



Inspectie Leefomgeving en Transport
Ministerie van Infrastructuur en Waterstaat

Improvement of the accident report

What is the real practice in the Netherlands?

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www.ilent.nl



Reporting of all accidents to the ILT (Article 47: national transport dangerous goods act)

- 1) Notify immediately the ILT of accidents which is or could be a danger to public safety.
- 2) Give the ILT the opportunity to assess the situation of the accident.
Do not act! ILT indicates whether she is on the site or not.
- 3) Acts are permitted which are necessary to prevent further hazard or damage.



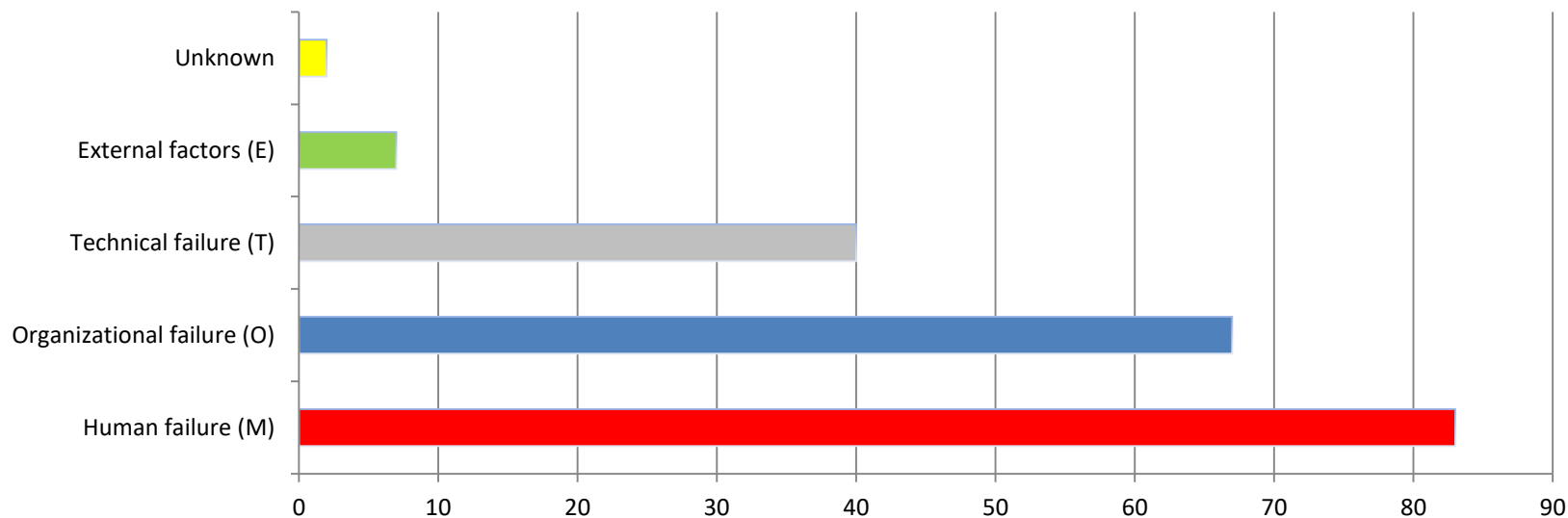
Role of ILT at accidents with the transport of DG

- Record all facts and circumstances
- Give (technical) expertise will be given
- Determine whether the transport meets the legal standard
- Determine whether the transport must be stopped
- Determine whether and in what way further transport can be taken place
- Determine whether additional measures / conditions are necessary
- Initiate an extraordinary investigation followed by an inspection / approval
- Make an investigation of the cause of the accident



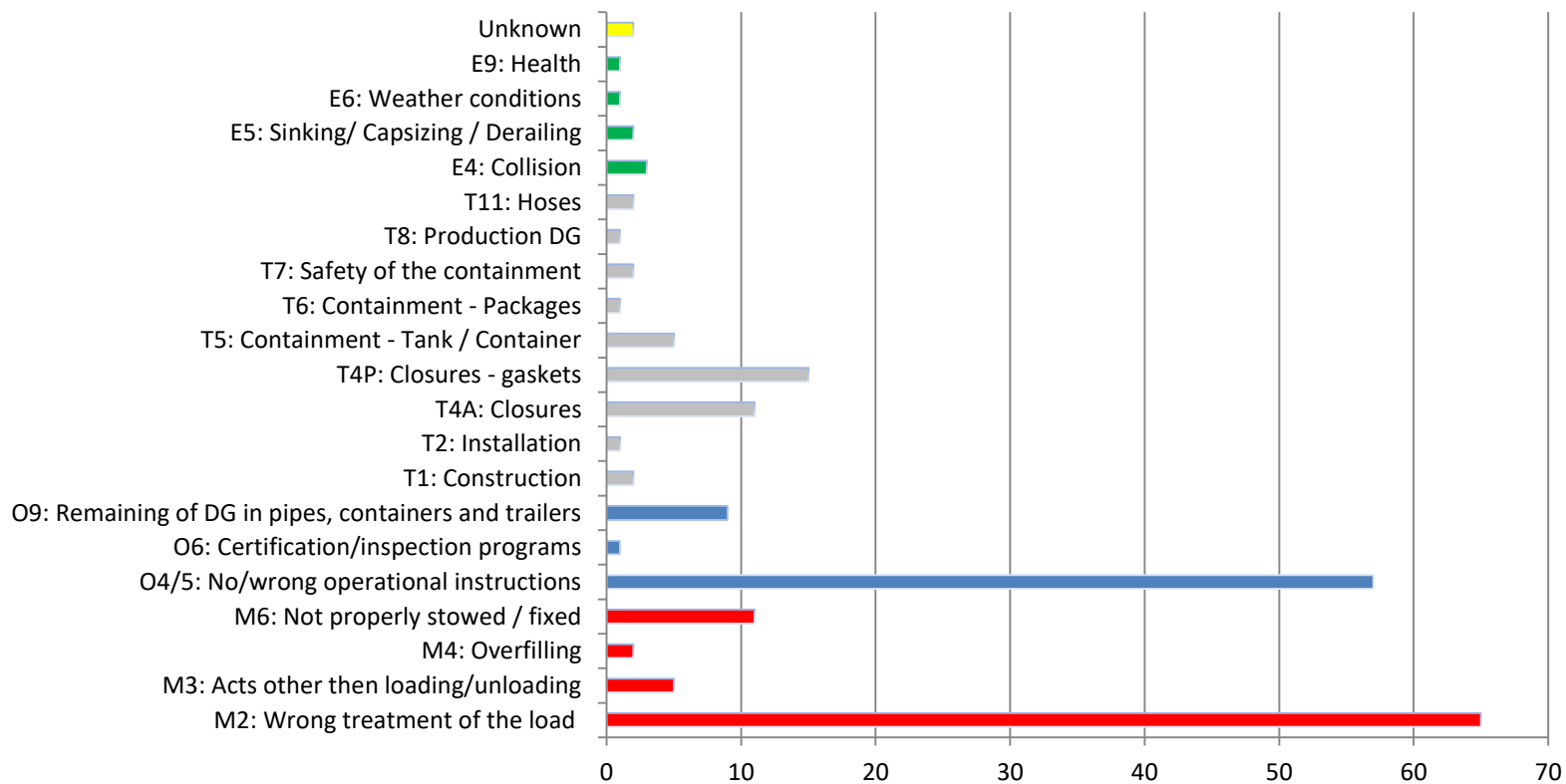
Accidents Road transport

Cause of failure





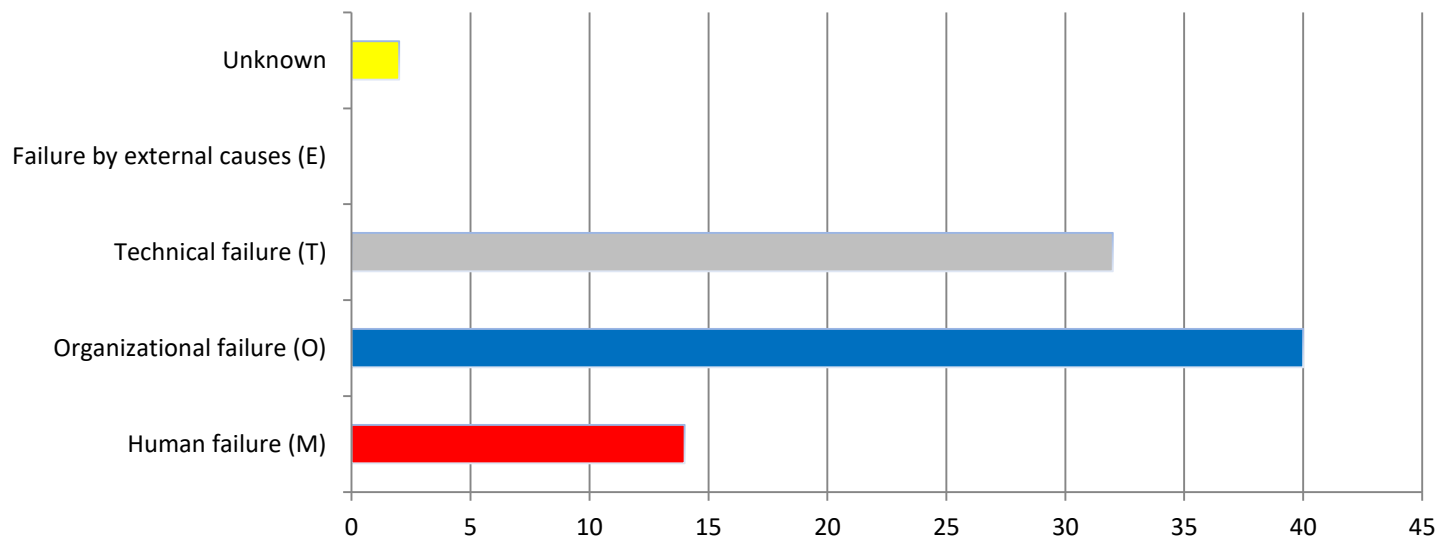
Accidents Road transport





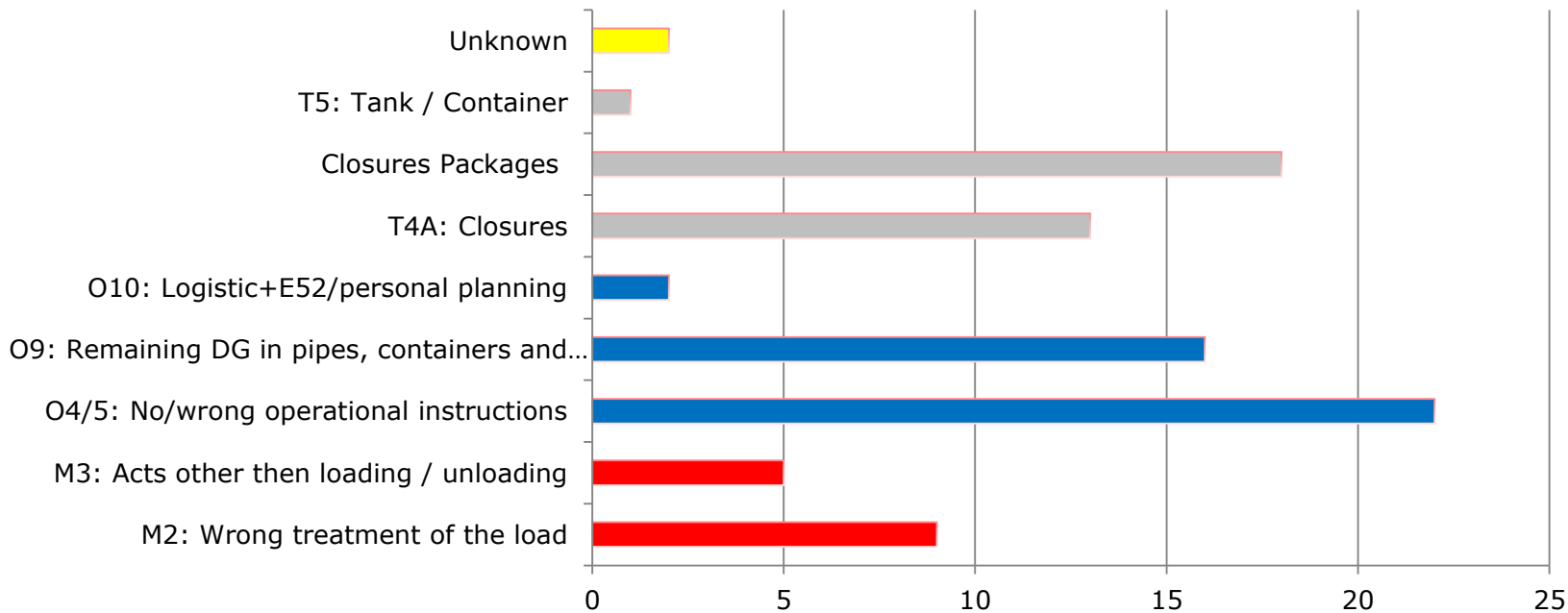
Accidents Rail transport

Cause of failure



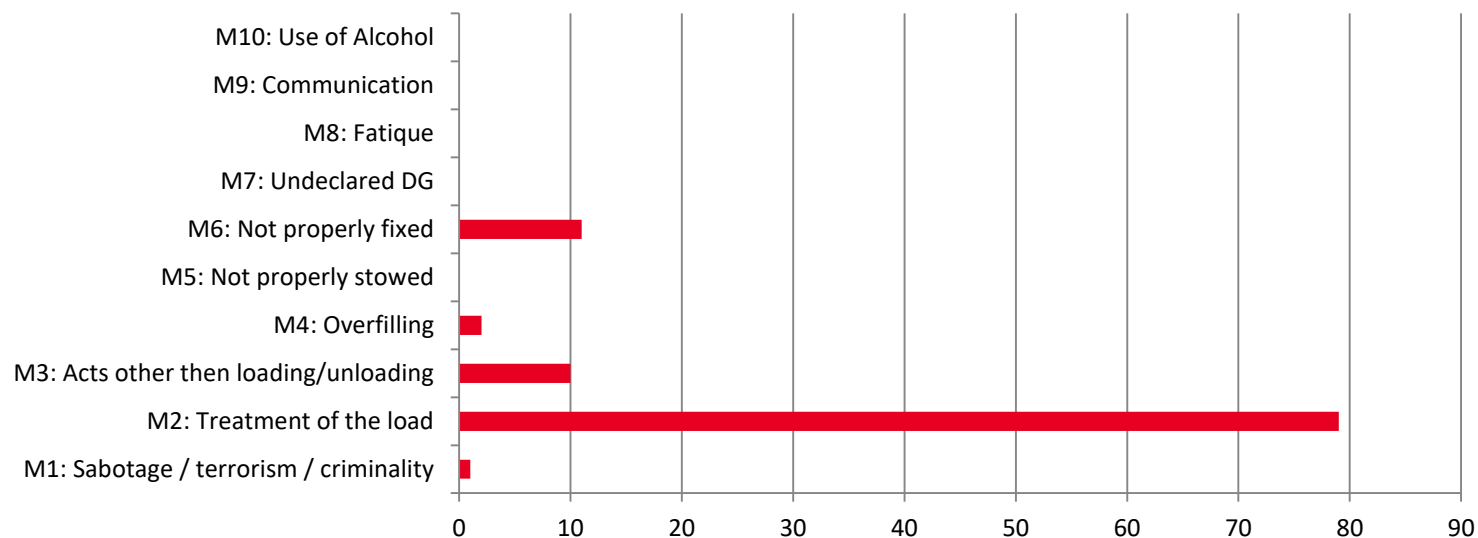


Accidents Rail transport





Human failure 2016



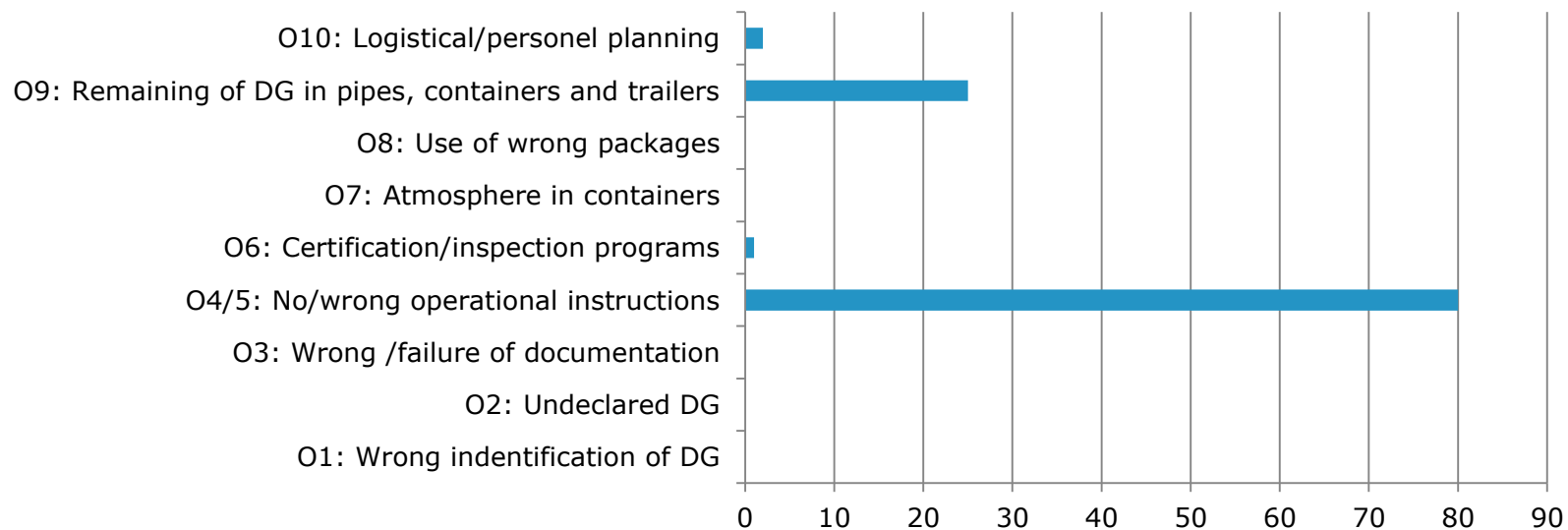


Human failure

M-1/ M-10	Aantal	Omschrijving
M-1	1	Transport of synthetic drugs in bad closed packages
M-2	79	Leaking packages by nails or sharp parts leakage by bulging parts, manual trimming of a gasket, punctured of packages by spoons of forklift truck, not properly closed enclosures (toggles/ not properly closed lock pin, closure caps), overloading vehicle, forgotten to open the vapor return during unloading, tightly adjusted brake pads, too much or too fast pressure on the pipes, not properly attaching of loading and unloading of hoses
M-3	10	Not properly placing of closures (feathers, butterfly valve = not centric), too strong or insufficient tightening bolts and nuts, placing of too small gaskets, battery poles not protected
M-4	2	Manually overfilling of IBC and stationary tank
M-6	11	Not properly fixed / stowed of the load



Organizational failure 2016



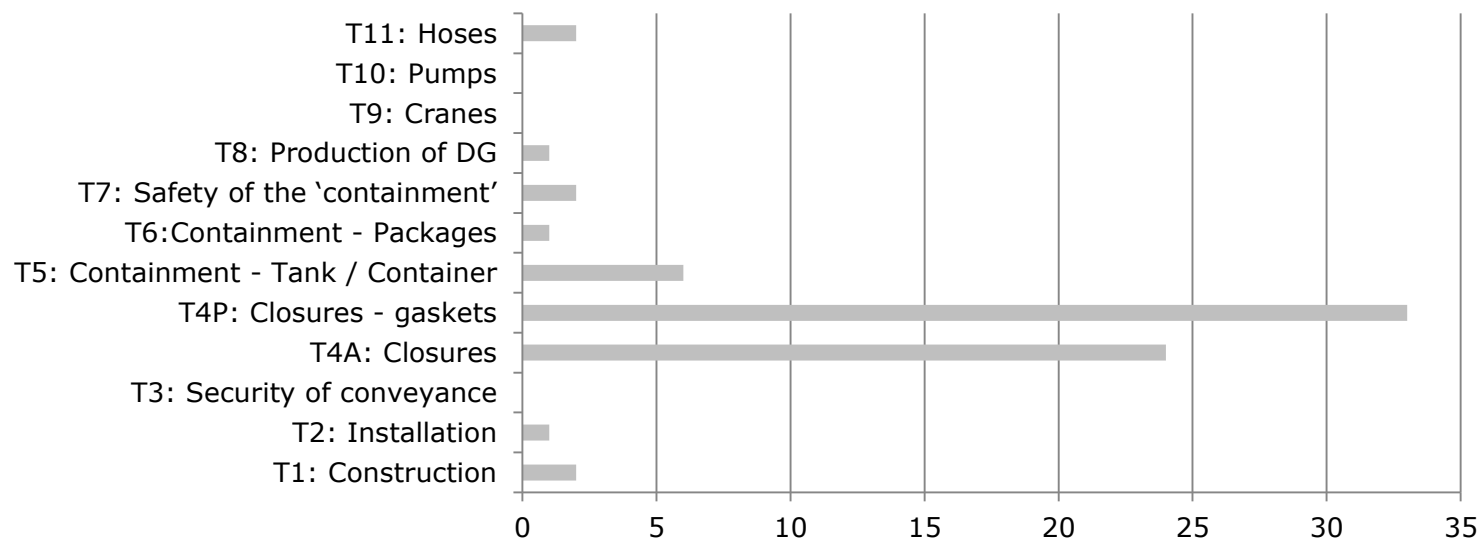


Organizational failure

O-1/ O-10	Aantal	Omschrijving
O-4/5	80	Failure and wrong use of procedures: Spilled product not cleaned, toggles not well tightned, driving with open manhole cover, closures not fully tightned, damaged gasket, wrong placing of gasket, manhole not centrated, remaining product, blowing off of tankcontainers, forgotten to close the closure of under loader. Forgotten to open the vapor return, wrong placing of valves.
O-6	1	Containment not tested within the period
O-9	25	Remaining product in loading pipe, spilled product not cleaned
O-10	2	Due to logistical circumstances during transport, the product is going to cook or pressure increases



Technical failure 2016



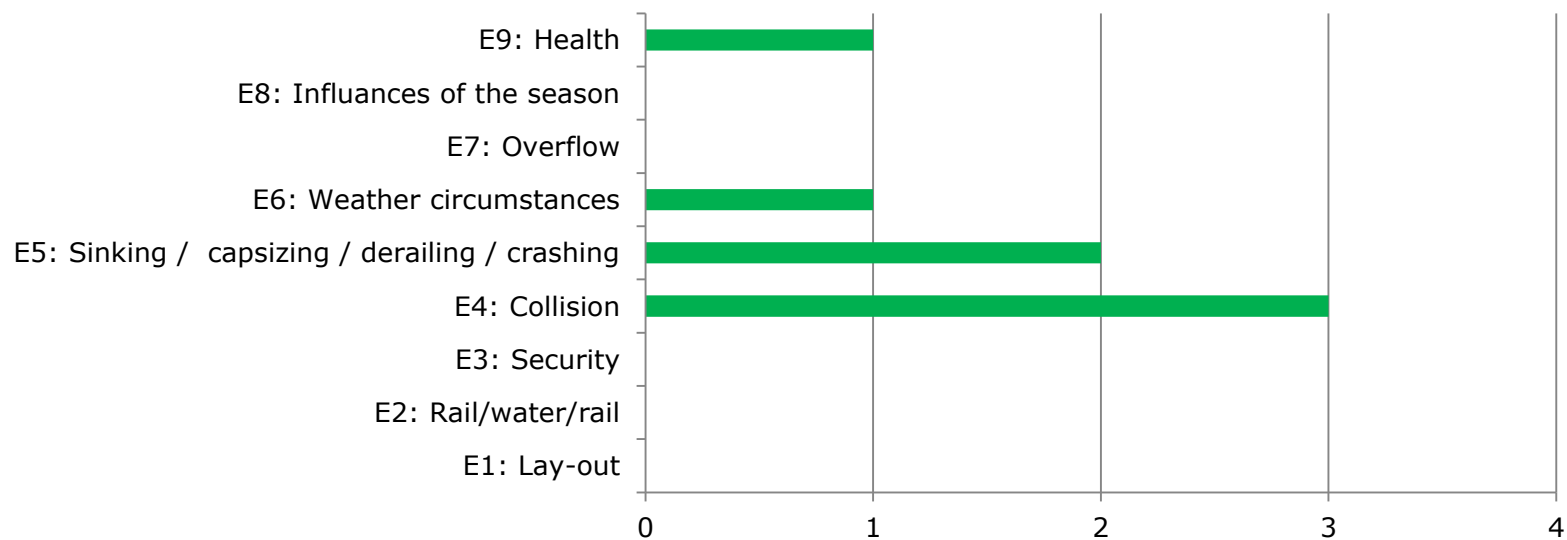


Technical failure

T-1/ T-11	Aantal	Omschrijving
T-1	2	Broken steering axle, too strong adjusted brakes
T-2	1	Bottom closure did not closed due to a leaking airhose. Effect: leaking DG
T-4A	24	Mounting bolts of under loader not well tighned, closures not properly closed / locked not central placed of the closure
T-4P	33	Defect or damaged packages, worned gaskets without memory
T-5	6	Damaged shell by transported DG (acid and coating) or metal stress at the weld seam
T-6	1	Hole in drum caused by effect of the DG
T-7	2	Leaking pressure valves
T-8	1	Due to a moisture of the product, a pressure build-up in the package
T-11	2	Tearing of a certificated unloading hose



Failure of external factors 2016





Failure external factors

E-1/ E-9	Aantal	Omschrijving
E-4	3	Collision between truck or passenger car
E-5	2	due to steering error getting off the road
E-6	1	Collision during heavily rain fall
E-9	1	Driver becomes unwell



Data 1.8.5 accident reports

	ADR	RID	Accident Investigations	Reports 1.8.5 ADR
2016	129	56	43	6
2017	106	74	46	10
2018	122	24	25	25



Communication

- ❑ Branches (VNCI, VNPI, VOTOB, EVO, TLN, ect.)
- ❑ Emergency services (firebrigade, police etc.)
- ❑ Local authorities (municipalities and safety regions)
- ❑ Symposia (CTGG, Society of Safety Advisors)
- ❑ Press releases, trade magazines
- ❑ Twitter
- ❑ Google Alerts
- ❑ Enforcement



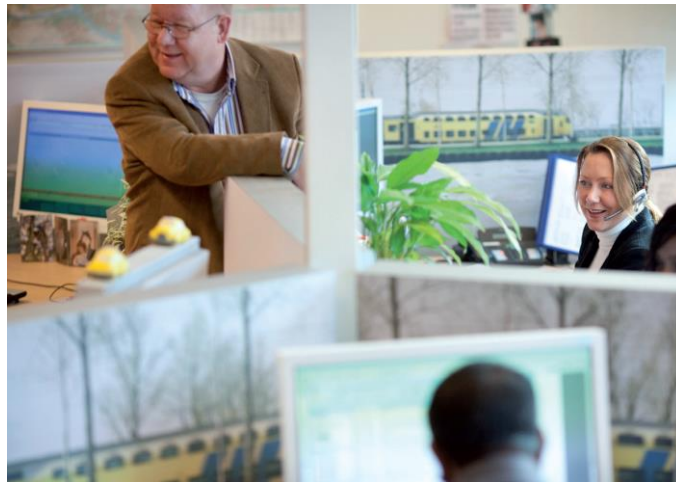
Contacting the ILT



Reporting and information center: +31 88 489 00 00



Website: <http://www.ilent.nl/english/>





Project drip leakages RID

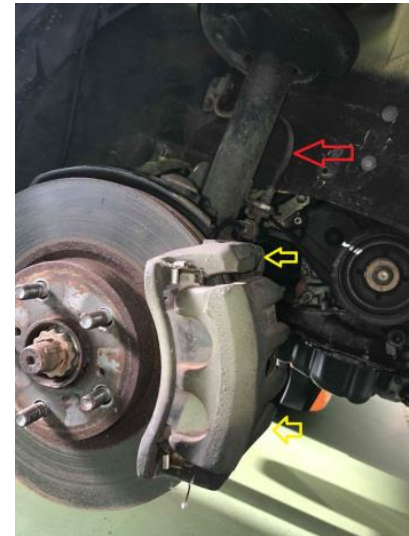
Organisatie:	Postcode	Plaats
1 Noord Europees Wijnopslagbedrijf B.V.	1043 AM	Amsterdam
2 Cytec Industries B.V.	3134 ZB	Vlaardingen
3 Arkema B.V. locatie Rotterdam	3196 KE	Rotterdam
4 Koole Tankstorage Pernis B.V.	3196 KE	Rotterdam - Pernis
5 VLS	3196 KH	Rotterdam - Vondelingenplaat
6 Shell Raffinaderij B.V.	3196 KK	Rotterdam - Vondelingenplaat
7 Kemira Water Solutions B.V.	3197 KA	Rotterdam - Botlek
8 Vopak Terminal Chemiehaven	3197 KB	Rotterdam - Botlek
9 LBC Rotterdam B.V.	3197 KJ	Rotterdam - Botlek
10 Lyondell Basell	3197 KM	Rotterdam - Botlek
11 Vopak Terminal TTR	3197 KN	Rotterdam - Botlek
12 ShinEtsu PVC B.V.	3197 KS	Rotterdam - Botlek
13 Rubis Terminal	3197 KS	Rotterdam - Botlek
14 Vopak Terminal Botlek (RCC)	3197 KS	Rotterdam - Botlek
15 Caldic	3198 LH	Rotterdam
16 Euro Tank Terminals B.V.	3198 LS	Europoort - Rotterdam
17 Kemira Rotterdam B.V.	3198 LS	Europoort - Rotterdam
18 BP Raffinaderij	3198 NA	Europoort - Rotterdam
19 Lyondell	3199 KB	Rotterdam - Maasvlakte
20 Dupont de Nemours	3313 LA	Dordrecht
21 Standic	3316 BG	Dordrecht
22 Arkema B.V. locatie Vlissingen	4389 PD	Ritthem
23 Yara Sluiskil B.V.	4541 HJ	Sluiskil
24 DOW Benelux B.V.	4542 NM	Hoek
25 Coatex Netherlands B.V.	4782 PM	Moerdijk
26 Stolthaven Moerdijk B.V.	4782 PM	Moerdijk
27 Shell Chemie Moerdijk	4782 SJ	Moerdijk
28 AnQuore	6129 EL	Urmond (Geleen)
29 OCI Nitrogen B.V.	6167 AC	Geleen ook andere locaties
30 SABIC B.V.	6167 AC	Geleen
31 DSM Lutterade	6411 AA	Geleen
32 KLK Kolb Specialties B.V.	7491 AE	Delden (vh Elementis Specialties B.V.)
33 FMC Chemicals Netherlands B.V.	9930 AD	Delfzijl
34 Akzo Nobel Chemiepark Delfzijl	9936 HD	Farmsum
35 Noord gastransport	9983 SP	Rodeschool
36 Lyondell Chemie Nederland B.V.	3197 KM	Botlek Rotterdam
37 Nyrstar Budel	6024 AA	Budel Dorplein
38 OCI Terminal Europoort B.V.	3198 LR	Europoort Rotterdam
39 Odfjell Terminals (Rotterdam) B.V.	3197 KJ	Botlek Rotterdam
40 Oiltanking Amsterdam B.V.	1047 AH	Amsterdam
41 Oiltanking Terneuzen B.V.	4542 SM	Hoek



Also special attention to: Vehicle tire fires

Probable causes are:

- Too low tire pressure
- Too tight (new) adjusted brake pads
- Use of imitation parts
- Broken wheel bearings





Accident reports 1.8.5

(Some examples)





Accident 1









Accident 2









Accident 3





100g sterilizant beži, 5g peroxidov...
 Desinfektsioonimittel mit Bleichwirkung für Textilien
 Agent de blanchiment et de désinfection pour textile
 Bleikvækst- og desinfektionsmiddel for tekstiler
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 Bleikvækst- og desinfektionsmiddel for tekstiler

mit 40
 Fara
 Niebezpieczeństwo
 Nebezpečí
 Nebezpečnost
 Опасность

Opasnost
Veszély

UN314



Ozonit 40
 Fara - Fara
 Vaara

Niebezpieczeństwo
 Nebezpečí
 Nebezpečnost
 Опасность

Opasnost
Veszély

220 kg

Everywhere It Matters.™

LOT

150310

4028161501013

Ozonit 40
 Fara - Fara
 Vaara

Niebezpieczeństwo
 Nebezpečí
 Nebezpečnost
 Опасность

Opasnost
Veszély

220 kg

Everywhere It Matters.™

LOT

150310

4028161501013

Improvement accident reports



Improvement accident reports



Accident 4



VERVAEKE

1308

VERVAEKE

EDOMITE
33.000 L

33

18-12-2023





Improvement accident reports




The Coatinc Company[®]
Coatinc N.V.
Oppervlakbehandeling sinds 1889



Leak track

Erosion of the metal

Leak track





Accident 5

**ADR : UN 3264 BIJTENDE ZURE ANORGANISCHE VLOEISTOF, N.E.G. (Bevat
WATERSTOFPEROXIDE, CHLOORWATERSTOFZUUR) ; 8 ; III ; (E)**

**ADR : UN 3264 BIJTENDE ZURE ANORGANISCHE VLOEISTOF, N.E.G. (Bevat
WATERSTOFPEROXIDE, CHLOORWATERSTOFZUUR) ; 8 ; III ; (E)**

24 packages 25 ltr. can blauw

28,8 Kg

Dop (ont-beluchting, DIN 61)

24 Kg

voor 20, 25 en 30 ltr. can

689 Kg



No Report









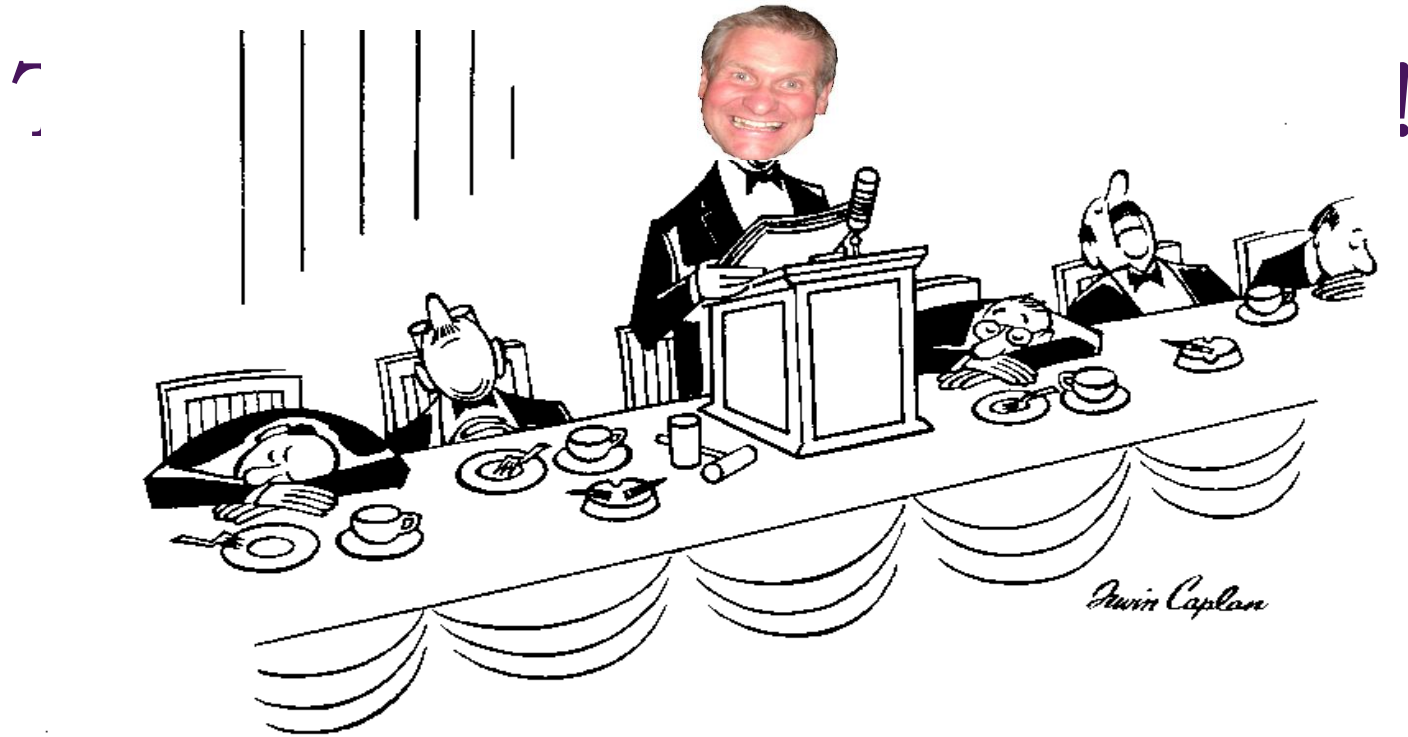
Sampling of jerrycans





Conclusions:

- Make an organisation responsible in your country for receiving **all** accidents with DG
- Analysis and investigation of accidents
- Draw up a special report of the most severe accidents and accidents of the same type which occur frequently
- Make these reports available for information to the Member States / Contracting Parties of ADR/RID/ADN
- International Database (UN level)



Caplan

Saturday Evening Post

"And now – are there any questions?"