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INTERNATIONAL  
RAILWAY SAFETY COUNCIL

# Crisis management exercise

▶ Understanding stakes and adjustment in crisis management through a game

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# The MS program

- The program is for young professionals - mostly railways engineers
- Created by **Alstom, SNCF, RATP, Bombardier, Siemens, Ansaldo STS, EPSF** in 2008 to answer a shortage in HR Resources
- In an **engineering School** – Ecole nationale des ponts et chaussées
- Its duration is **16** months with **20** modules (civil infrastructure, operation, rolling stock, signaling, project management, transport economy)
- The module was build by an **SNCF expert**, Emmanuel Teboul in crisis management

# The Context

- The crisis day is a part of the module dedicated to management crisis training
- It is the **key moment** in a 5 days module
- Safety and security, system engineering, RAMS are taught before this module but very often with a rational or technological approach
- This module is focused on **management skills and human factor**

# Up Stream training sessions

- ▶ Before the exercise, there are 5 introductory courses
  1. The screening of an episode of the **West Wing serie** about a major crisis in a **nuclear power station**
  2. Communication courses with a **specialised journalist**
  3. The presentation of French public crisis process (**ORSEC**) with a civil security teacher who belongs to **the Home Secretary**
  4. Return of experience from 2009 **Eurostar** crisis with « **disney train** »
  5. The **compared process** implemented by SNCF-RATP in crisis Management procedures.

# A crisis day aims

The educational aims are **for the students**

- How to cope with stress and **media hype**
- To cope with **complexity and many players** in operation management
- To manage with not enough of information or to many information
- How to make decision in an **uncertainty environment**

# The storyline

**A freight train with 17 wagons transporting propanol gas derails  
at 9 am 47 in a station at Dijon (or Massy until 2012)**

Very quickly the local incendent correspondant is informed and  
join the crisis site

At 9.40 am a gas leak is detected in a damaged tank car

The exercise lasts 5 hours and finish with a press conference

*Look at the short film screened in 2012*

# The educational display

Just 3 classrooms and 15 telephone and laptops

The 20 students are divided in 2 classrooms with very few equipment (telephone, internet & fax)

No direct exchanges between the 2 teams

1. The technical crisis room : Technical director and regional train, intercity, HST, freight managers and so on.
2. The strategy room for communication : Crisis director, security and safety manager, external and press correspondent
3. A supervision room with a team of 6 supervisors who play 15 different roles – the local incident correspondent is in this room

# What do the students learn ?

How to manage with a avalanche of information send to from the supervision room in a very short time and making the right decision about :

- ▶ Estimating the explosion risk
- ▶ Making an inventory of affected train and passengers
- ▶ Stopping or not not the traffic
- ▶ Evacuating or not passagengers
- ▶ Finding supstitution buses...

How to take care of passengers whose expectation are very diverse :

- ▶ The care for 88 year old woman who collar bone and 8 month pregnant in TER
- ▶ Several classes of young children primary school who are travelling year study trip
- ▶ Passengers who are living the trains after 2 hours stop

How to design a transport map for the following day



# Main Educational benefits

- ▶ The state of doubt linked to the lack of information
- ▶ Adopting a constantly questioning approach
- ▶ Anticipation
- ▶ A school of precision : the obligation to make an acute chronology
- ▶ Giving priority to organizational robustness rather than technology
- ▶ The stress and pressure : human limits are quickly overstepped
- ▶ A few crisis communications rules
- ▶ The actors game complexity : the goals are divergentsIn
- ▶ In making a decision in crisis situation, there is no absolute rationality

# Conclusion

Education expert have identified game-based learning as the most efficient way of learning

The simulation reproduce a very realistic situation

- ▶ The students train their behavioural knowledge in terms of **communication, decision-making and coordination** (they are not used to that in their studies)
- ▶ The students develop more knowledge if they experience uncomfortable situation
- ▶ The safety bureaucratic culture is not enough in crisis situation management
- ▶ The student have to develop their know-how and collective intelligence **far over the limits of the standards and process application**