



HOW TO PREVENT 'RATIONAL ACCIDENTS,' WITH JEAN-PIERRE BENOÎT

I will not allow yesterday's success to lull me into today's complacency, for this is the great foundation of failure.

Og Mandino, author of The Greatest Salesman in the World

A RATIONAL ACCIDENT occurs when insufficient preventative care is a result of rational calculation by those whose job it is to prevent accidents. The two primary causes are:

1. Positive track records of safety cause actors to rationally under-estimate future risks
2. Redundancies in safety design reduce individual care taken

Accidents happen, no matter how hard we try to prevent them. But what if the very rational way we try to stop accidents happen, could actually be causing them? Jean-Pierre Benoît, Professor of Economics and author of The Problem of Prevention, spoke to Conversations on Climate about just this puzzle; and what game-theory can teach us about solving it.

For any executive concerned with managing risk and optimising their operations, here are his four top tips for avoiding a 'rational accident' in your firm:

FOUR SOLUTIONS FOR RATIONAL ACCIDENTS

1. Don't have too many safety layers.

A system with an excess of redundancy can backfire, as agents 'overcompensate' by taking additional risks elsewhere.

FOCUS your design on those safety mechanisms which are the most powerful – avoid averaging down with too many weaker layers.

2. Educate your team about 'strategic dependency'.

Safety systems which are designed to be independent of each other (and thus act as fail-safes) can become tied together by human mediation – for example, workers take system A less seriously because they can rely on systems B and C instead.

FIREWALL your independent systems in people's minds, as well as on paper.

3. Empower the right number of people.

If everyone is made responsible, there is a risk that no-one feels responsible; it is always somebody else's problem. This can also result in a lack of dedicated expertise and leadership around safety.

CONCENTRATE responsibility for risk in a few key positions, so they take real ownership of it.

4. Use checklists.

These force teams to go through a system rigorously each time, reducing the 'strategic slackening' that comes from not having had any problems arise before. They can also help coordinate disparate actors around a common goal.

CONDENSE lists to a minimum number of critical elements; left too long and people will struggle to take each element seriously

To get more insight on rational accidents and what they might mean for your business, listen to Jean-Pierre Benoît's full *Conversations on Climate* episode with United Renewables [here](#).

You can find out more about Professor Benoît and his work [here](#).

The information in this document is based on:
Benoît, J. and Dubra, J. (2013) 'The Problem of Prevention' *International Economic Review* Vol 54, No.3

Why should I read the memo, when you've read the memo?... But the problem is when we all think that way, nobody reads the memo.
Jean-Pierre Benoît, Conversations on Climate