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Beyond registration of REACH dossiers: an industry perspective

Steffen Bade

Ludwigshafen am Rhein, 26.09.2019

Outline

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- Examples: experiences and factors influencing dossier updates
- Further steps for dossier improvement
- Summary & conclusion

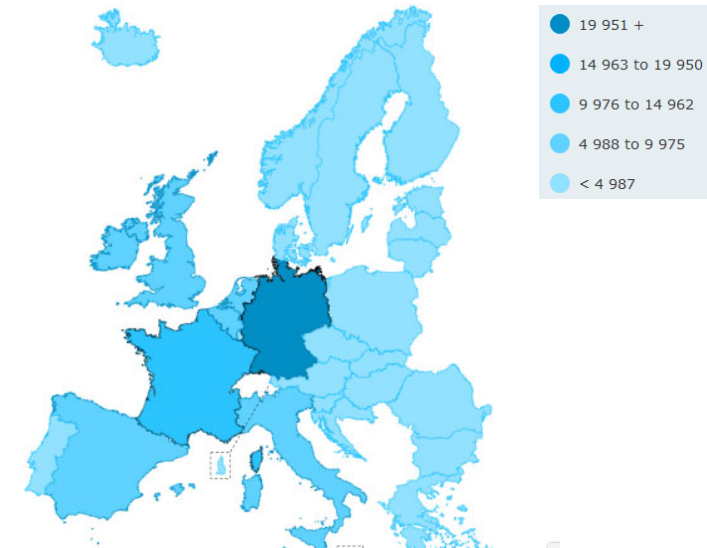
Objectives of REACH

Ensure a high level of protection for human health and the environment

„No data, no market“
=> 97.162 registrations on 22.607 substances

Enhancement of competitiveness and innovation

Promotion of alternative test methods



Taken from EChA, 2019

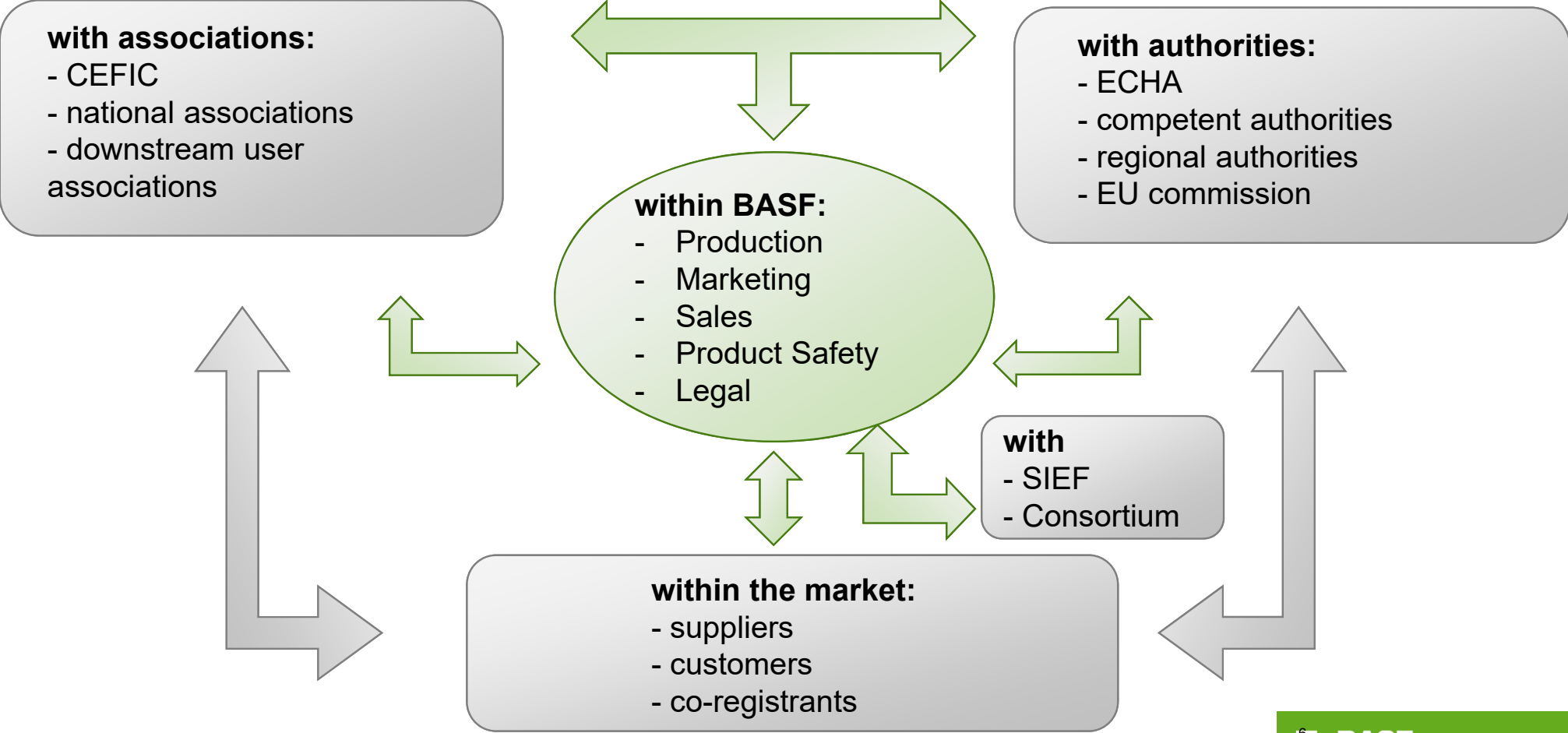
Free circulation of substances on the internal market

REACH @BASF

REACH manpower@BASF

- REACH resources @BASF
 - ▶ ~100 legal entities with active registrations
 - ▶ ~30 REACH-coordinators
 - ▶ ~90 substance-coordinators
 - ▶ **65 toxicologists, ecotoxicologists, documentalists and experts for physicochemical data**
 - *Those experts provide the main input for registration dossiers*
 - Consultants (external & internal) as additional support
 - Lab personnel not included

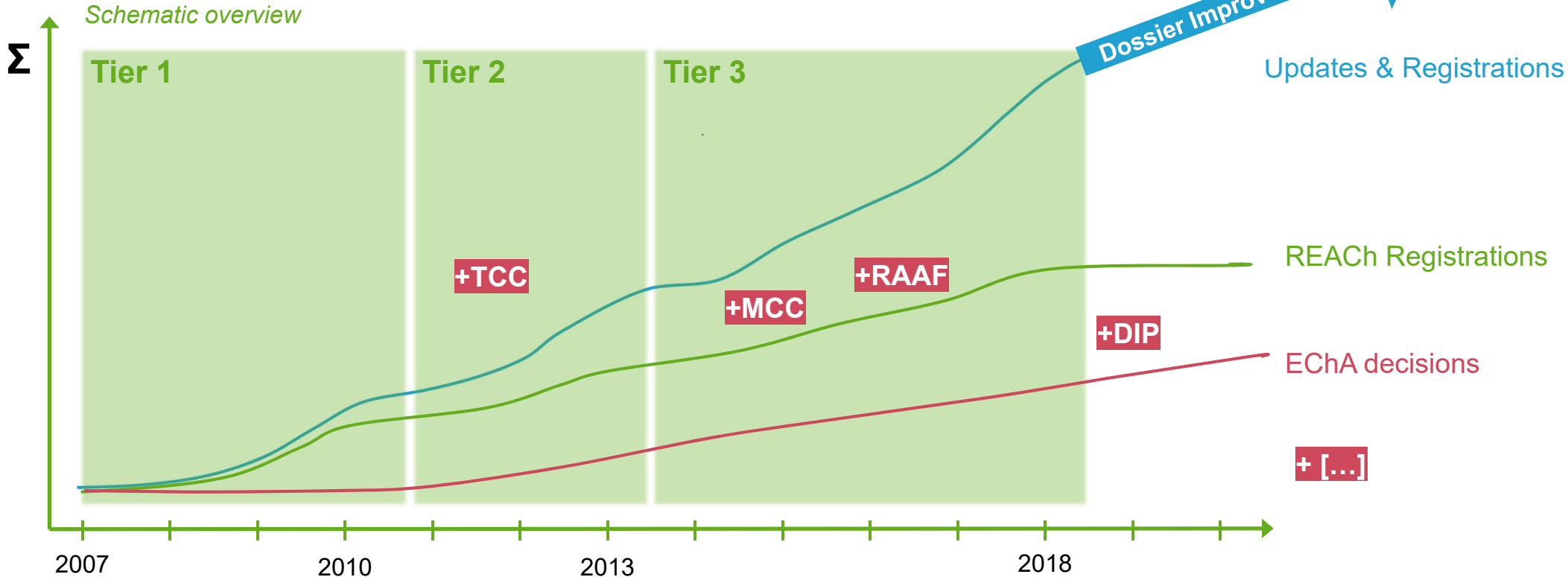
REACH Communication Network



REACH efforts@BASF

- BASF has registered approx. 2,000 substances
- BASF holds approx. 3,000 active REACH registrations
- BASF is sole registrant or LEAD registrant in ca. 50% of the registrations
- BASF ordered approx. 4,000 (eco)toxicological studies for REACH purposes since 2007. It breaks down to 1,400 *in vivo* studies and 2,600 *in vitro* studies
- On average across the last 10 years, BASF is sending ~50 submissions (registrations or registration updates) per month. This equals to 2-3 submissions per working day.
- BASF spent ca. 400 Mio€ on REACH between 2007 to 2018, i.e. 40 Mio€ per year and 3.3 Mio€ per month
 - ▶ Although registration-phase finished, annual costs remain and increase further

Registration is not the end...



Experiences and factors influencing dossier updates

Triggers for dossier updates

Continuous pressure for dossier update

Business driven

- ▶ additional / modified uses
- ▶ change in substance ID
- ▶ change in production volume
- ▶ change in confidentiality claims
- ▶ change in LE (acquisitions and divestments)

Regulatory driven

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

BASF has submitted more than
BASF has received more than

2,200 update dossiers to
800 decision letters* from



*TP, CCh & SEv

■ BASF
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Dossier update process is complex for industry

- Communication is key factor
- Time-consuming negotiations in consortia (particularly now for dossier improvement)
- Continuous development of IUCLID versions
- Continuous development of regulatory benchmarks (i.e. new guidance documents, new study protocols, changes in information requirements)
- Different interpretation of legal text, scientific arguments and guidance documents
- Different approaches to data gap filling, exposure assessment, CSR preparation etc.

Example I: Complexity of dossiers

- **Example A:** REACh Technical Dossier (2010)

- ▶ > 4,200 pages
- ▶ > 600 references

- 3 updates: CSR increased from 819 to 865 pages (2017)

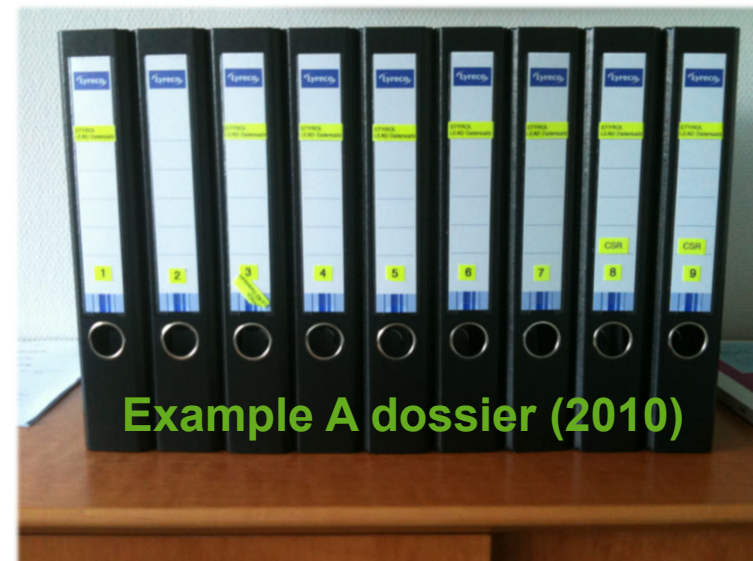
- eSDS:

- ▶ 68 pages, 54 pages thereof: use information & scenarios
- ▶ after updates : 90 pages, 71 pages thereof: use information & scenarios

- **Example B:** read-across justification (tox); category

- ▶ 2013: 45 pages
- ▶ 2016: 51 pages
- ▶ 2017: 102 pages after publication of read-across assessment framework (RAAF) and discussion with EChA

Many dossiers are complex; adaptation of current standards takes time



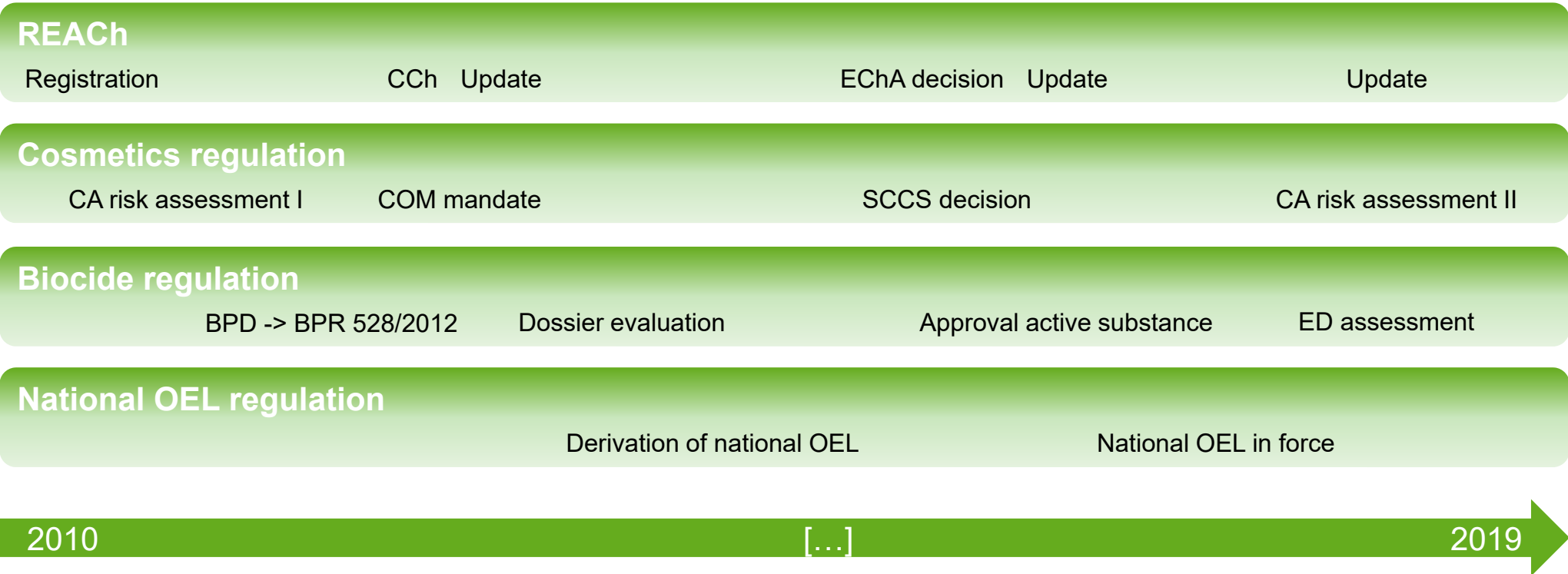
Example II: Dossier improvement & safe handling of chemicals

- **Example A:** Improvement of category read-across justification (tox) from 45 to 102 pages
 - ▶ No further substance-specific data or use information were required or generated
 - ▶ Safe-levels (e.g. DNELs/PNECs etc.) and C&L was not changed
 - ▶ Category, data and justifications were discussed with authorities and accepted
 - ▶ **Conclusion: formal requirements were fulfilled, but risk assessment of category members was not changed**
- **Example B:** Improvement via new studies after non-acceptance of read-across justification
 - ▶ Results of new studies confirmed formerly non-accepted read-across arguments

Adaptation to current standards does not necessarily lead to change in risk assessment and RMM

Example III: Other regulations possibly interfere with REACh

Example: substance used under REACh, as cosmetic ingredient and as biocide



**REACh updates are influenced by other legislations (e.g. safe levels)
Harmonization (e.g. AF) and adequate update frequencies increase efficiency**

Dossier quality and further steps

Quality of REACh dossiers

Analysis of 1st retrospective UBA/BfR study (2018) based on a sample of 88 BASF SE LEAD dossiers

■ Example Toxicology:

- ▶ 4 categories: developmental tox; reproduction tox; mutagenicity; repeated dose tox
- ▶ Manual check of each shortcoming claimed by BfR/UBA

Result	% dossiers	% dossiers
Already addressed via update (>03/2014)	39.5	80.2
Substance under current CCh/SEv – update in preparation (2019)	18.5	
No shortcomings claimed / complex	22.2	
Claimed shortcomings not addressed, yet	19.8	19.8

>80% of LEAD dossiers meet quality standards (tox)

Focus for further dossier improvement

Further steps to improve dossier quality

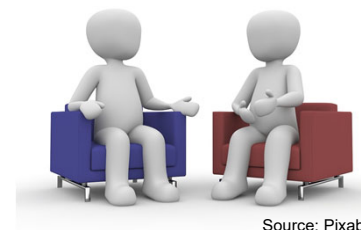
- Multi-annual (2020-2027) action plan to improve quality of REACH dossiers
 - ▶ Cooperation agreement between Cefic and EChA
 - ▶ Focus on substances located in „uncertain“ (=non-decided) pool of EChA's chemical universe
 - ▶ Improvement in close coordination with EChA



Source: Pixabay

- Pilot project of volunteering companies (3) and EChA
 - ▶ Joint discussion of exemplary improvement strategies
 - ▶ Learning for industry, associations and authorities

Summary



Source: Pixabay

- REACh is a success story: it increased the availability of safety information for chemicals
 - ▶ REACh is an enormous investment for industry
 - ▶ There has never been such an achievement by any chemical regulation in the world. We should be proud of what has been accomplished by legislators, authorities and industry.

- „*Dossier quality*“ is no synonym for „*safe handling of chemicals*“ or „*compliance*“
 - ▶ Standards are under continuous development; registered chemicals are handled safely despite ongoing discussions between industry and authorities
 - ▶ Communication, adequate consideration of industry input, increase of practicability and decrease of bureaucracy will make another success story for authorities, legislators and industry

Concluding remark

- Increase of regulatory benchmarks
 - ▶ reduces speed and efficiency of updates
 - ▶ increases complexity and resource requirements (industry & authorities)
- The safety of chemicals should be the focus of updates: **Balance** between formal and science-based requirements as well as **constructive interaction** between registrants, associations and regulators required
- Balanced risk communication required

 **BASF**

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