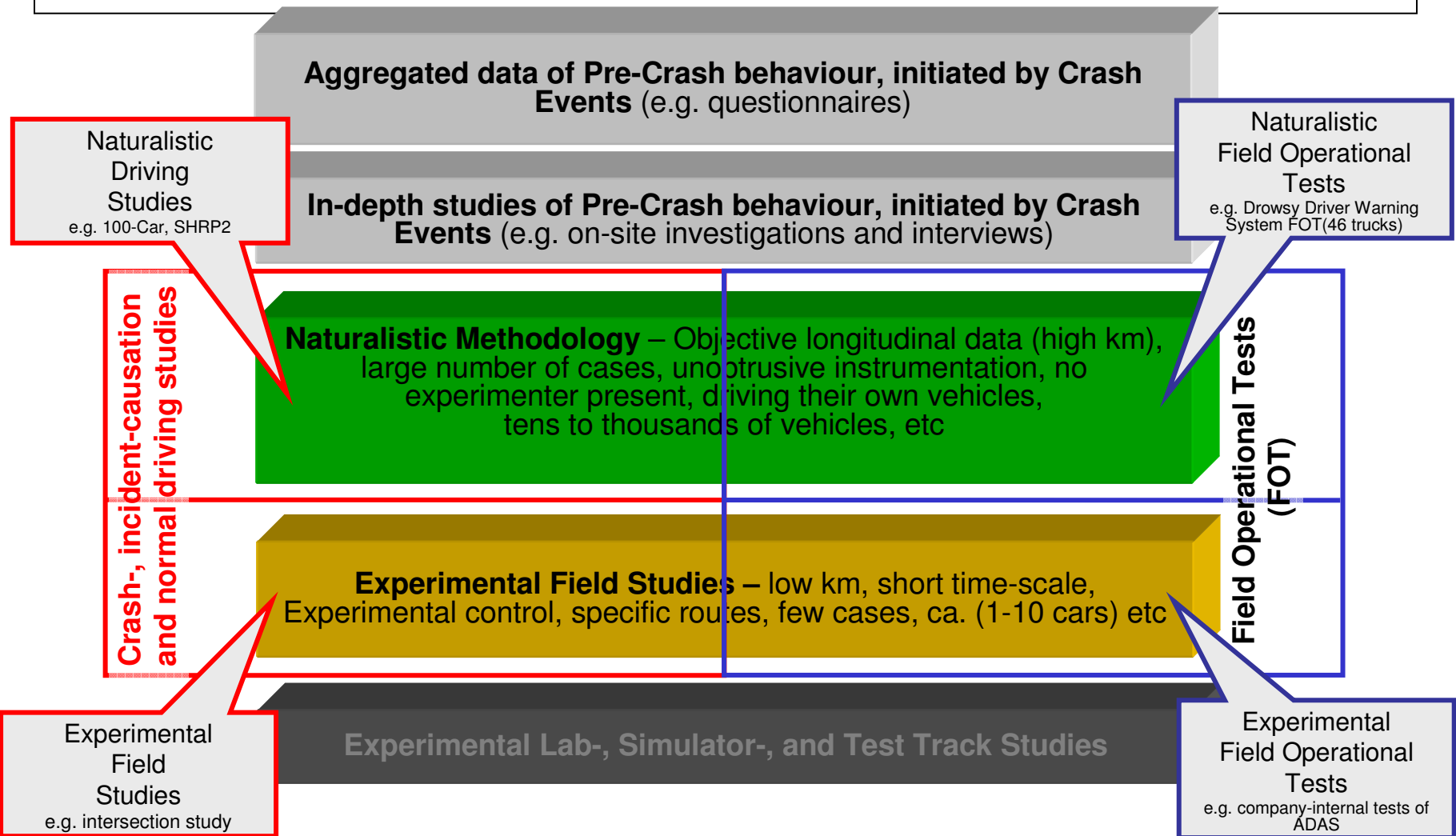
Objectives

Workshop Topic Session 3

- Discuss and agree on a common understanding of the "assessment and benefit analysis of integrated safety systems " and the possibilities of FOTs and alternative / complementary methods to answer this.
- Outlook on future research and a link to the Active Safety area.



Relation to Existing Methods



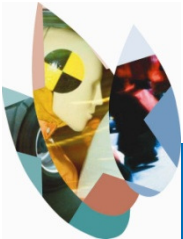
Defining FOTs

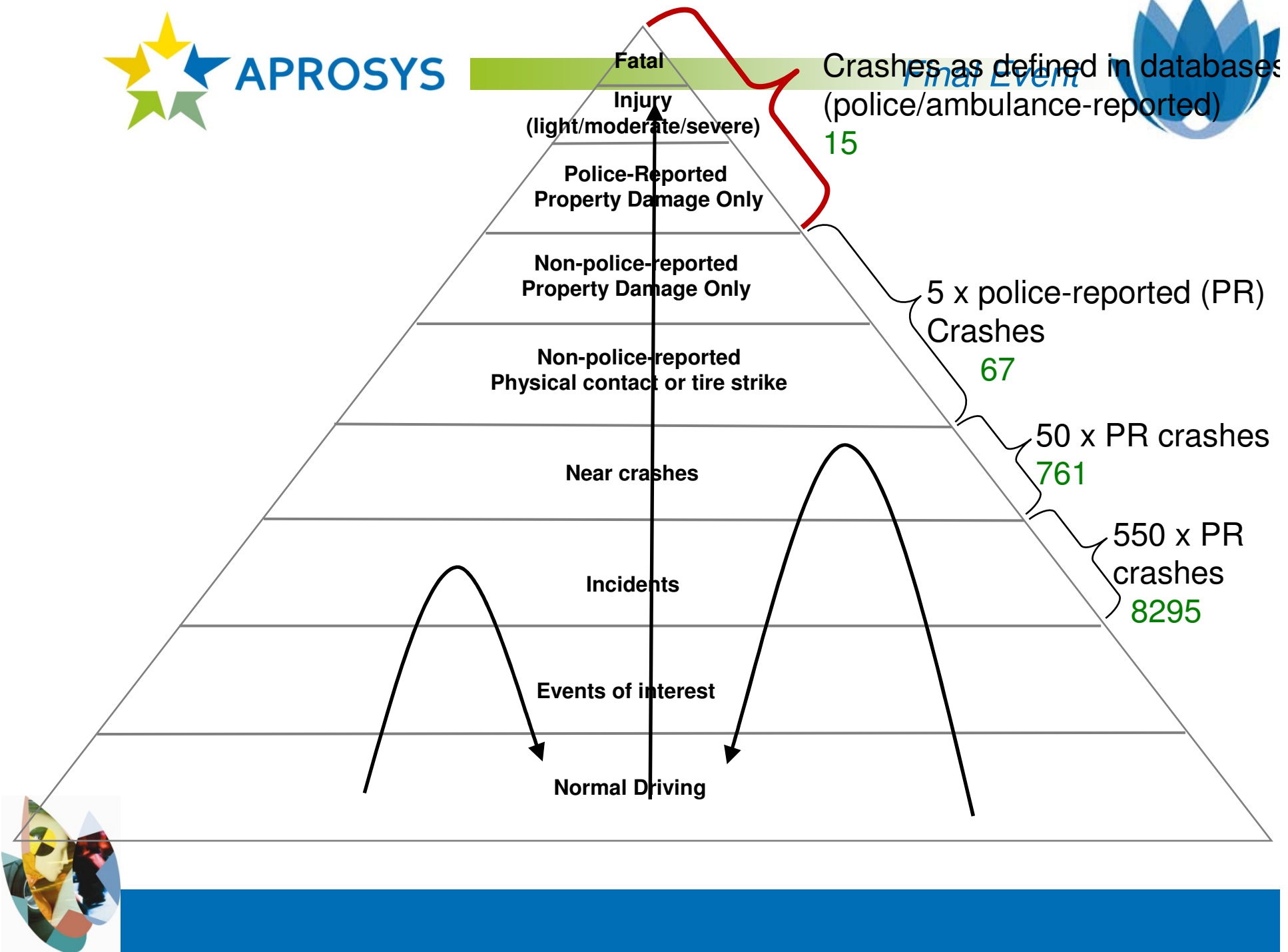


Field Operational Tests are defined as “a study undertaken to evaluate a function, or functions, under normal operating conditions in environments typically encountered by the host vehicle(s) using quasi-experimental methods” (FESTA, 2008)

- EU focus more on on-market systems
- US FOTs have focused more on prototype systems

“**Naturalistic driving studies** are defined as those undertaken using unobtrusive observation or with observation taking place in a natural setting” (Dingus, et al. 2006).





Examples of FOTs/NDS



- US:
 - **IVBSS** – Integrated ADAS FOT
 - **ACAS** - Automotive Rear-End Collision Avoidance System
 - **RDCW** - Road Departure and Curve Speed Warning
 - **VOLVO FOT** (100 Trucks, 3 years, USA), **Mack FOT** – IVI projects
 - **DDW-FOT** – Drowsiness, 46 trucks, 1.5 yrs
 - **CICAS** - Cooperative Intersection Collision Avoidance Initiative
 - **ACAT** projects – e.g. Scenario-based simulation techniques
 - **100-Car study** – Naturalistic driving study 100 cars 1 yr
 - **SHRP2** - Naturalistic driving study with an advanced vehicle subset
 - **Trip-21** – Nomadic device based cooperative systems (VII) functions
- EU:
 - National projects:
 - “**The Assisted Driver**” in The Netherlands (40 vehicles), and newer **3000 truck FOT**
 - **TSS FOT** (Data acquisition & storage technologies, data analysis) in Sweden
 - **SeMiFOT** – Sweden-Michigan FOT
 - **SIM-TD** in Germany – German cooperative systems FOT (20 Partners, 60 M€ Budget, Start 2008)
 - EU Projects:
 - **FESTA** – FOT methodology project
 - **EuroFOT** - In-vehicle systems FOT
 - **TeleFOT** – Nomadic devices FOT
 - **FOT-NET** – Networking and methodology
 - **APROSYS** – technical assessment
 - **eVALUE, eIMPACT, PReVAL, TRACE** - Impact assessment and CBA expertise
 - DaCoTa, PROLOG, 2BeSafe, INTERACTION, etc
- Japan:
 - **Drive Recorders** – Naturalistic Driving Data with consumer systems
 - **SmartWay** - Cooperative systems FOT
- OEM-internal FOTs

