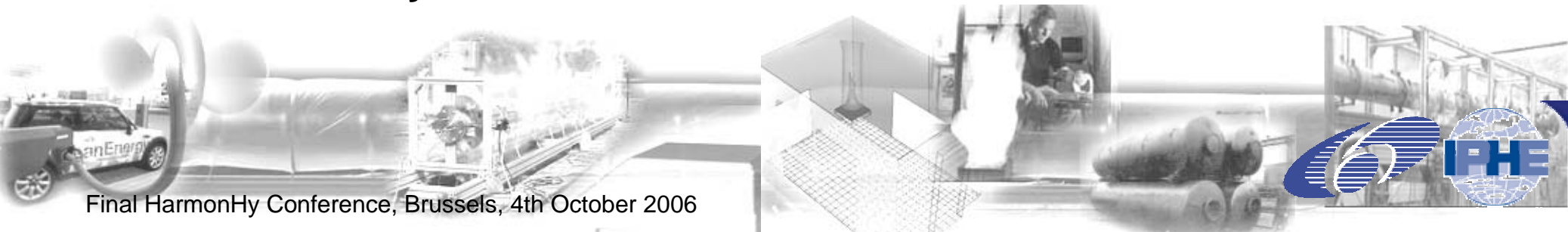




# HySafe

## Creating the knowledge base for regulatory processes

T. Jordan  
Forschungszentrum Karlsruhe  
Coordinator of NoE HySafe  
[coordinator@hysafe.net](mailto:coordinator@hysafe.net)



# Research and RCS

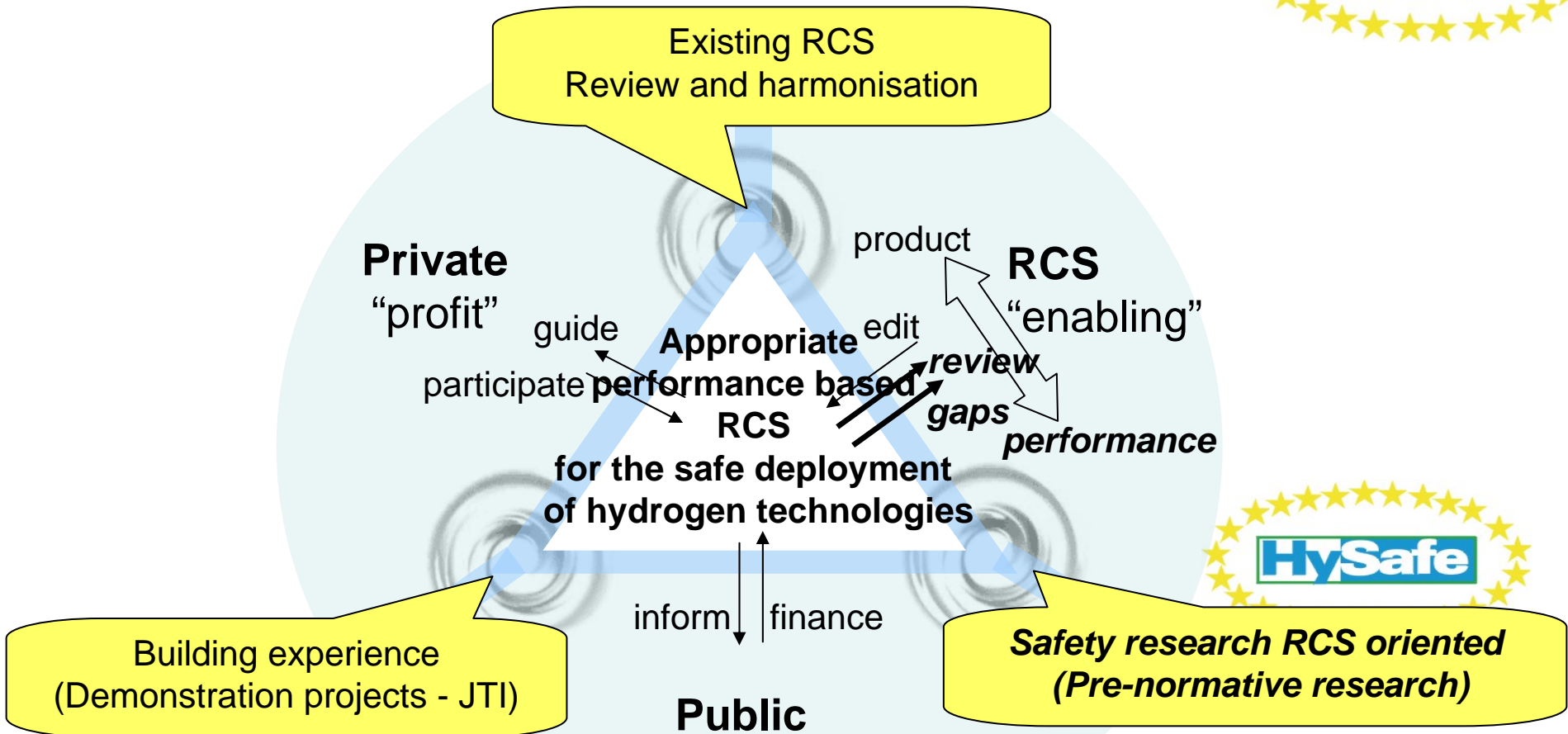


- **Research** on hydrogen safety is **necessary** because of **new public use** of hydrogen and the new technologies involved
- Research on hydrogen safety makes sense if **new knowledge, experience and learning** are **transported to RCS documents**

(here RCS = Recommendations, Regulations, Codes and Standards)



# Towards appropriate RCS



# Interface “Safety research / RCS”



## HySafe actions to transport new findings, experience, learning to RCS

- ✓ **Active participation** in targeted RCS groups (ISO, IEC, UN ECE)
- ✓ **Input consensual knowledge on scientific facts** via HySafe delegates
- ✓ **Review draft document and promote consensus** within EU on draft regulations and standards via **HySafe position papers** and via (25) consolidated votes (**invitation of EU national mirror committees**)
- ✓ **Maintain communication channels** to all involved parties (HFP – CEN – CENELEC – ISO – IEC – EC – HySafe....)

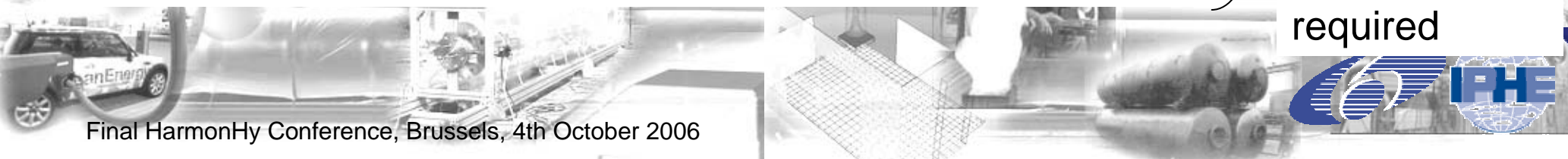
long termed  
experience  
based  
activities →

**Not Project**

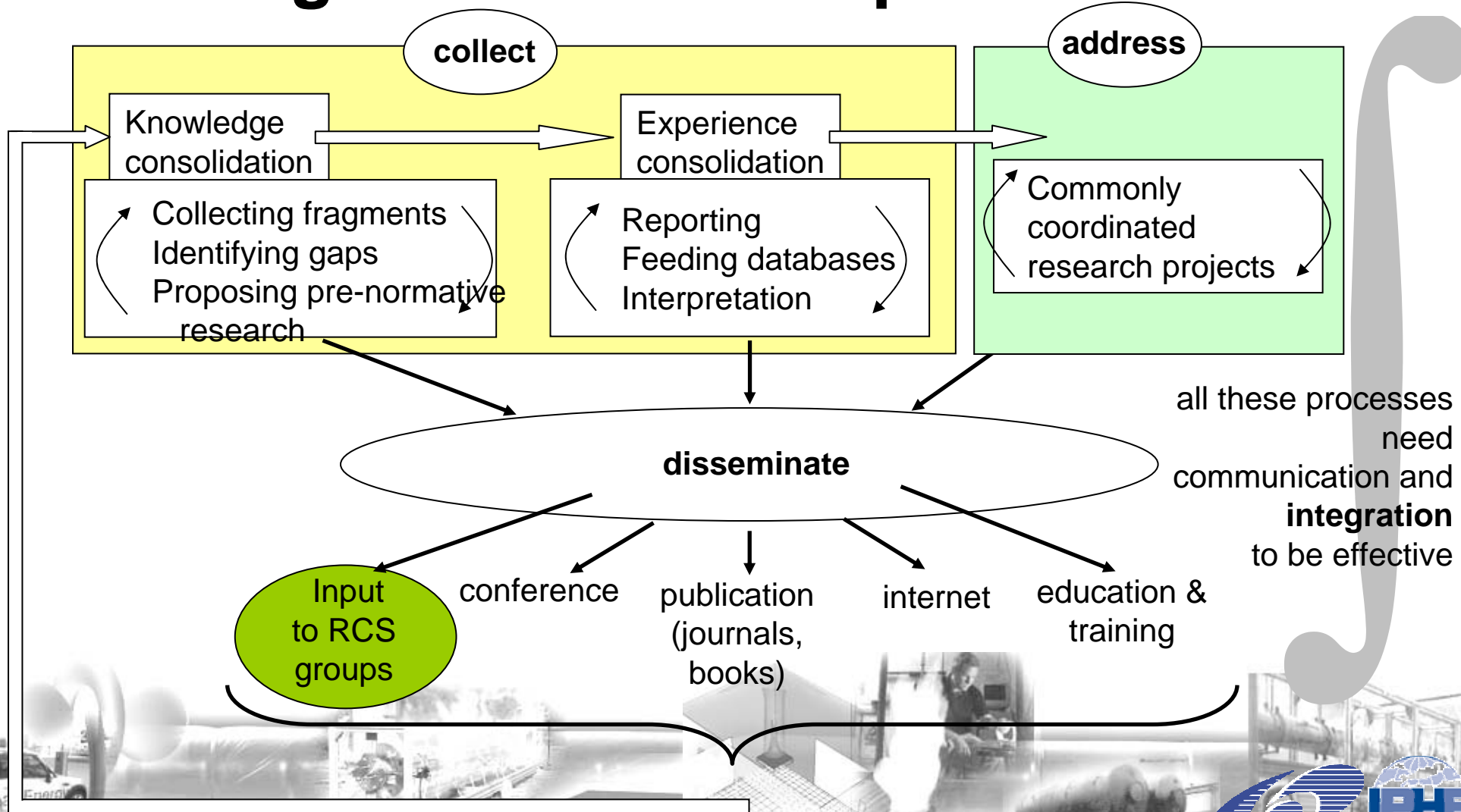
**but**

**Institution**

required



# HySafe: Creating the safety knowledge base for RCS processes



# HySafe Safety Action Plan HSAP



Development of safety procedures, standards, tools, skills in FP7 / JTI

**Unique Safety Assessment Framework for all EC co-funded projects under FP7, demonstration projects in JTI:**

- ✓ Guidance on methodologies:
  - hazard identification, risk assessment and management, risk control, emergency planning, incidents reporting and learning ...
- ✓ Common “language” and safety expectations
- ✓ Exchange and consolidation of experience (Hydrogen Incident and Accident Database HIAD)
  - Improved experience exchange, learning curve
  - Demonstration of homogeneous and appropriate safety culture across EU

**↩ Editing of a “Safety Action Plan” to guide EU projects applicants**

**↩ Set up of an Expert Panel for project safety plan and “auditing”**



# Beyond NoE HySafe



↪ NoE HySafe **integration** actions and successes towards the safe introduction of hydrogen system will be pursued beyond the end of EU funding by the set up of a **permanent structure**:



## HySafe - The European Hydrogen Safety Centre

↪ Discussions are currently taking place within HySafe to discuss its **missions, status and funding**

↪ **Contribution to RCS will be among its key objectives!**



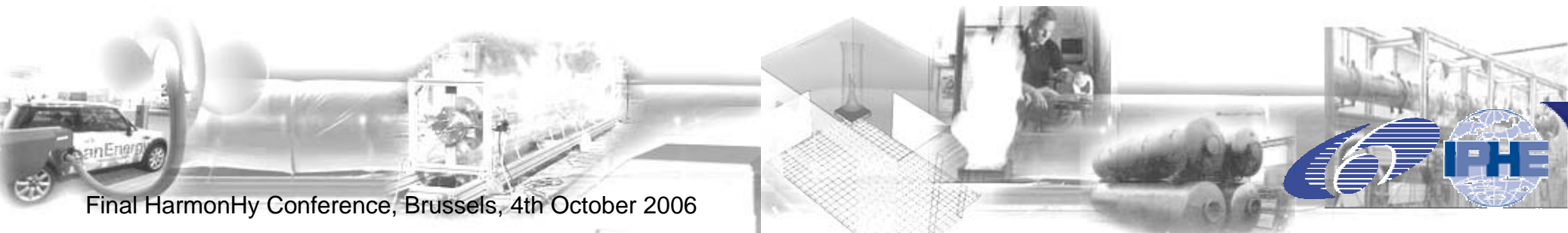
# Thank you!



**In case of further questions  
contact**

**[coordinator@hysafe.net](mailto:coordinator@hysafe.net)**

**Tel. +49 7247 82 61 05**





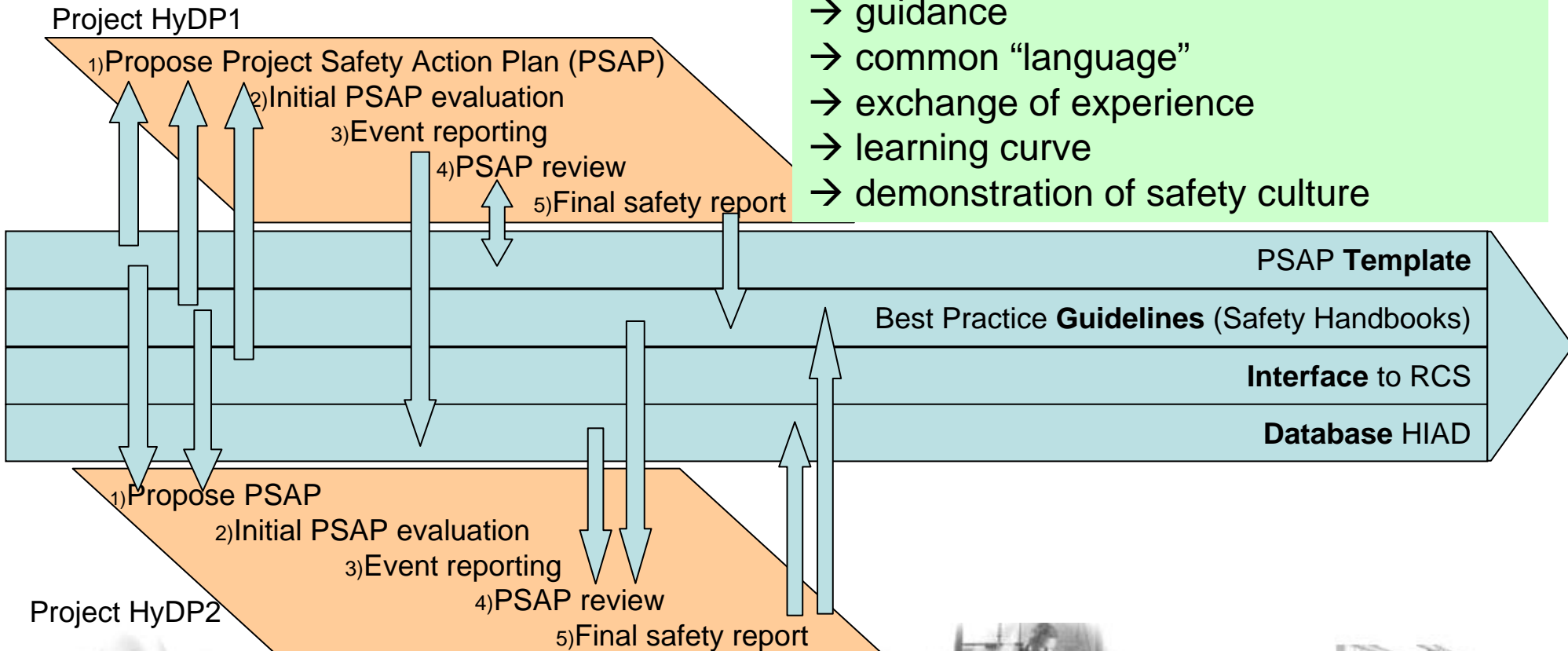
# Safety Action Plan

## Support of Demonstration Projects in the JTI



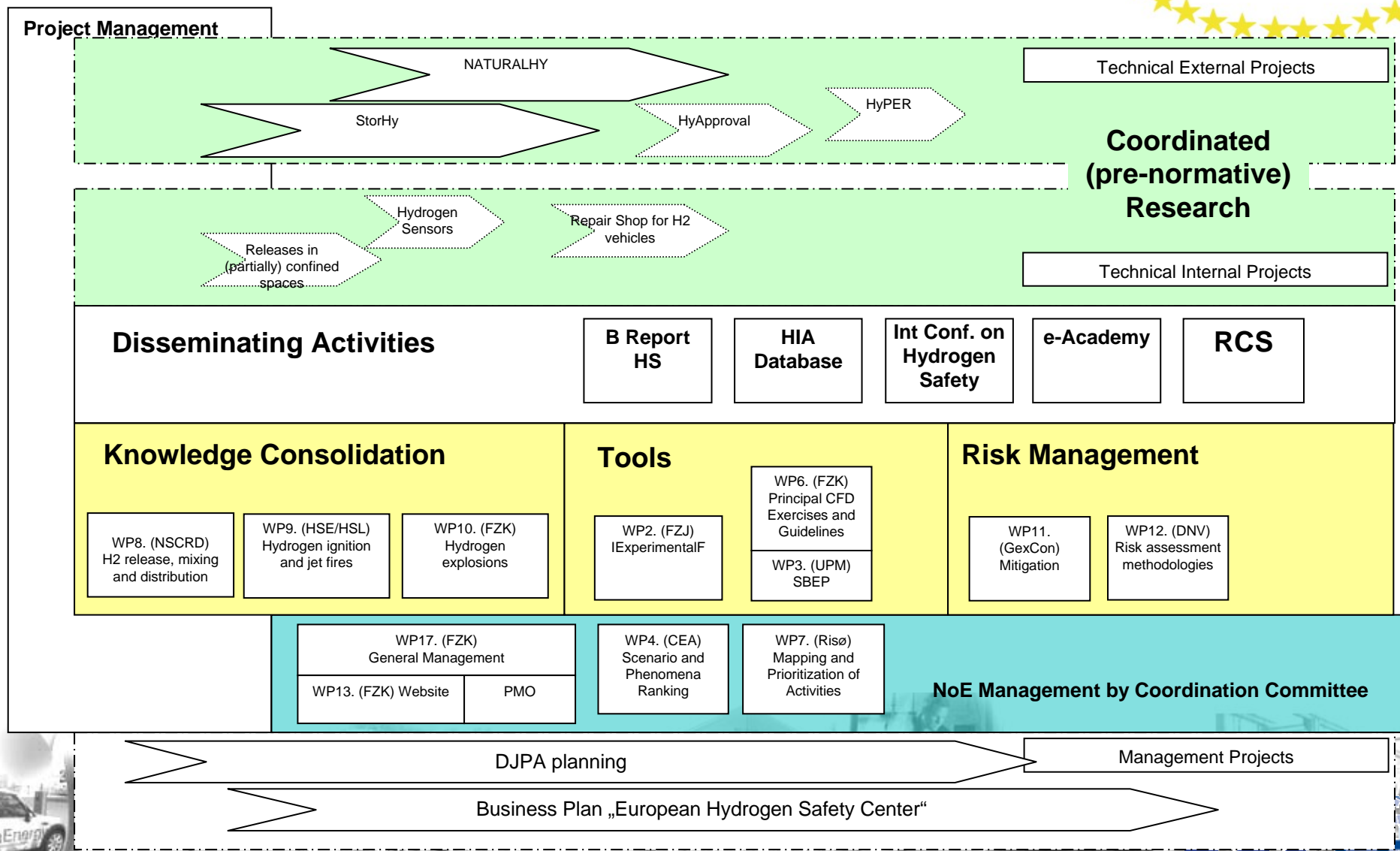
### Unique Safety Assessment Framework:

- guidance
- common “language”
- exchange of experience
- learning curve
- demonstration of safety culture



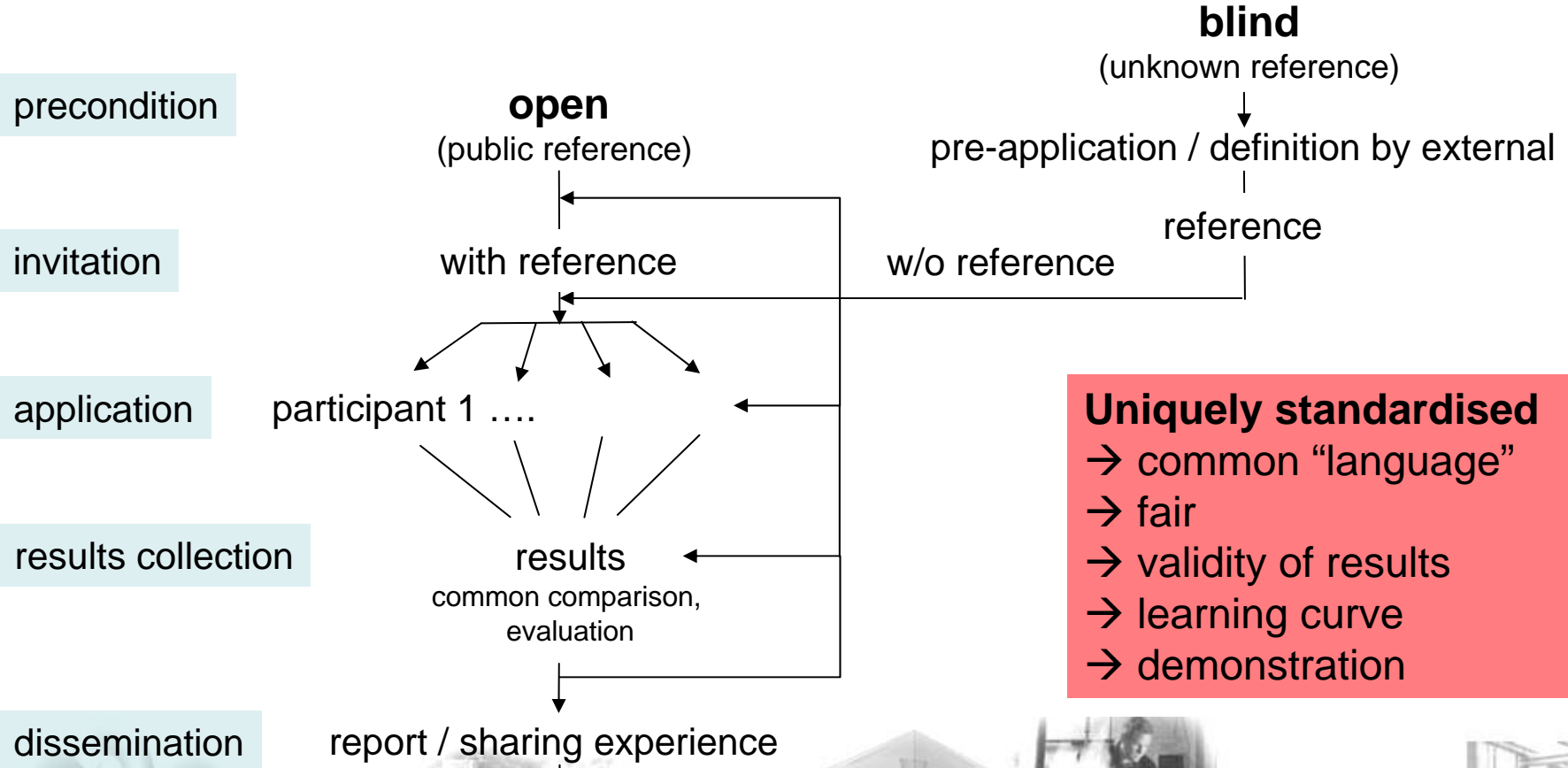


# NoE (→ EIHS) HySafe contributions



# Benchmarking / Assessment frameworks

Comparison of standards, safety procedures, tools, skills,...



**Uniquely standardised**

- common “language”
- fair
- validity of results
- learning curve
- demonstration

