



Group Function Sustainability Affairs, ABB, Dec 2015

# EU REACH

## Checklist for REACH compliance at ABB

# Aim of EU REACH

To improve the protection of human health and the environment from the risks that can be posed by chemicals, while enhancing the competitiveness of the EU chemicals industry.

To promote alternative methods for hazard assessment of substances, in order to reduce the number of tests on animals.



# Scope of EU REACH

REACH covers all substances on their own,  
in preparations and in articles (products).

However, REACH does not apply to:

Radioactive substances.

Substances on their own,  
in preparations or in  
articles to customs  
supervision and which are  
in temporary storage for  
re-exportation or in  
transit.

Non-isolated  
intermediates.

Carriage of dangerous  
substances on their own  
and in dangerous  
preparations by rail,  
road, inland waterway,  
sea or air.

Certain substances on  
their own, in  
preparations or in  
articles exempted by  
Member States in the  
interest of defense.

Waste, which as defined  
in Directive 2006/12/EC,  
is not a substance  
according to REACH.

# Roles and Responsibilities

REACH distinguishes different roles in the supply chain.

**Manufacturer**

**Supplier**

**Producer**

**Distributor**

**Downstream  
user**

- ❑ ABB may play several roles under REACH and have specific obligations. Every local business unit must understand their role and responsibility under REACH.
- ❑ Responsibility follows the delegation scheme described in country directives with the overall responsibility on the LBU-manager.

# Compliance with EU REACH

REACH stands for:

- ❑ Registration
- ❑ Evaluation
- ❑ Authorization
- ❑ Restriction of CHemicals



The following pages include a checklist of actions that must be taken into account and be fulfilled in order to meet and be compliant with the EU REACH legislation.

# Checklist for compliance

1. Chemical substance inventory
2. Registration / Registration process
3. Pre-registration
4. Authorization
5. Restriction
6. ABB List of Prohibited & Restricted Substances
7. Information
8. Strategic decisions





# 1. Chemical substance inventory

- Make a list of chemical substances used within your company or business unit.
- Make sure that Safety Data Sheets (SDS) are available for all your substances (which should not be older than 3 years).
- Make sure that each substance is used in the way described in the safety data sheet (identified use). Otherwise develop a chemical safety assessment and make a notification to ECHA.
- Make sure to use the protective equipment prescribed in SDS.



## 2. Registration

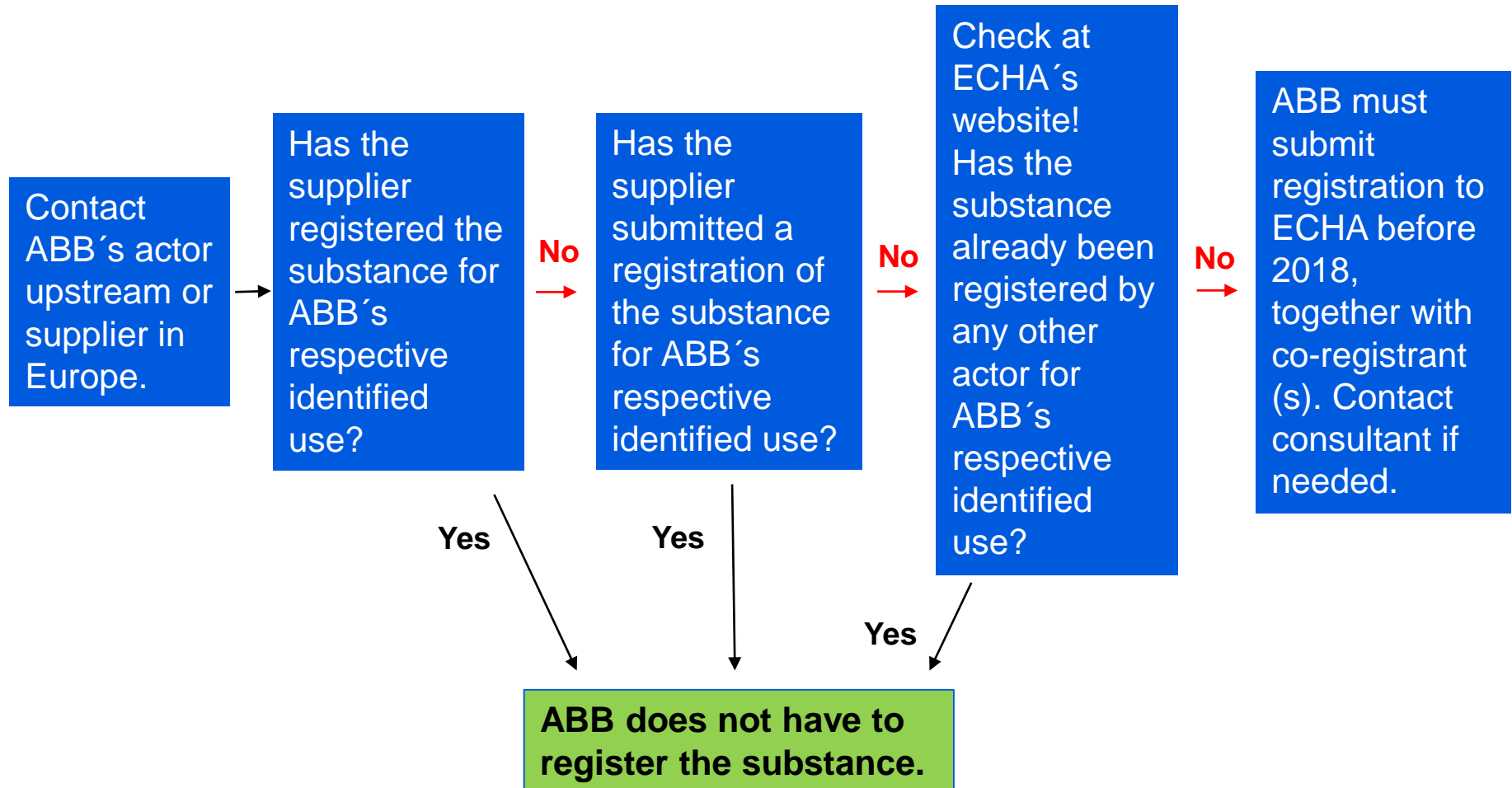
- List the substances (per CAS number) that are imported from a non-EEA country.
- Determine the annual volume for each substance from non-EEA country per LBU.
- Determine the annual volume for each substance from non-EEA country per legal entity of ABB.
- If import or manufacture of a substance from a non-EEA country is  $> 1$  ton/year per legal entity of ABB it is necessary to register the substance.
- If import or manufacture of a substance from a non-EEA country is  $> 10$  ton/year per legal entity of ABB a Chemical Safety Assessment must be performed and a Chemical Safety Report completed.





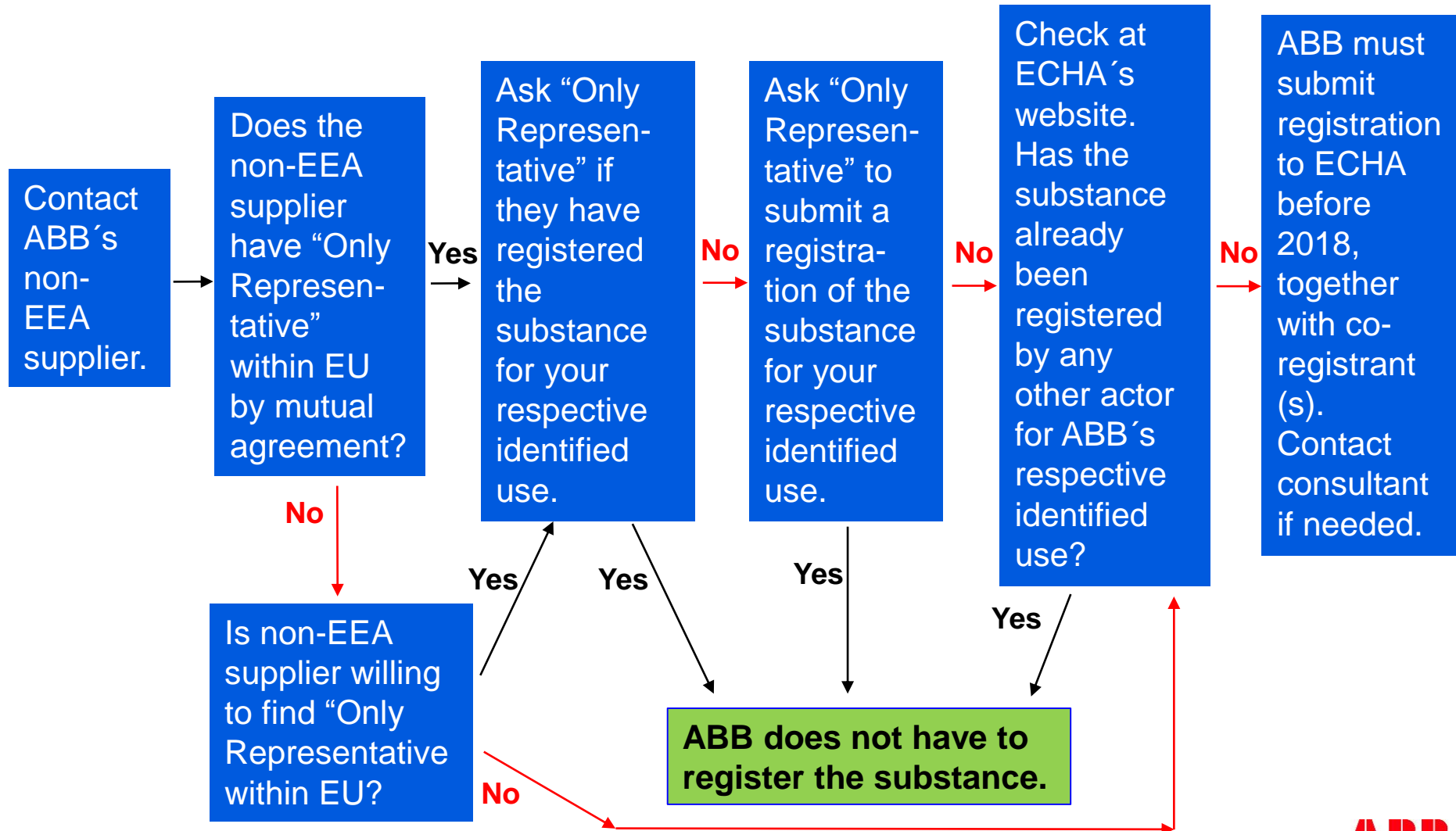
## 2. Registration process I

- If ABB has suppliers within EEA, the identified use of the substance must be registered according to the following process.



## 2. Registration process II

- If ABB has suppliers outside the EEA, the identified use of the substance must be registered according to the following process.



### 3. Pre-Registration

- If you are manufacturer or importer for the first time of a substance in quantities  $>1$  ton/year you can submit a late pre-registration:
  - At the latest 6 months after manufacturing or importing a substance  $>1$  ton per year.
  - At least 12 months before the relevant transitional deadline for registration.






## 4. Authorization

- Identify hazardous substances (SVHC, Substances of Very High Concern) in your processes and your products (as in materials and components).
- Follow the substance status in the lists of EU REACH from Registry of Intention to Candidate list .

### Candidate list

➤ Number of substances on the Candidate List: 163 (last updated: 15/06/2015)

Showing 1 - 50 of 163 results. Items per Page 50 Page 1 of 4 < First < Previous Next > Last >>

Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number	IUCLID 5 Substance Dataset	
o-aminoazotoluene	202-591-2	97-56-3	2012/12/19	Carcinogenic (Article 57a)	ED/169/2012		<a href="#">Details</a>
Imidazolidine-2-thione (2-imidazoline-2-thiol)	202-506-9	96-45-7	2013/12/16	Toxic for reproduction (Article 57 c)	ED/121/2013		<a href="#">Details</a>
1,2,3-trichloropropane	202-486-1	96-18-4	2011/06/20	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	ED/31/2011		<a href="#">Details</a>

<http://echa.europa.eu/web/guest/candidate-list-table>

## 4. Authorization

- Follow the substance status in Annex XIV.
  - Apply for authorization at least 18 months before sunset date.
  - After the sunset date has passed, the substance is prohibited within EU
- Take strategic decisions concerning substances for which it is difficult to find alternatives.



Authorization list – Annex XIV

Showing 31 results.						
Name	EC Number	CAS Number	Sunset date	Latest application date	Exempted (categories of) uses	
1,2-Dichloroethane (EDC)	203-458-1	107-06-2	22/11/2017	22/05/2016		<a href="#">Details</a>
2,2'-dichloro-4,4'-methylenedianiline (MOCA)	202-918-9	101-14-4	22/11/2017	22/05/2016		<a href="#">Details</a>

<http://echa.europa.eu/web/guest/addressing-chemicals-of-concern/authorisation/recommendation-for-inclusion-in-the-authorisation-list/authorisation-list>

## 5. Restriction

- Follow the substance status in Annex XVII.
  - Check the conditions for restriction and allowed uses of substances.
  - If necessary, start a substitution process or reduce the substance below the stated threshold.

List of Restrictions – Annex XVII

Showing 1 - 50 of 105 results.								
Items per Page 50 Page 1 of 3 < First < Previous Next > Last >								
Entry no	Substance / group of substances / mixture	EC Number	CAS Number	Consolidated text	Appendix	New amendment (EU Regulation)	Q&A	Standards
26	Monomethyl-dibromo-diphenyl methane bromobenzylbromotoluene, mixture of isomers Trade name: DBBT	-	99688-47-8	Page 233				
11a	Volatile esters of bromoacetic acids: Methyl bromoacetate	202-499-2	96-32-2	Page 221				
14	4-Nitrobiphenyl	202-204-7	92-93-3	Page 220				
13	Benzidine	202-199-1	92-87-5	Page 222				
9d	Benzidine and/or its derivatives	202-199-1	92-87-5	Page 221				
15	4-Aminobiphenyl xenylamine	202-177-1	92-67-1	Page 222				

<http://echa.europa.eu/web/guest/addressing-chemicals-of-concern/restrictions/list-of-restrictions>



## 6. ABB List of Prohibited and Restricted Substances

- Identify hazardous substances (SVHC) in your processes and products by using “ABB List of Prohibited and Restricted Substances” (updated twice a year).

**ABB List of Prohibited and Restricted Substances, ver. 1.6.**  
This document is valid as of 2015-07-07

Substance	CAS No.	Risk	ABB class.	Threshold values 0,1% w/w applies if nothing else stated	Legislation	Example of applications	Comments
1 -methyl-2-pyrrolidone	872-50-4	Toxic for reproduction	R		EC 1907/2006/C CAN NPRI 2010 US 40 CFR Ch	Solvent in paint, varnish, cleaning agents, pesticides etc.	REACH
1,1,1-trichloroethane	71-55-6	Substance that deplete the ozone layer	P		CH SR 814.81 A1 CH SR 814.81 A2 EC 2037/2000 CAN Tox. Subs US 40 CFR Ch	E.g. degreasing	IEC62474
1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113)	76-13-1	Substance that deplete the ozone layer	P		CH SR 814.81 A1 CH SR 814.81 A2 EC 2037/2000 CAN Tox. Subs. US 40 CFR Ch	E.g. cooling agent	IEC62474
1,1,2-trichloroethene (Trichloroethylene)	79-01-6	Carcinogenic	P	EU: sunset date 21/04/2016	EC 1907/2006/C EC 1907/2006/XIV EC 1907/2006/XVII CH SR 814.81 A1 CAN NPRI 2010 CAN Tox. Subs. US 40 CFR Ch	Solvent, cleaning agent	REACH

<https://library.e.abb.com/public/45c0637e1d20496a8c82c94302e01114/ABB%20List%20of%20Prohibited%20and%20Restricted%20Substances%20July%202015.pdf>

## 7. Information

- Communicate with suppliers about your purchased products to check if the content of Candidate list substances is  $> 0.1$  weight-%. Prioritize suppliers with respect to risk of finding restricted substances and complete contracts.

You **CAN** choose  
your supplier...



- Communicate with your suppliers concerning substances on the Authorization list in Annex XIV.



## 7. Information

- Submit safety data sheets or other information to customers.



- Provide your customers with sufficient information about Candidate list substances  $> 0.1$  weight-% in products in accordance with Article 33 in EU REACH. This means that a component of a complex product is counted as a separate article.



ABB transformer



Components of ABB transformer

## 8. Strategic decisions

- Take strategic decisions concerning substances for which it is difficult to find alternatives.



For more information:

Read "ABB Guidelines for EU REACH Compliance",  
available in ABB Sustainability Toolbox !

Power and productivity  
for a better world™

