

BfR Workshop

"Mind the Gap – Data Availability in REACH Registrations"

The Perspective from a Lead Registrant

150 years



We create chemistry

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BASF SE
Product Safety

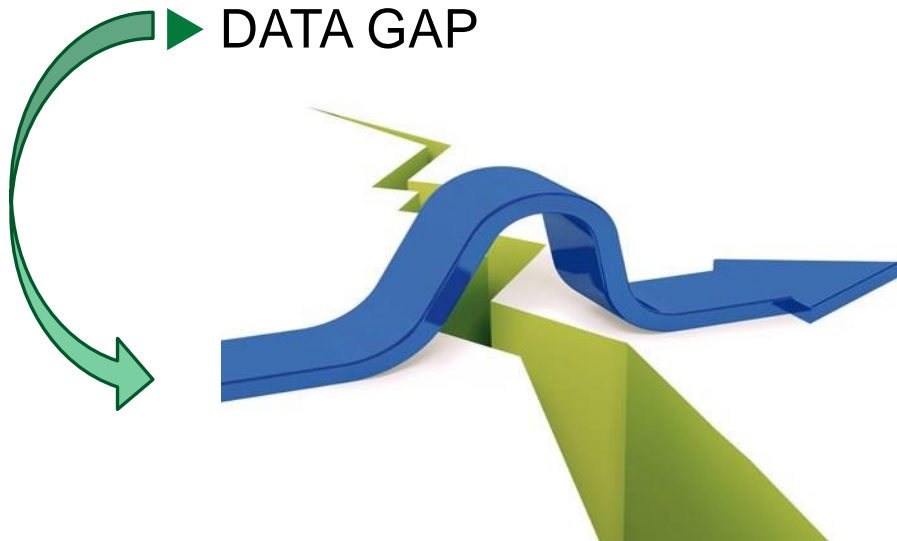
First Steps in Dossier Preparation

- Substance ID
- Data Gap Analysis

▶ Data available



▶ DATA GAP



1	A	B	C	D	E	F	G	H
2	Identity of Substance	Ames (REACT)	Information Requirement	Rating	Data Availability			
3	Test Number	Ames (REACT)	Information Requirement	Rating	Result	Source	Data Reference	Supports Category
31	* * * * *							
32	8.1	VI	Skin irritation (indicate if in vivo)					
33	8.2	VI	Eye irritation (indicate if in vivo)					
34	8.3.1	VI	Skin sensitization					
35	8.4.1	VI	In vitro gene mutation study in bacteria					
36	8.4.2	VI	In vitro cytogenetic study in mammalian cells					
37	8.4.3	VI	In vitro gene mutation study in mammalian cells					
38	8.4.4	VI	Other in vivo mutagenicity test: microsome test (OECD 414) or UDS assay (OECD 488)					
39	8.5.1	VI	Acute toxicity, oral route (OECD 401, 423 or 424)					
40	8.5.2	VI	Acute toxicity, inhalation					
41	8.5.3	VI	Acute toxicity, dermal route					
42	8.6.1 a/b/c	VI	Short-term repeated dose toxicity study in rats (28 days) oral/dermal/inhalation					
43	8.6.2 a/b/c	IX	Sub-chronic toxicity study (90 days) in rats, oral/dermal/inhalation					
44	8.6.3	X	Chronic toxicity (12 months or longer) rats (reproductive/other)					
45	8.7.1 a	VI	Screening for reproductive/developmental toxicity, rats					
46	8.7.2 a	IX	Developmental toxicity study, rats					
47	8.7.2 b	IX	Developmental toxicity study, rabbits					
48	8.7.2 a/b	IX, X	One-generation reproduction toxicity study (enhanced)					
49	8.7.2 a/b	IX, X	Two-generation reproduction toxicity study					
50	8.8.1	VI	Assessment of toxicokinetic behaviour (based on required studies)					
51	8.9	X	Carcinogenicity study/combined chronic toxicity, rats (Sposova's test)					
52	Other studies (to be listed below)							
53		IX	Neurotoxicity					
54								
55	* * * * *							
56	* * * * *							
57	8.11	VI	Short-term toxicity testing on Daphnia					
58	8.12	VI	Growth inhibitor study on algae					
59	8.13	VI	Short-term toxicity testing on fish					
60	8.14	VI	Activated sludge/resuspension inhibition testing					
61	8.15	IX	Long-term toxicity testing on Daphnia, 21-days					
62	8.16.1	IX	Fish early-life stage (FELS) toxicity test					
63	8.16.2 (a)	IX	Fish short-term toxicity test on embryos and larvae by otoliths					

- ▶ Testing (proposal)
- ▶ Read across
- ▶ QSAR
- ▶ Waiving

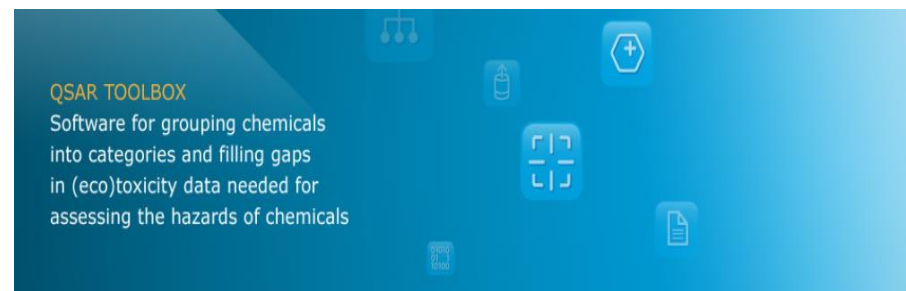


Assessment of "Data Gaps"

- Formal data gap check is easy
- When testing is not the preferred option
 - ▶ read across
 - ▶ QSAR
 - ▶ waiving

might become the surrogate

- considering
 - ▶ the endpoint
 - ▶ the complete phys-chem, tox and ecotox profile of the substance
 - ▶ data from structurally related substances
 - ▶ on a substance by substance basis



REACH manpower @ BASF

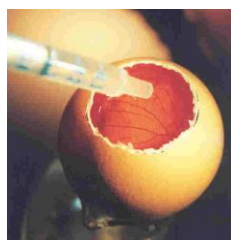
- REACH resources @ BASF:
 - ▶ 50 legal entities within the EU (plus 40 outside the EU)
 - ▶ 30 REACH-coordinators in operational divisions
 - ▶ 130 substance coordinators
 - ▶ 70 toxicologists, ecotoxicologists, documentalists and experts for physico-chemical data
 - ▶ External consultants as additional support



REACH efforts @ BASF

■ Tier 1

- ▶ ca. 670 substances registered
- ▶ >1000 registrations submitted
- ▶ 60 % as lead or alone



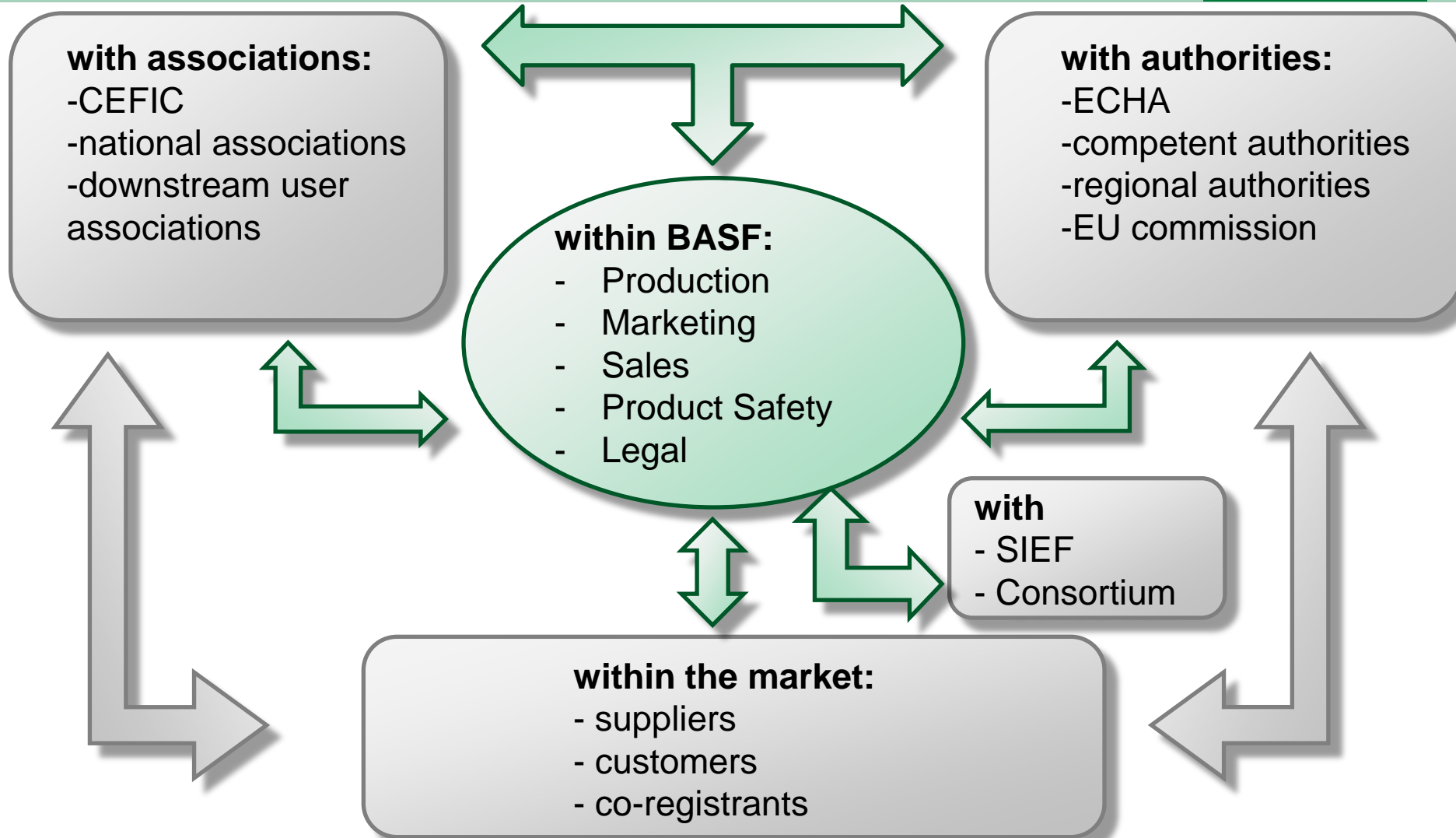
■ Tier 2

- ▶ ca. 560 substances registered
- ▶ ~ 700 registrations submitted
- ▶ 65 % as lead or alone

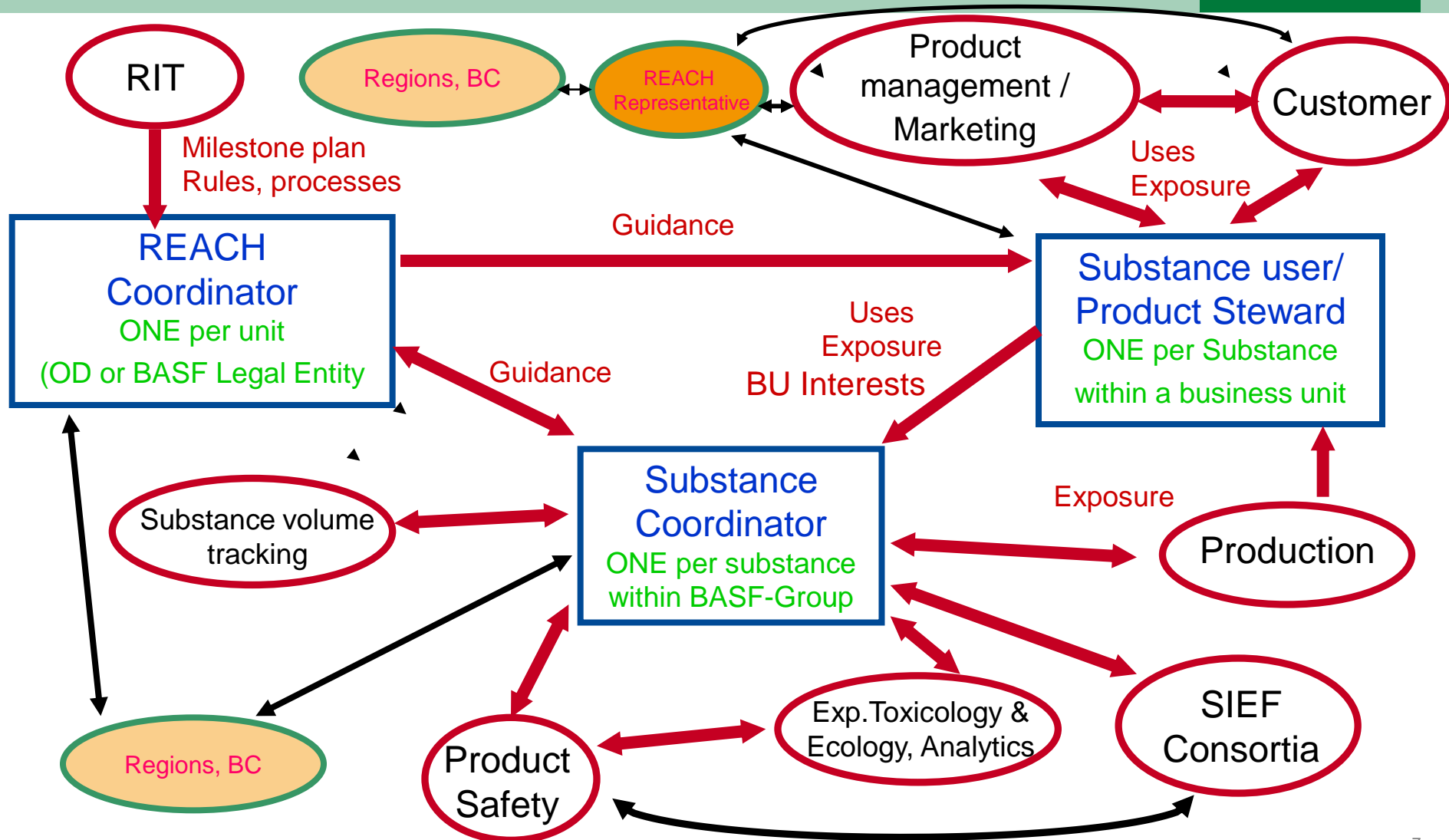
■ **BASF** calculates with overall costs of 500 – 550 Mio € (2008 – 2018)

- ▶ 50 mio € per year
- ▶ 20 mio € per year for tox and eco testing

Key for REACH: Communication



REACH Communication Network @ BASF



REACH Tier 1 Experiences

- communication is key factor
- time consuming negotiations in SIEFs and consortia
- relatively fast agreements on substance identity
- 3 different IUCLID versions
- new guidance documents
- different interpretation of legal text and guidance documents
- different approaches to data gap filling, exposure assessment, CSR preparation etc.




REACH Tier 1

Example: Styrene

- REACH Technical Dossier (2010)
 - ▶ ca. 4200 pages
 - ▶ > 600 references
 - ▶ 819 pages CSR
- 2 updates so far
- eSDS:
 - ▶ 68 pages, 54 pages thereof covering information about uses and corresponding exposure scenarios
 - ▶ after update : 90 pages, 71 pages thereof covering use and exposure scenarios



Registration is not the end ...

Continuous pressure for dossier update

Business driven

- ▶ additional / modified uses
- ▶ change in substance ID
- ▶ change in production volume
- ▶ change in confidentiality claims

Regulatory driven

- ▶ new relevant data / information
- ▶ changed classification and labelling
- ▶ ECHA (targeted) compliance checks
- ▶ substance evaluation
- ▶ new / modified ECHA – guidances

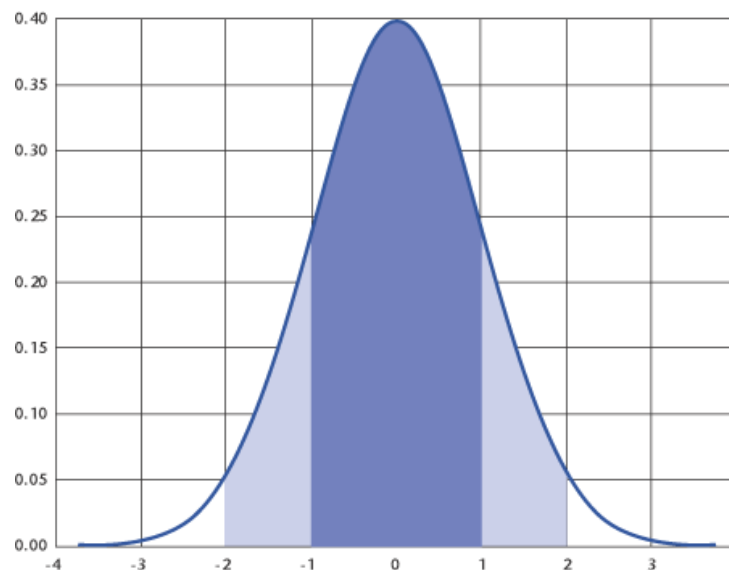
BASF has submitted more than **2000** update dossiers to

BASF has received **341** decision letters from



Quality of REACH Dossiers

- dossier quality shows Gaussian distribution



Dossiers are not perfect, but overall most are of reasonably high or very high quality

Concluding Remark



**Take and
adequately
consider
industry input**

**Increase
practicability
and decrease
bureaucracy**

150 years



We create chemistry