

A man with glasses and a goatee, and a woman with long dark hair, are standing in front of a modern, light-colored building. The man is on the left, looking upwards and to the right. The woman is on the right, laughing with her mouth open. The background shows a clear sky and a modern architectural structure.

Detailed simulation of hazardous events for risk management & loss quantification

Part 1: Industrial Hazards

ADVANCED MODELLING & SIMULATION – AMS –

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JUNE 2018

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Out Offer of services

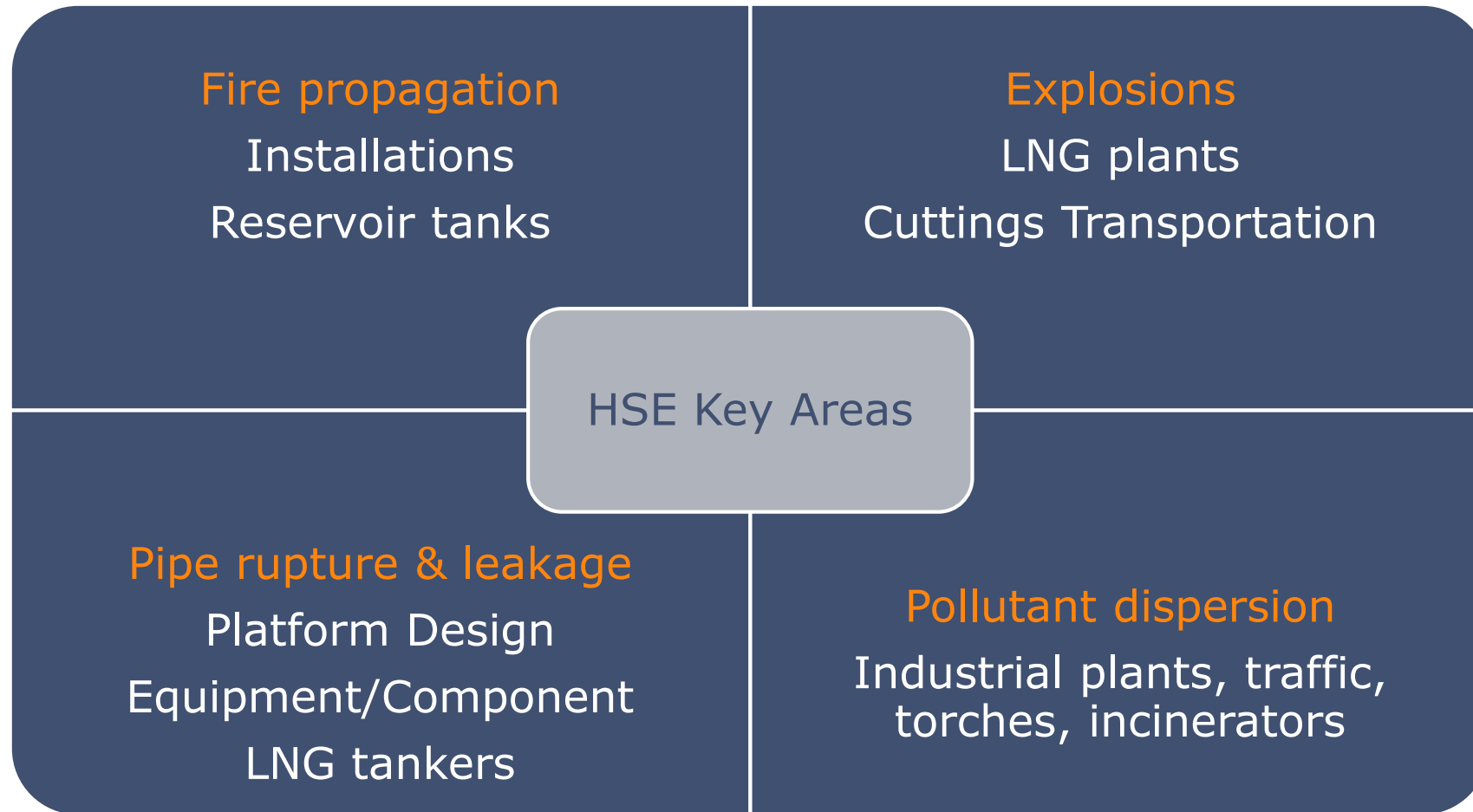
AFRY Advanced Modelling & Simulation (AMS) Section:

- AFRY's reputation in engineering services is worldwide acknowledged
- AFRY's AMS has expertise in the 3D simulation (CFD & CMFD) of industrial & environmental flows using their simulation platform TransAT
- The AMS group adapts and implements models required by the clients to meet their interests and solve their pressing problems
- New developments are ongoing, sustained by the DigitalPoyry Initiative.

Our Offering:

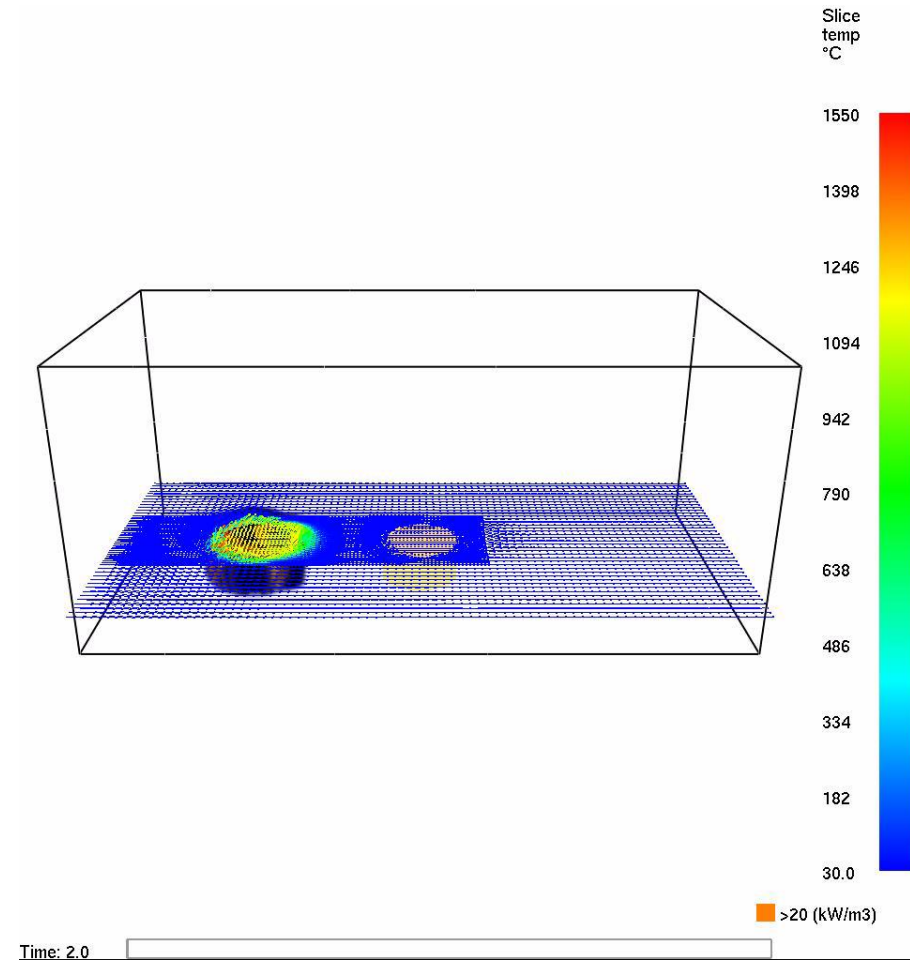
- In case of interest, AMS can prepare a project work and financial plan
- AMS can support you for all you simulation studies related to Risk Management, using other simulation tools, too, e.g. PHAST, FDS, etc.
- Alternatively, AFRY AMS can license its TransAT CFD tool under competitive conditions to the clients.

Typical HSE Application Areas requiring cfd



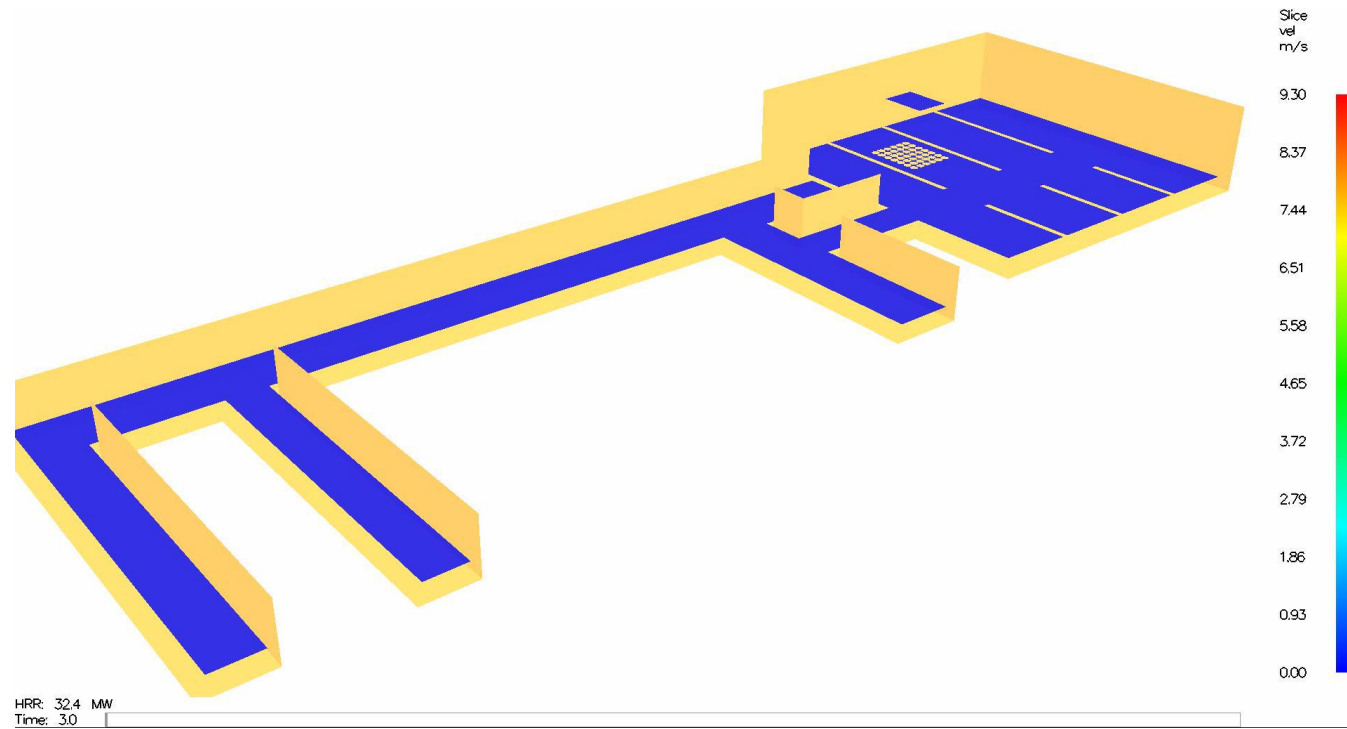
1- Fire propagation

FIRE DOMINO EFFECT IN RESERVOIR TANKS IN AN LNG HARBOUR



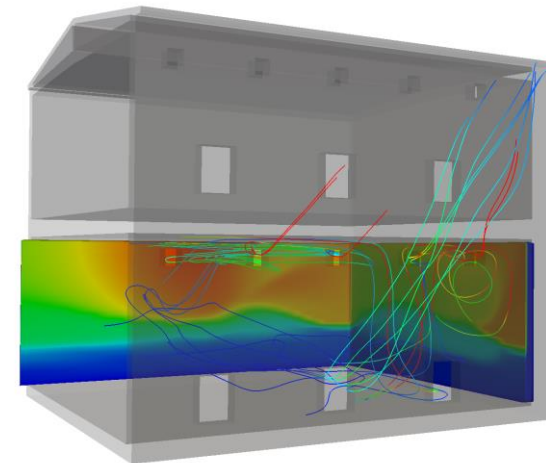
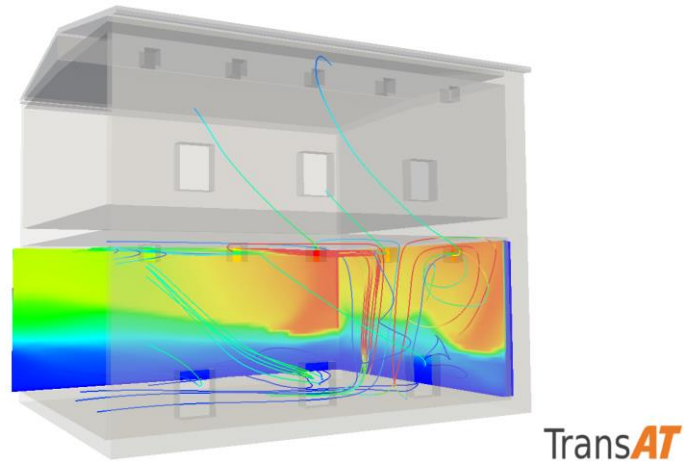
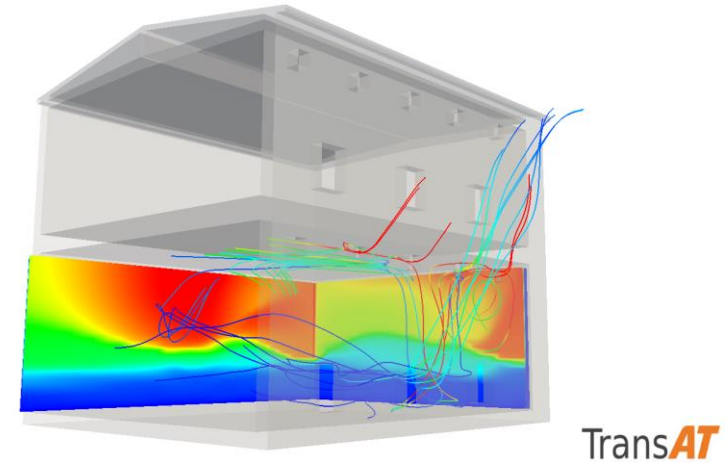
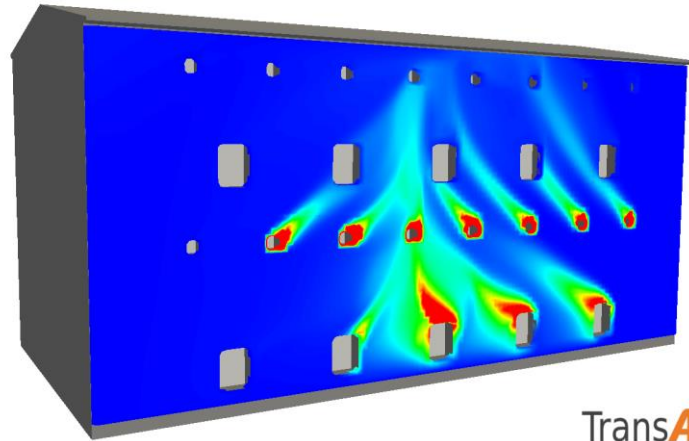
1- Fire propagation

FIRE SPREADING IN AN INDUSTRIAL WAREHOUSE



1- Fire propagation

FIRE SPREADING IN A HOUSE

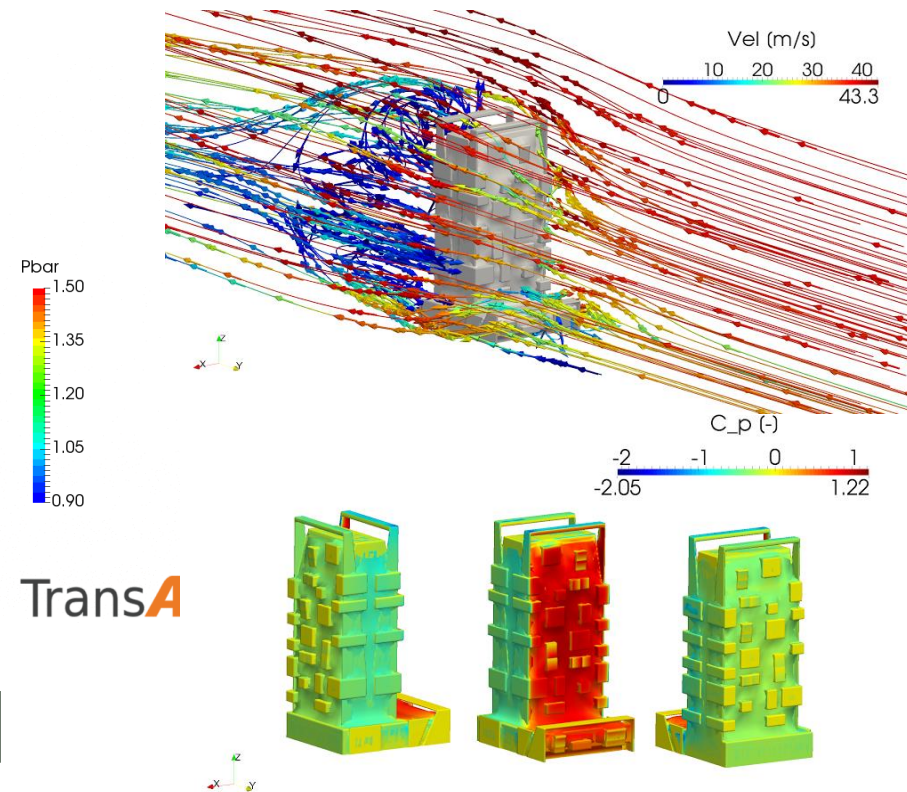


2- Blasts & Explosions

BLASTS IN URBAN ZONES

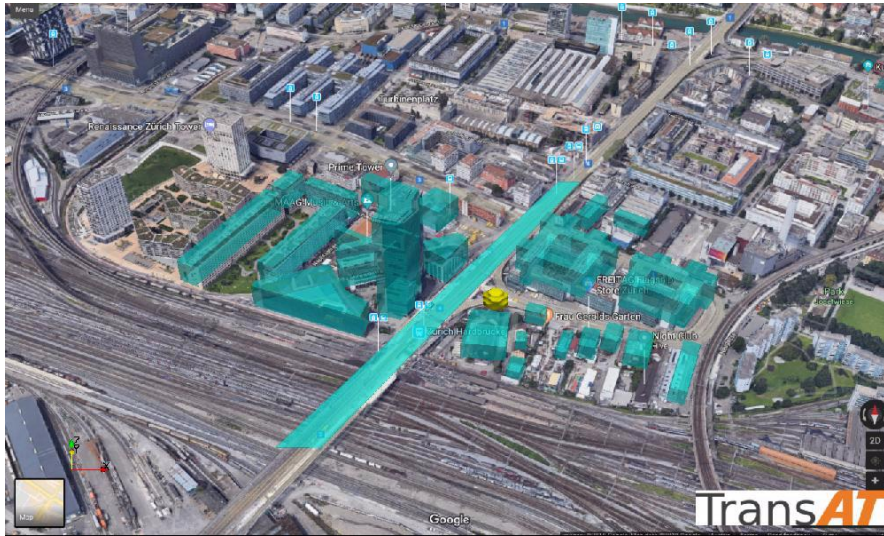


Explosion near a Building

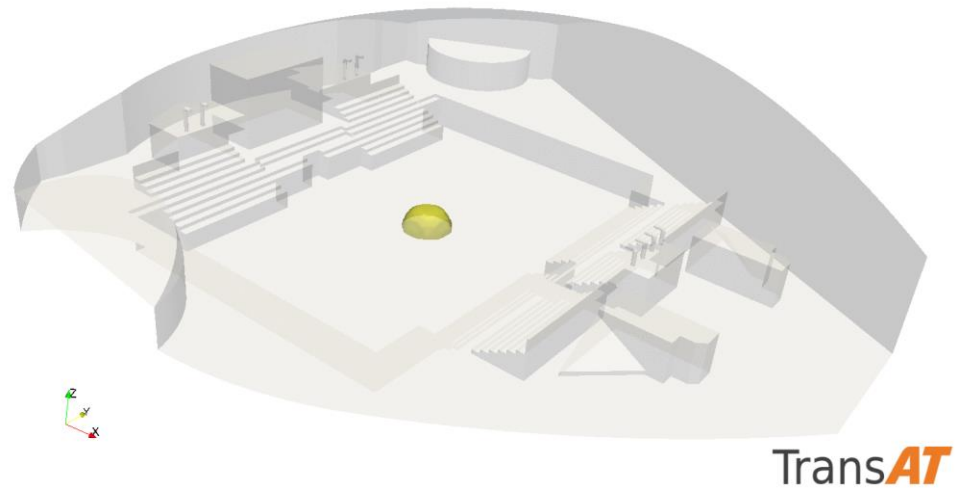


2- Blasts & Explosions

BLASTS IN URBAN ZONES



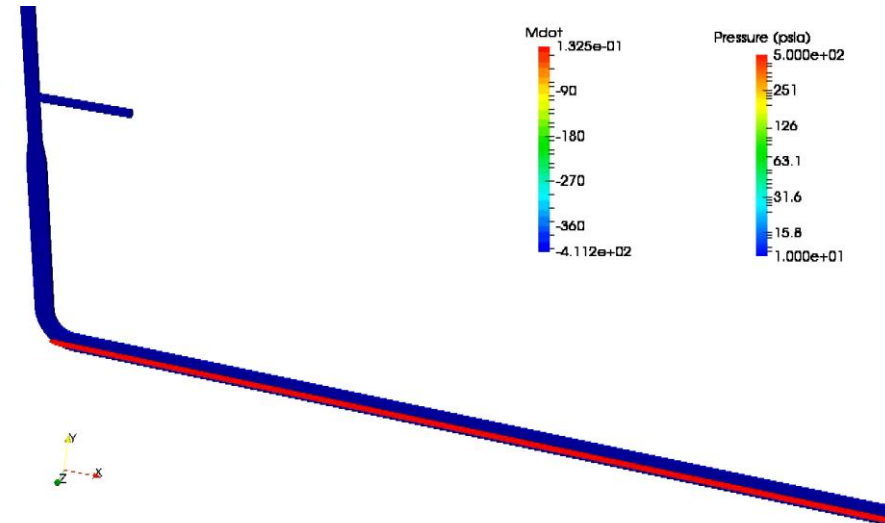
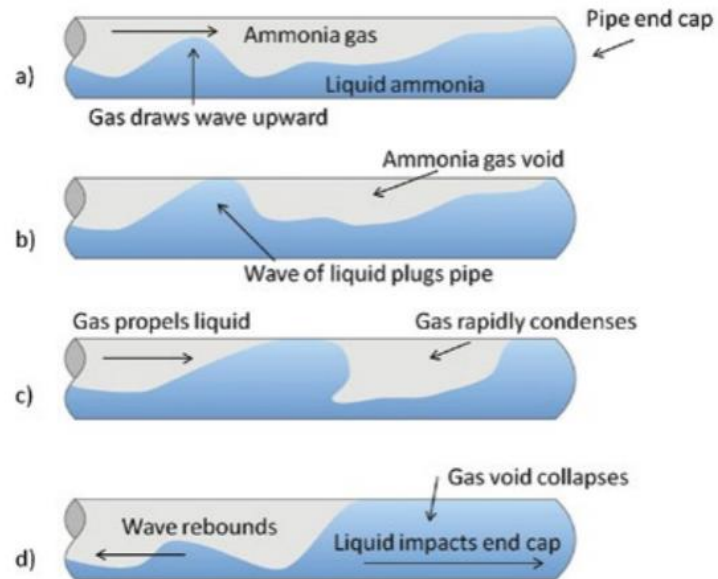
**Explosion near train station
(Zurich)**



Blast in a theater

3- Pipe rupture and leakage

WATER HAMMER, HYDRAULIC SHOCK: SUDDEN SPIKE IN PRESSURE OCCURRING IN LIQ. PIPES





Making Future

- Advanced Modelling & Simulation
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