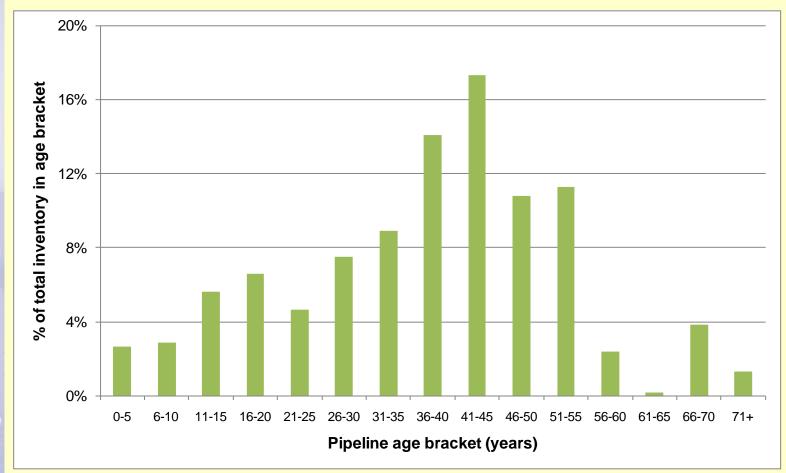
Ageing: what do the statistics tell us?

Jean-François Larivé on behalf of CONCAWE

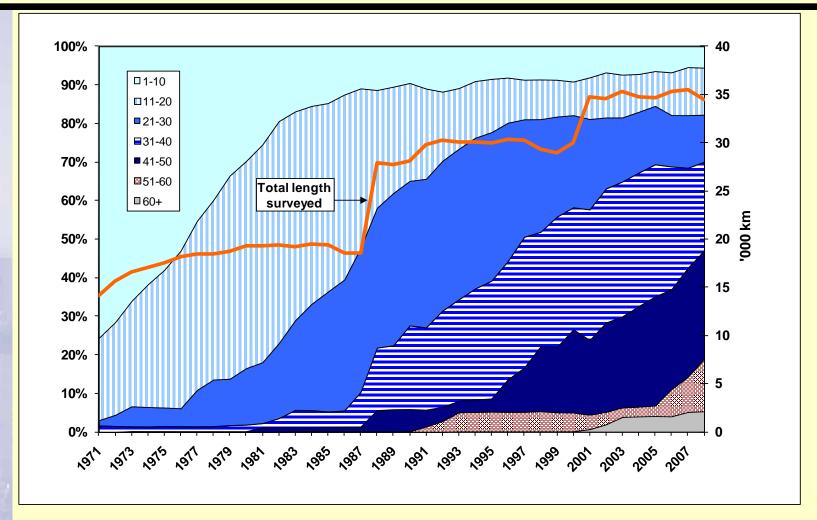
concawe

The "CONCAWE" network is "mature"



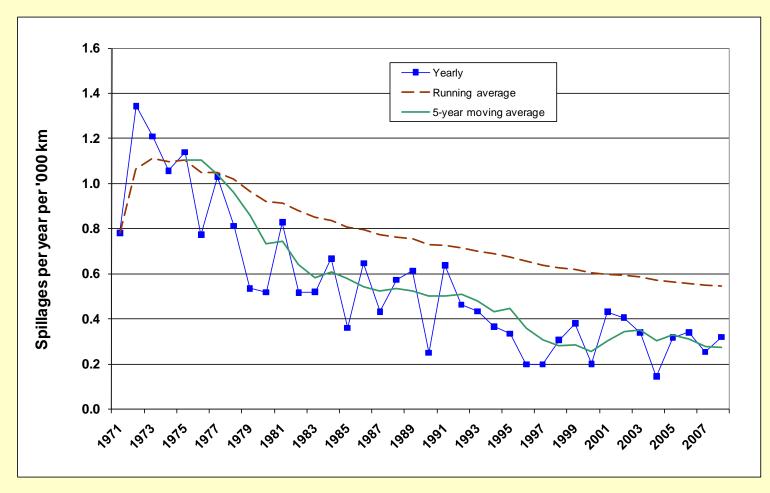


How did we get there?



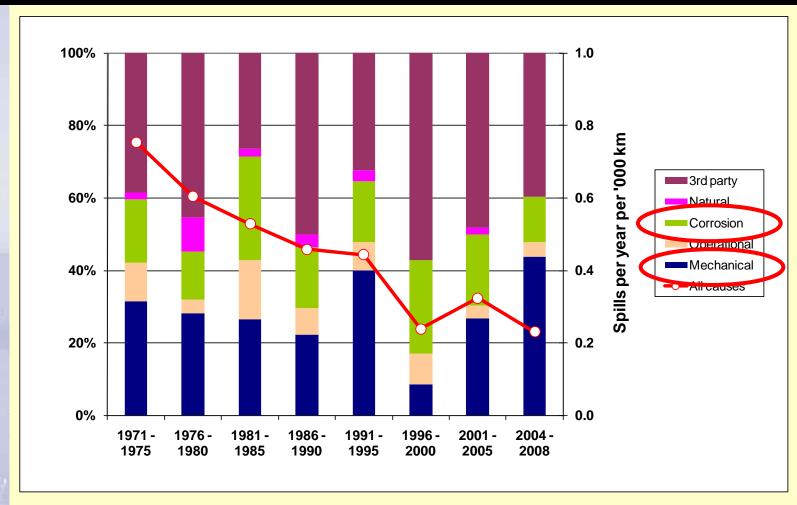
- 80% of the network is over 20 years old
- 50% is over 40 years old

Spillage incidents?



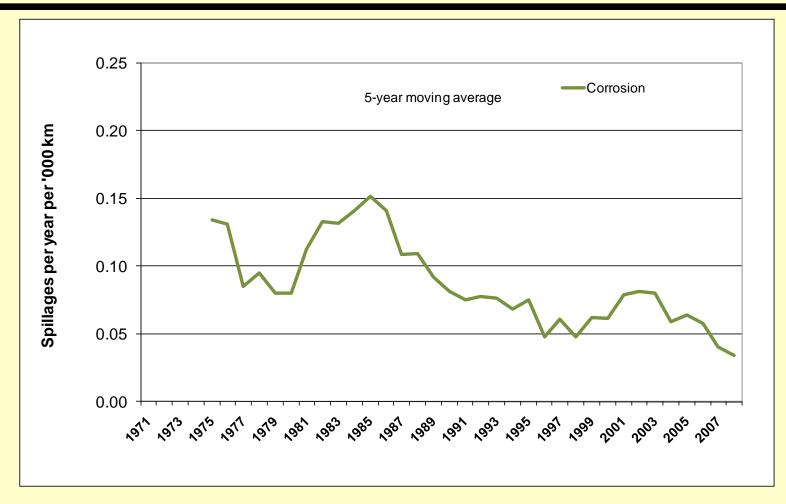
The frequency of spillage incidents is still on a downwards trend

Causes of spills in cold pipelines over time



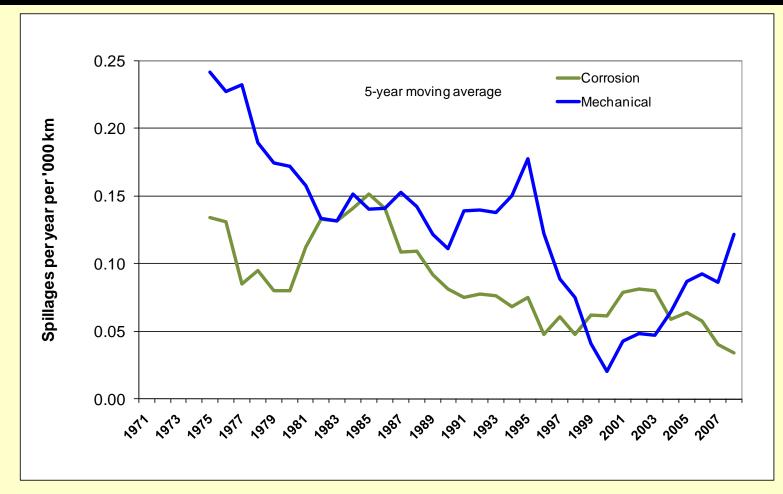
Mechanical and corrosion-related failures are the most likely to be linked to ageing

Corrosion



The frequency of corrosion-related spills has not increased over the years

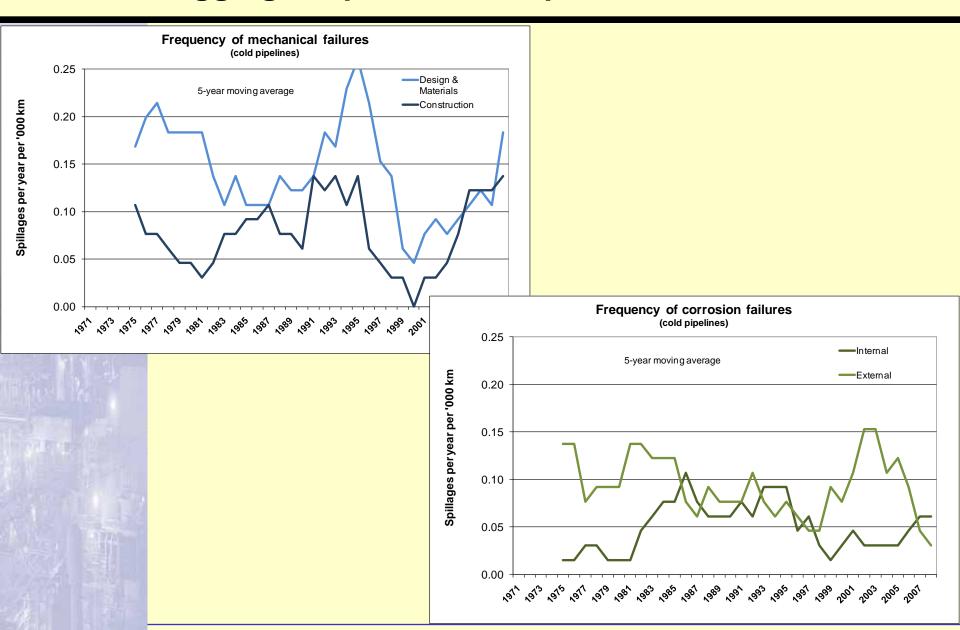
Mechanical



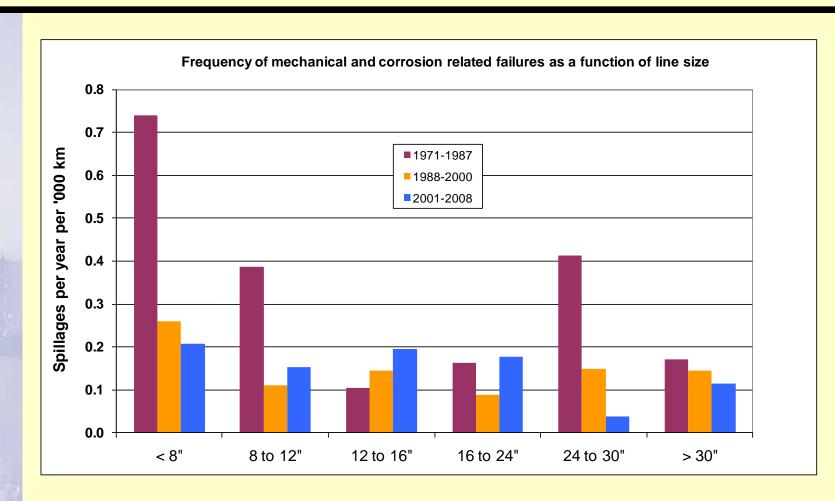
The frequency of mechanical failures appears to be on the increase since the beginning of the last decade after years of declining trend

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Digging deeper does not provide additional clues



Pipeline size?

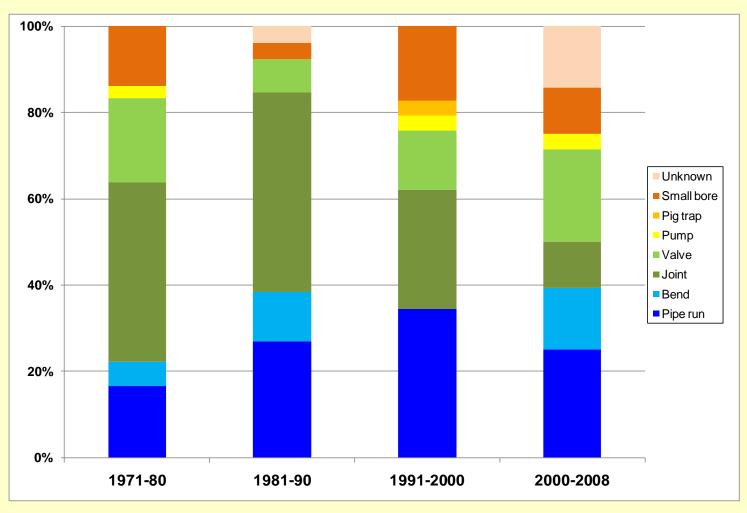


Failed equipment?

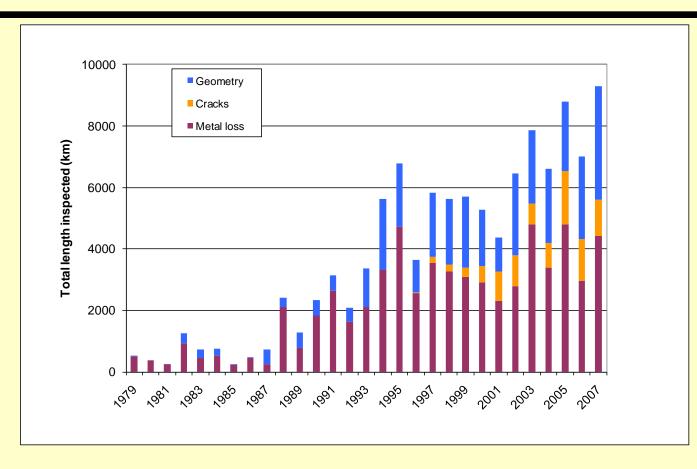


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Intelligence pig inspections



- Improved integrity management including the development of intelligence pigs has contributed to the control of ageing
- 75% of the inventory has been internally inspected at least once

