

unity, solidarity, universality

# UIC activities in the field of Human Factors

20th International Railway Safety Conference (IRSC)

Hong Kong, 04-08 October 2010

Peter Gerhardt, Head of UIC Safety Unit

## **UIC Headquarters in Paris**

- > Technical departments (Fora):
  - \* Railway System
  - \* Passenger
  - \* Freight
- > Department "Fundamental values"
  - + Units (Platforms):
    - Environment, Energy & Sustainability
    - Safety
    - Security
    - Expertise Development
    - Research Coordination

The "Human Factors" is an integrate part of all safety activities



# **UIC Safety Unit**

> <u>Safety Platform</u> (Plenary, Steering Group)

### > <u>5 Advisory Groups – 5 items</u>

- System Safety Management Group (SSMG)/CER Safety Support Group
- \* Human Factors
- Occupational Health and Safety (OHSG)
- \* International Railway Safety Network (IRSN)
- \* Safety Performance/UIC Safety Database

## > Conferences/Seminars/Workshops



# **Human Factors / Human Sciences (1)**

"Organisational and human aspects of safety when crossing borders" ( UIC project 2009 - 2010)

- Objective: Identify, observe and analyse specific human behaviors brought about by border crossings (technical, relating to language, culture, etc.)
- Methodology: Identify types of borders most affected by safety issues and select a number of them,

Identify of main risks

• <u>Deliverable</u>: **Recommendations** in order to help provide RU & IM with maximum control over the risks related to "mistakes";



# **Human Factors / Human Sciences (2)**

#### Further activities:

- > Benchmark study on the contribution of psychology to railway operation safety,
- > Benchmark study on local management safety checks
- > Study on "The integration of human factors into the analysis of accidents and incidents,
- > Study on "Crisis management" (planned)



## Occupational Health and Safety Group (1)

#### Post-traumatic stress and its management

To help persons having experienced > Objective:

traumatic events,

manage the consequences;

> Methodology:

Carry out a survey of the various strategies used by different companies,

Benchmarking incident management

models:

> Deliverable: **UIC** guidelines ("Booklet")

> Presentation of the outcomes to the UIC Safety Platform end of 2010



## Occupational Health and Safety Group (2)

#### **Further Activities:**

- > Guidance on high visibility clothing and Personal Protective Equipment (PPE) for track workers
- > Safety culture of sub-contractors
- > Use of mobile phones and portable electronic devices
- > Effective management of noise in location
- > Risks arising from alcohol & drugs



# Safety Educational Programme

- > Specific railway safety workshops and seminars
  - \* Safety education, Tehran, 04-05th May 2010
  - \* Stress, train driver, UIC, Paris 2009
- > Educational programme on operational and health & safety risks faced by the railways
- > A safety critical communications workshop

(work in progress)

Core principles: Policy, Process, People, Performance

**Everyone is responsible for safety** 



# Safety Performance/UIC Safety Database

- > Colleting data, common definitions, detailed causes description
  - Cause: "Human factors" permanent staff

    - contractors
    - passenger
  - Categories of persons involved. Passenger, employees, level crossing users, unauthorized persons on railway premises, others
- > Annual SDB activity report, benchmarking

UIC website: http://safetydb.uic.org

**Objective:** to extent the SDB to other regions



# **Expertise Development Unit**

- > Permanent best-practice exchanges
  - continuous learning, regular dialogue between training experts
- > EC Leonardo da Vinci project: "Best practice guide"
  - \* developing an e-learning material of track staff
- > Research study "Benchmarking training centers"
  - study involves 15 selected training providers, focus on train drivers, signalers/traffic controllers, signal/interlocking technicians

http://www.railtraining.org



# Safety at the road/rail interface

About 1/3 of railway accidents in Europe happen on level crossings,

**but:** almost caused by road users/ pedestrians

Responsibility of <u>all</u> partners (road users, policy, railways)

> International Level Crossing Awareness Day

ILCAD, 22nd June 2010

international campaign for 2011 in preparation

> 11th Global Level Crossing Symposium (Tokyo, 26th-29th October 2010)

www.level-crossing.org



■ ■ Thank you for your kind attention

Peter Gerhardt, Head of UIC Safety Unit Email: gerhardt@uic.org

