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Fast Track Process

- 1. Scope the high spend and high material risk products
- 2. Group units (of a product) based on BOM composition
- 3. Use ERP or purchasing system data to develop BOMs for each set of assembled units
- 4. Screen out no-risk / low-risk parts to develop Compliance BOM with part numbers and supplier codes for medium-risk and high-risk parts
- 5. Upload Compliance BOMs to BOMcheck, Map the Compliance BOMs to all relevant commercial identifiers for the product and submit SCIP dossiers to SCIP database
- 6. When suppliers update medium risk / high risk parts, BOMcheck updates the Compliance BOM and resubmits dossiers to SCIP database for all mapped identifiers



Scope your products

1. Scope the high spend and high material risk products using in-house data





e.g. look at your highest/bestselling products



Group product units

- For example, identify the different combinations of components and sub-components for each product
- Use vendor data from ERP or purchasing system to develop several Composite BOMs which consider all combinations of parts used in a product

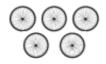






ECHA Quasi-identical complex objects: Criteria

Criteria for 'grouping':



1. The complex object (units) have the same function or use [same article category (CN/TARIC code and description)];



2. The complex object (units) incorporate the same components and subcomponents (i.e. having the same function/use following the previous criterion 1), and the complex object or its components and subcomponents incorporate the same articles as such, which fulfil 'sameness' criteria for quasi-identical articles as such listed in slide 48.



3. The safe use instructions are the same for the complex object (units)



[which is a logical consequence of the two criteria above]

Recommendation: complex objects meeting these criteria can be submitted in the same SCIP notification





ECHA Example: sets of quasiidentical complex objects

Several units from the 649 units placed on the market (according to the commercial identification) incorporate the same combinations of components and subcomponents with articles as such containing Candidate List substances.



Subject to the SCIP notification obligation

Those combinations are the same for different **sets of** the assembled **units**, where those units fulfil the criteria **of** quasi-identical complex objects.

Each of those sets must be submitted to the SCIP database as **one notification** with a **specific primary** article identifier.







Required specific identification of the "smartphone 10" sets for SCIP notifications										
Primary article identifier	Primary ID	Primary ID	Primary ID							
	(Set 1)	(Set 2)	(Set 3)							
	200 units	350 units	99 units							
Smartphone 10	10-1	10-2	10-3							
O Printed Circuit Board PCB	PCB-01	PCB-02	-							
Ø Capacitor CAP	CAP-001	CAP-002	-							
	CO-0001	CO-0001	-							
- Contact CO	¶ SVHC 1	¶ SVHC 1								
	CA-0002	-	-							
- Casing CA	¶ SVHC 2									
	BAT-03	-	BAT-03							
O Battery BAT	¶ SVHC 3		¶ SVHC 3							

e.g. It is recommended to submit one SCIP notification for each set of quasi-identical smartphones (10-1,10-2 and 10-3), instead of for each individual unit

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More far-reaching 'grouping' approaches: Representative article approach

 The approach described in the following two slides is not recommended anymore by BOMcheck or ECHA as the solution is no longer in line with reporting requirements having to be at an "article" level.





Representative article approach



- Variation of what is sometimes also referred to as 'worst case' reporting.
 - Consists in the 'worst' possible combination of potential components and subcomponents containing Candidate List substances in a given complex object and reported in the SCIP notification under the umbrella of a 'fictitious' complex object.
- Articles in complex objects with different Candidate List substances in their composition are reported individually in the SCIP notification under a generic identification for those complex objects ('fictitious' complex object inserted in the hierarchical tree of components and sub-components).
- The components and sub-components (and respective SCIP data) under the umbrella of a 'fictitious' complex object are reported with their respective names and primary article identifiers.

not recommended





Representative article approach: Example



- Smartphone 10 (primary article identifier 10-RAA)
 - Battery BAT-F (primary article identifier BAT-F-01)
 - Battery BAT3 (primary article identifier BAT-03)
 - Candidate List substance 3
 - Battery BAT4 (primary article identifier BAT-04)
 - Candidate List substance 4



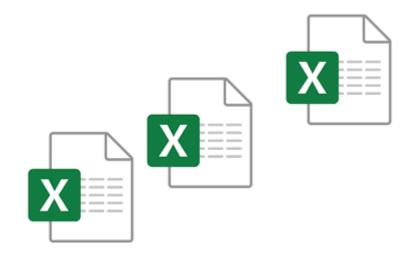
- The assembler could report in the SCIP notification the two subsets of batteries (BAT3 & BAT4) under a single 'fictitious' battery identification (name: e.g. Battery BAT-F; primary article identifier: BAT-F-01), regardless whether the concrete battery incorporated in a specific set of units of the "smartphone 10" placed on the market belongs to one subset (e.g. BAT3) or another (e.g. BAT4)

not recommended



Develop Composite BOM

3. Use ERP or purchasing system data to develop BOMs for each set of assembled units





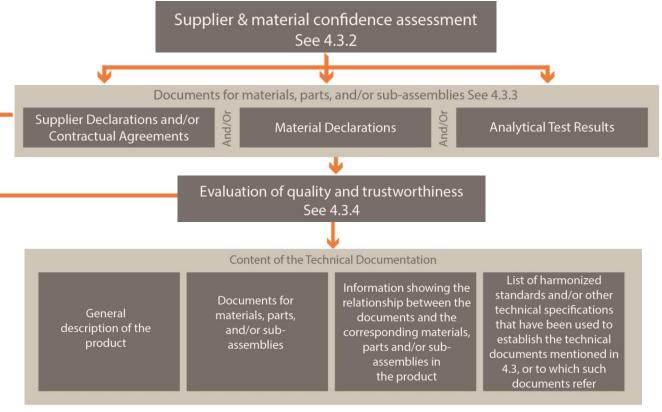
EN 50581 / IEC 63000

 Assess risk of supplier part non-compliance to decide documentation requirements

EN 50581 / IEC 63000 Clause 4.3.2

The types of technical documents that are required for materials, parts and/or sub-assemblies shall be based on Manufacturer's assessment of

- a) The <u>probability</u> of restricted substances being present in materials, parts or subassemblies, and
 - b) The trustworthiness of the supplier



EN 50581 / IEC 63000

 Manufacturer can make self declaration for no risk / low risk materials

EN 50581 / IEC 63000 Clause 4.3.2: Supplier and Material Confidence Assessment

The types of technical documents that are required for materials, parts and/or sub-assemblies **shall** be based on the manufacturer's assessment of

- a) the probability of restricted substances being present in materials, parts or sub-assemblies, and
- b) the trustworthiness of the supplier

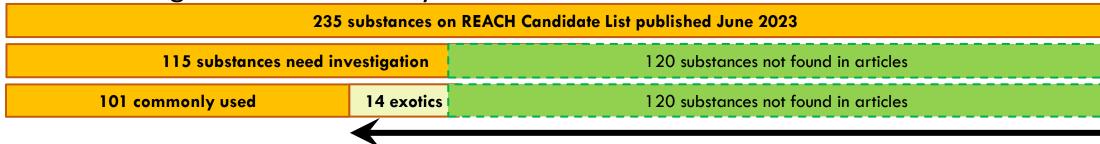
When undertaking the assessment described in point a), the manufacturer may apply technical judgement, as some substances are unlikely to be contained in certain materials (e.g. organic substances in metals). Such technical judgement should be based on technical information available via the electrical/electronic industry, or a literature investigation of the materials/parts used in electrical/electronic products.



4

Substance screening and guidance

- BOMcheck Substance List Working Group investigates new REACH SVHCs
 - Extensive outreach through trade associations and supply chains
 - Develops detailed knowledge of all known uses of a substance
- Rely on up-to-date concise chemicals guidance in declaration tool to reduce supplier time and effort
 - Increase data accuracy
 - BOMcheck is updated within 3 weeks of new REACH Candidate List release
 - Screening reduces burden by over 60%





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Substance screening and guidance

- Declaration tool contains guidance to make declarations quickly and accurately
- Each substance has summary guidance and detailed information sheet
 - Where used, typical addition rates, trade names, alternatives, etc.
- Quick fill statements guide declaration process

Summary guidance

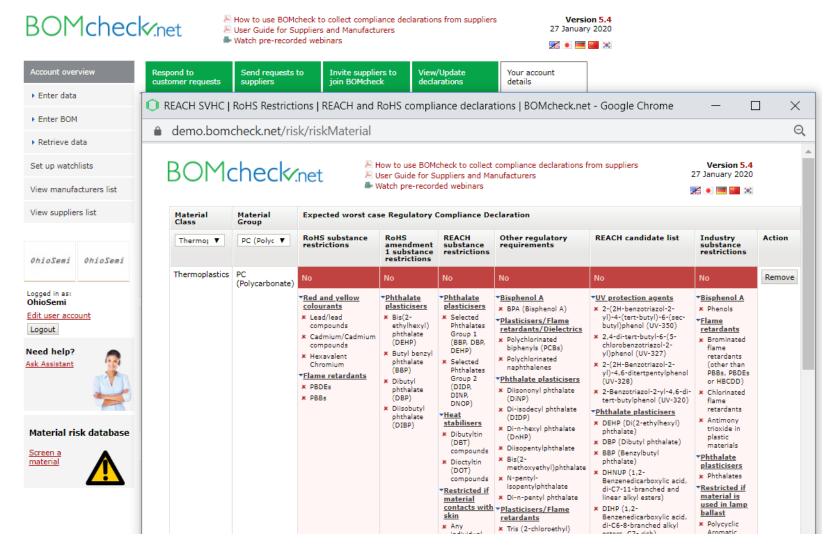
- Silicic acid, barium salt, lead-doped may be used in the phosphor coating for ultraviolet lamps
- Dimethyl formamide may be used as a solvent in the electrolyte solution for electrolytic capacitors
- PFNA, PFOA and APFO may be found in PVDF plastic up to 1% w/w of the plastic.
- Diglyme, <u>Triglyme</u>, EGDME and 1,2-Diethoxyethane may be used as solvents in battery electrolytes for sealed <u>lithium ion</u> batteries

Quick fill statements

- ✓ Part does not contain ultraviolet lamps
- Part does not contain electrolytic capacitors
- Part does not contain PVDF plastic
- ✓ Part for does not contain <u>lithium ion</u> batteries

4

Material Risk Database





Screen out no risk/low risk parts

Produce Compliance BOM from Composite BOM:

Use own materials knowledge to remove no risk / low risk parts, including

- Electrical copper (does not contain lead)
- Sheet steel (does not contain lead)
- Cast aluminium (does not contain lead)
- Steel fixing and fastenings such as nuts, bolts, screws, etc. Note that brass fixings and fastenings contain lead
- Printed instructions, cardboard packaging, wooden pallets (don't contain REACH Candidate List substances > 0.1%)

Customer Product	Version	Description								
1JNL100067-124	0	PS862YI								
Customer Product	Version	Description	CPN/CP Ve	ersion	Description	Position	Qty	Part Number	Verified Manufacturer	Verified Part Number
1JNL100067-124	0	PS862YI	POW00214 0		Front plate PS862F	55	1	ACC TO DRWG 4824506-KU	E Vasteras Skylt & Gravyr	ACC TO DRWG 4824506-KU
1JNL100067-124	0	PS862YI	1JNL100441-774 0		METAL AL PLATE 13.5x18.8x1.7mm ABB LOGO	56	1	1JNL100441-744 (based on 5	2 Vasteras Skylt & Gravyr	17A108888188
1JNL100067-124	0	PS862YI	4911005-610		LOGIC HC AND 4 ELEMENT 2-IN SO14 SMD	58	1	74HC08D	NXP	74HC08D,653
1JNL100067-124	0	PS862YI	4911005-610		LOGIC HC AND 4 ELEMENT 2-IN SO14 SMD	58	1	74HC08D	Nexperia	74HC08D,652
1JNL100067-124	0	PS862YI	4911005-610		LOGIC HC AND 4 ELEMENT 2-IN SO14 SMD	58	1	MC74HC08AD	On Semiconductor	MC74HC08AD
1JNL100067-124	0	PS862YI	4911005-610		LOGIC HC AND 4 ELEMENT 2-IN SO14 SMD	58	1	CD74HC08M	Texas Instruments Semicondu	CD74HC08M
1JNL100067-124	O	PS862YI	21242025-175 0	- (N,TAPPING SCREW	69	2	99981127	Arvid Nilsson	99981127
1JNL100067-124	0	PS862YI	21242025-175		N,TAPPING SCREW	69	2	99981127 M2,2 X 9,5	Arvid Nilsson	99981127 M2,2 X 9,5
1JNL100067-124	0	PS862YI	21242025-175		N,TAPPING SCREW	69	2	14585F220091	Bufab	14585F220091
1JNL100067-124	0	PS862YI	21242025-175		N,TAPPING SCREW	69	2	6346678	Bossard	6346678
1JNL100067-124	0	PS862YI	21242025-175		N,TAPPING SCREW	69	2	21242028-3	MS Precision	21242028-3
1JNL100067-124	O	PS862YI	21242025-175 0		N,TAPPING SCREW	69	2	7981 Z *29,5	Mattssons	7981 Z *29,5
1JNL100067-124	0	PS862YI	21242025-175		N,TAPPING SCREW	69	2	RTK ST2,2X9,5	Mattssons	RTK ST2,2X9,5
1JNL100067-124	0	PS862YI	3BSC970241R1 0		N,ME_LABEL,PAPADH,80X108.34	70	1	L98 99994632	Märkas	4003464
1JNL100067-124	O	PS862YI	3BSC970241R1 0		N,ME_LABEL,PAPADH,80X108.34	70	1	PER ITEM DESCRIPTION	MiF	PER ITEM SPEC 80X108.34
1JNL100067-124	o	PS862YI	3BSC970241R1 0		N,ME_LABEL,PAPADH,80X108.34	70	1	L98 99994632	Eson Pac	L98 99994632

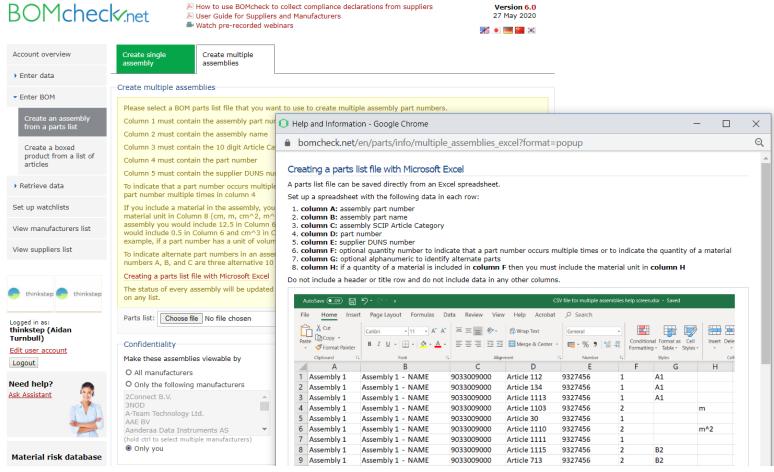


5

Compliance BOM contains medium/high risk parts

Create multiple Compliance BOMs at the same time by uploading up to 500,000 parts in one file

For alternate parts which are sourced from different suppliers, BOMcheck calculates the 'worst' case by checking each SVHC in each alternate part





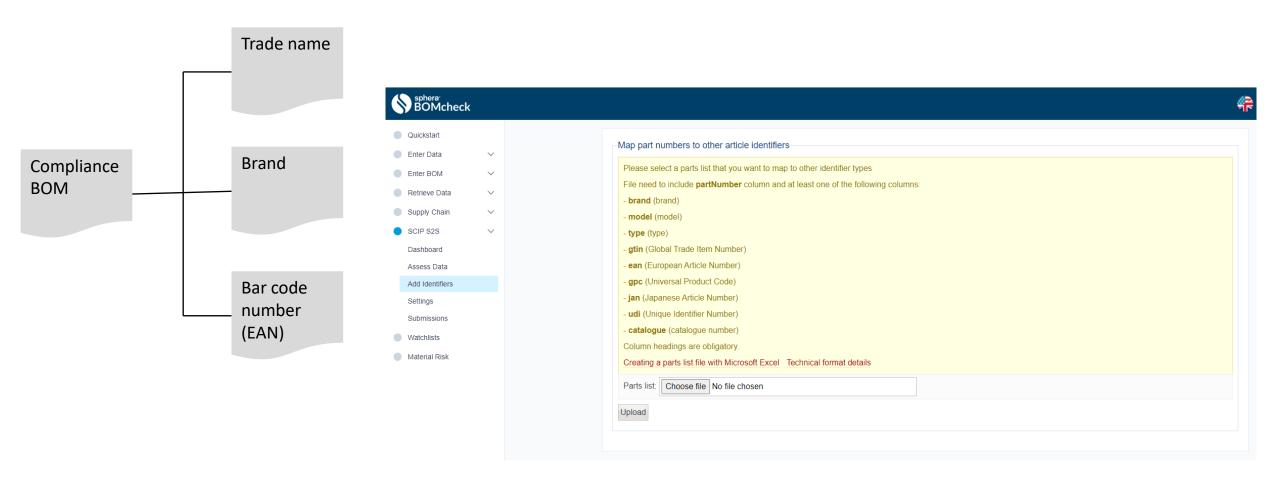
Formatting of Compliance BOMs for upload

- Column A must contain the product number for the Compliance BOM (Mandatory)
- Column B can contain the product name for the Compliance BOM (Optional)
- Column C must contain the 10 digit Article Category (TARIC Code) for the Compliance BOM (Mandatory)
- Column D must contain the part number. This can be your part number or the supplier part number (Mandatory)
- Column E must contain the BOMcheck supplier code (DUNS number) (Mandatory). If the supplier is making the
 declaration in BOMcheck for the part number provided in Column D, then the BOMcheck supplier code (DUNS number)
 must be provided in column E. If you are making the declaration in BOMcheck for your part number provided in Column D,
 then your BOMcheck supplier code must be provided in column E
- To indicate that a part number occurs multiple times in an assembly, you may specify the quantity in Column F or include the part number multiple times in column D (Optional)
- If you include a material in the assembly, you must use Column F to indicate the quantity of the material and you must include a valid material unit for the part number in Column H (cm, m, cm², m², cm³, Liter or m³). (Mandatory). For example, to include 0.5 cm³ of solder in the assembly you would include 0.5 in Column F and cm³ in Column H
- To indicate alternate part numbers in an assembly, you may include an alphanumeric in Column G. (Optional). For example, if part numbers A, B, and C are three alternative 10 Ohm resistors then alphanumeric in Column G could be R1



Map Compliance BOM to commerial identifiers





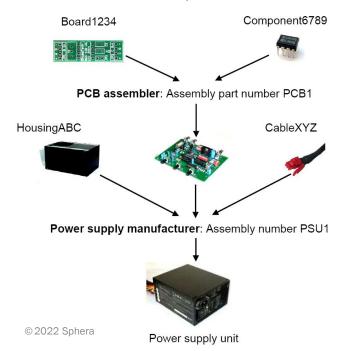


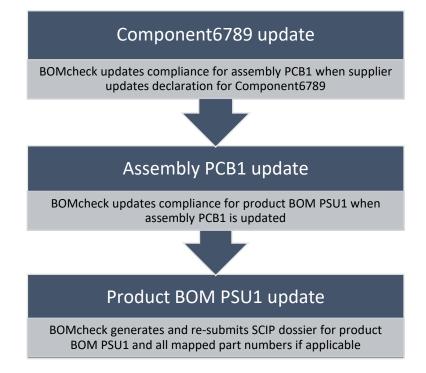
Dynamic updates

- BOMcheck rolls up the declaration data for supplier parts and provides BOM level compliance status
- When a part is updated, BOMcheck re-calculates compliance

• Recalculating compliance, generating and re-submitting dossiers to the ECHA SCIP database takes 4

minutes for a part with 100,000 parts

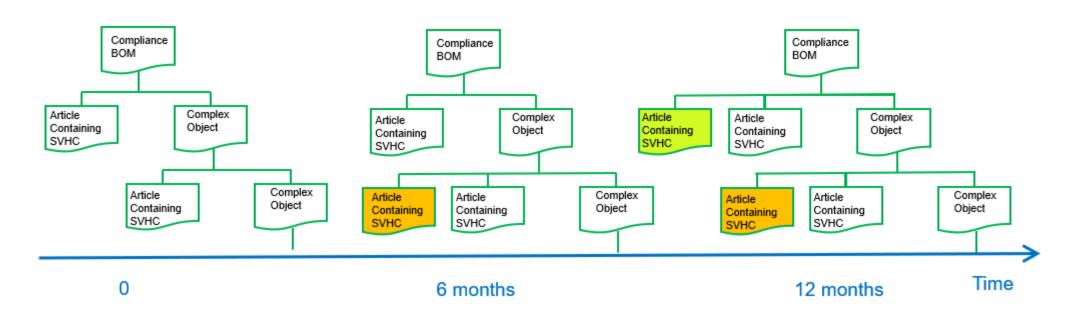






Dynamic updates

- Supplier declarations updated every six months after new REACH Candidate List published
- BOMcheck checks the sub-supplier parts declarations, recalculates compliance and updates SCIP information for the Assembly







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