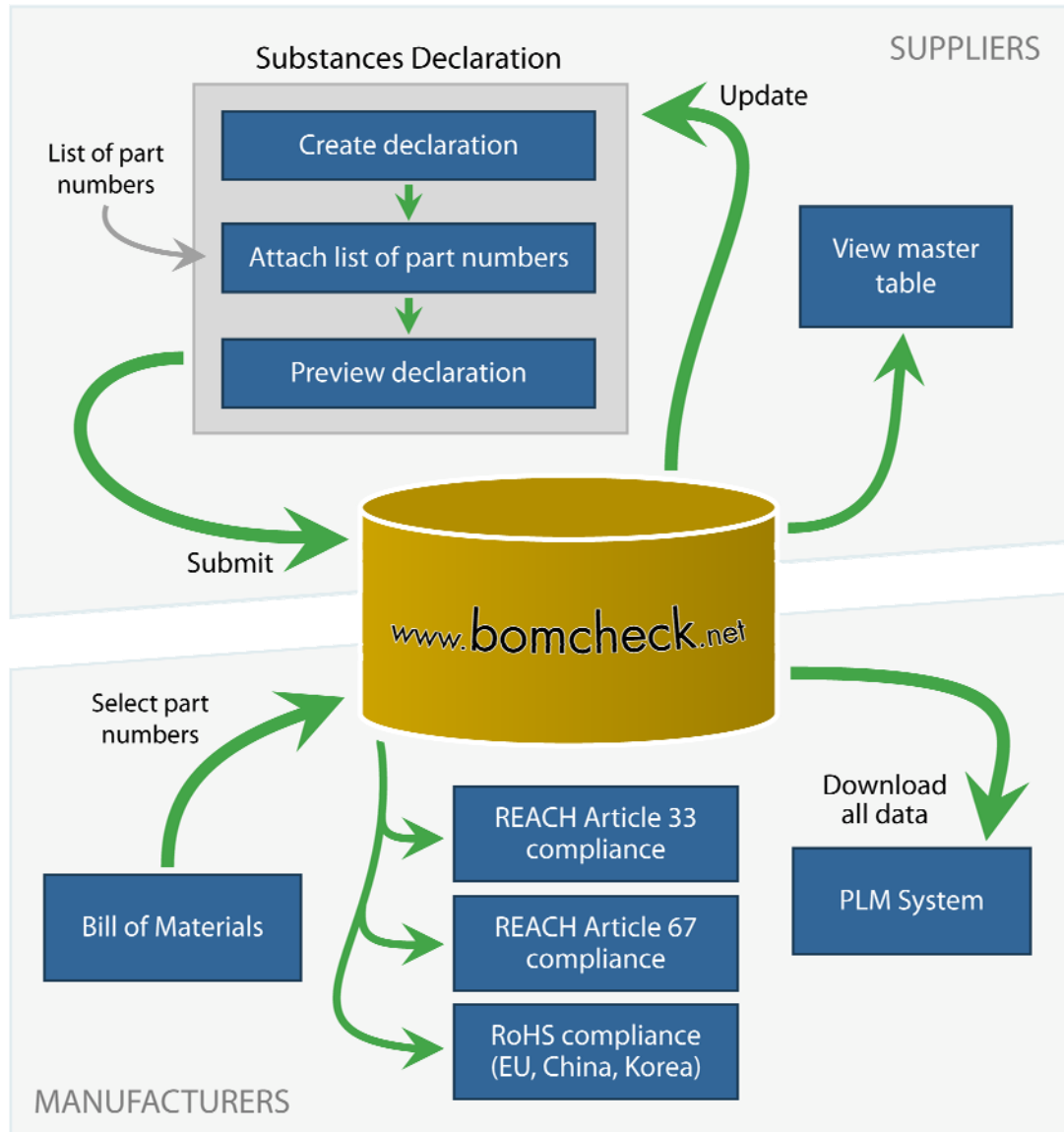


Data reporting options for manufacturers



May 2008



Contents

1	Data used in this brochure	1
2	Summary report of compliance status for a manufacturer BOM	1
3	Parts compliance PDF report with suppliers electronic signatures.....	2
4	Parts compliance CSV file with supplier electronic signatures.....	4
5	Parts compliance XML file with supplier electronic signatures.....	4
6	Web service for automatic download of data from BOMcheck.....	5
7	About ENVIRON	6
8	Further information.....	6

1 Data used in this brochure

The data presented in this brochure for Ace Supplier is based on RoHS declaration data published by 3M on its website www.3m.com. 3M publishes lists of parts numbers which are:

- RoHS compliant
- Non-RoHS compliant
- RoHS compliance status unknown

The data presented for Components 'R' Us is based on data published by Intel on its website www.intel.com. Intel publishes lists of part numbers which:

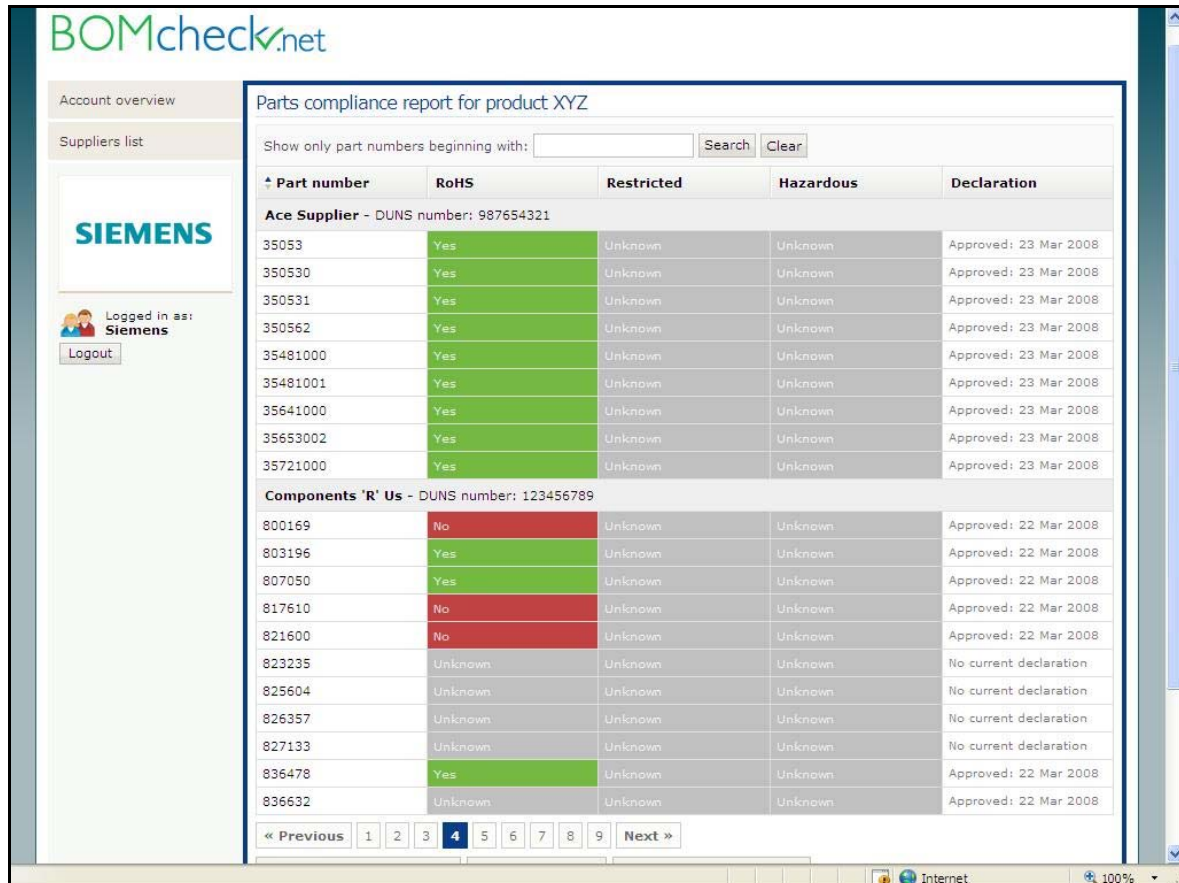
- Do not contain any RoHS substances
- Are RoHS compliant due to an exemption
- Are non-RoHS compliant

This illustrates why it is necessary to gather materials declaration at the supplier part number level.

2 Summary report of compliance status for a manufacturer BOM

A manufacturer can extract data from BOMcheck for the list of supplier part numbers which the manufacturer uses in a Bill of Materials (BOM) for a product. BOMcheck provides a summary table highlighting overall compliance status for each supplier part number in the BOM.

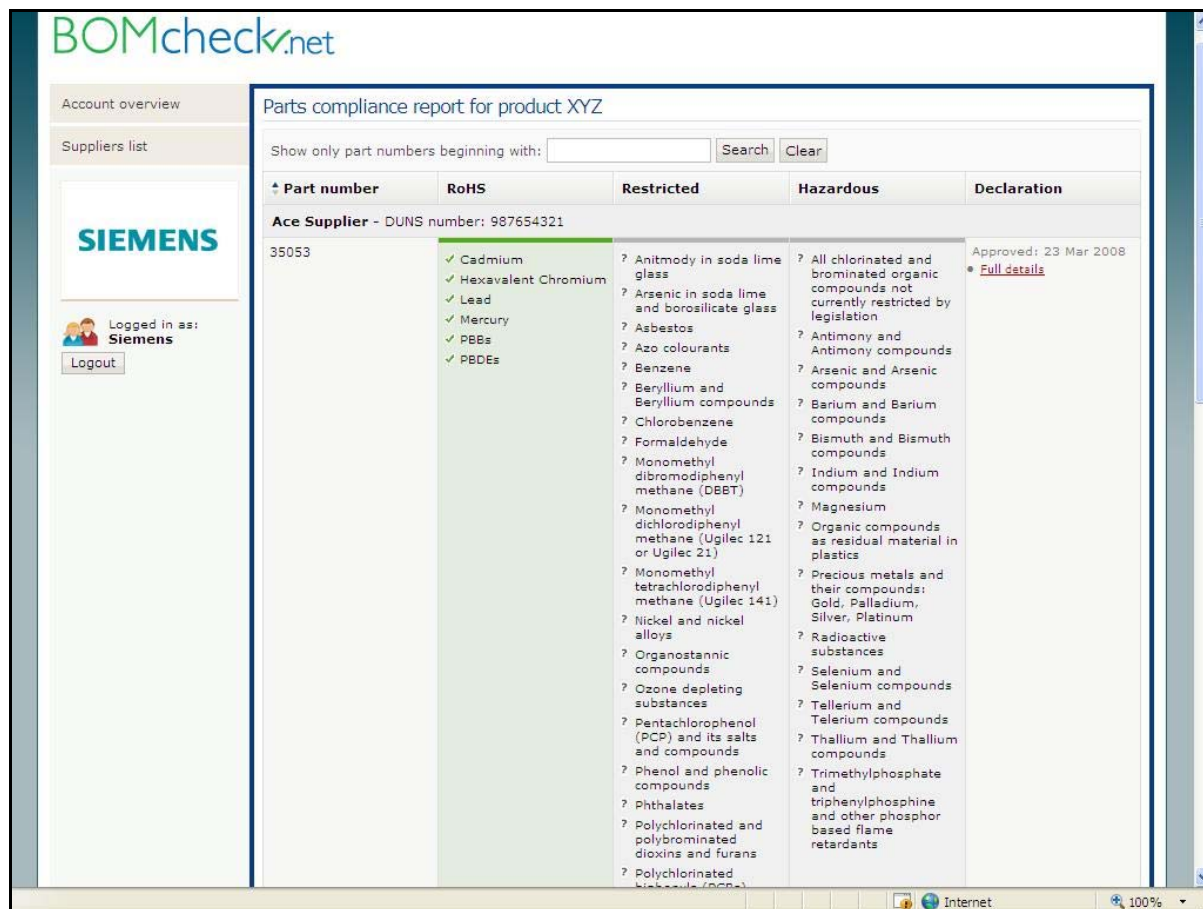
Figure 1. Summary report of compliance status for a manufacturer BOM



Part number	RoHS	Restricted	Hazardous	Declaration
Ace Supplier - DUNS number: 987654321				
35053	Yes	Unknown	Unknown	Approved: 23 Mar 2008
350530	Yes	Unknown	Unknown	Approved: 23 Mar 2008
350531	Yes	Unknown	Unknown	Approved: 23 Mar 2008
350562	Yes	Unknown	Unknown	Approved: 23 Mar 2008
35481000	Yes	Unknown	Unknown	Approved: 23 Mar 2008
35481001	Yes	Unknown	Unknown	Approved: 23 Mar 2008
35641000	Yes	Unknown	Unknown	Approved: 23 Mar 2008
35653002	Yes	Unknown	Unknown	Approved: 23 Mar 2008
35721000	Yes	Unknown	Unknown	Approved: 23 Mar 2008
Components 'R' Us - DUNS number: 123456789				
800169	No	Unknown	Unknown	Approved: 22 Mar 2008
803196	Yes	Unknown	Unknown	Approved: 22 Mar 2008
807050	Yes	Unknown	Unknown	Approved: 22 Mar 2008
817610	No	Unknown	Unknown	Approved: 22 Mar 2008
821600	No	Unknown	Unknown	Approved: 22 Mar 2008
823235	Unknown	Unknown	Unknown	No current declaration
825604	Unknown	Unknown	Unknown	No current declaration
826357	Unknown	Unknown	Unknown	No current declaration
827133	Unknown	Unknown	Unknown	No current declaration
836478	Yes	Unknown	Unknown	Approved: 22 Mar 2008
836632	Unknown	Unknown	Unknown	Approved: 22 Mar 2008

The manufacture can drill down to more detailed information on the declaration status for individual part numbers.

Figure 2. Drill down to more detailed information on declaration status



The screenshot displays the BOMcheck.net interface. On the left, there is a sidebar with 'Account overview', 'Suppliers list', and a Siemens logo. The main content area is titled 'Parts compliance report for product XYZ'. It includes a search filter for part numbers and a table with the following columns: Part number, RoHS, Restricted, Hazardous, and Declaration. The table shows a single entry for part number 35053, which is compliant with RoHS (Cadmium, Hexavalent Chromium, Lead, Mercury, PBBs, PBDEs) and lists various restricted and hazardous substances. The declaration is approved on 23 Mar 2008, with a link to 'Full details'.

Part number	RoHS	Restricted	Hazardous	Declaration
35053	<ul style="list-style-type: none"> ✓ Cadmium ✓ Hexavalent Chromium ✓ Lead ✓ Mercury ✓ PBBs ✓ PBDEs 	<ul style="list-style-type: none"> ? Antimony in soda lime glass ? Arsenic in soda lime and borosilicate glass ? Asbestos ? Azo colourants ? Benzene ? Beryllium and Beryllium compounds ? Chlorobenzene ? Formaldehyde ? Monomethyl dibromodiphenyl methane (DBBT) ? Monomethyl dichlorodiphenyl methane (Ugilec 121 or Ugilec 21) ? Monomethyl tetrachlorodiphenyl methane (Ugilec 141) ? Nickel and nickel alloys ? Organostannic compounds ? Ozone depleting substances ? Pentachlorophenol (PCP) and its salts and compounds ? Phenol and phenolic compounds ? Phthalates ? Polychlorinated and polybrominated dioxins and furans ? Polychlorinated biphenyls (PCBs) 	<ul style="list-style-type: none"> ? All chlorinated and brominated organic compounds not currently restricted by legislation ? Antimony and Antimony compounds ? Arsenic and Arsenic compounds ? Barium and Barium compounds ? Bismuth and Bismuth compounds ? Indium and Indium compounds ? Magnesium ? Organic compounds as residual material in plastics ? Precious metals and their compounds: Gold, Palladium, Silver, Platinum ? Radioactive substances ? Selenium and Selenium compounds ? Tellurium and Tellurium compounds ? Thallium and Thallium compounds ? Trimethylphosphine and triphenylphosphine and other phosphor based flame retardants 	Approved: 23 Mar 2008 Full details

3 Parts compliance PDF report with suppliers electronic signatures

The manufacturer can generate a compliance report for the list of supplier part numbers which is in the Bill of Materials (BOM) for a product. The report is provided in PDF format for downloading or printing directly from the internet.

On the front page the report lists the part numbers for suppliers which are not yet members of BOMcheck (i.e. BOMcheck does not yet have any data for these supplier part numbers).

The report then contains a section for each supplier which starts with the supplier's electronic signature, followed by the supplier declaration data for the list of supplier part numbers in the BOM for the product.



Figure 3. Parts compliance PDF report with suppliers' electronic signatures

BOMcheck.net
ENVIRON

SIEMENS

Parts compliance report for product XYZ

Report generated: 8 April 2008, 17:37 GMT

Unknown supplier

Ace Supplier

DUNS number: 123456789

24 Supplier Way, Bath, BANES, BA1 4QH, England

Declarations authorised by: Fred Smith, Quality Director

Declaration approved: 23 March 2008, 11:30 GMT

RoHS

Substance	Maximum concentration	Do all single homogenous materials in the parts contain less than the maximum concentration?
Cadmium	0.01%	Yes
Hexavalent Chromium	0.1%	Yes
Lead		
Mercury		
PBBs		
PBDEs		

Restricted

Substance	Maximum concentration	Do all single homogenous materials in the parts contain less than the maximum concentration?
Organostannic compounds	0.1%	Unknown
Ozone depleting substances		Unknown
Pentachlorophenol (PCP) and its salts and compounds	0.001%	Unknown
Phenol and phenolic compounds	50 mg/l	Unknown
Phthalates	0.1% when used in toys and	Unknown

Attached parts list

Part number	Part name
33411L	
334426	
334444	
33661000	
33661001	
33661002	
33671000	
33673002	
339104	
339122	
34751	
35053	
350530	
350531	
350562	
35481000	
35481001	
35641000	
35653002	
35721000	

Hazardous

Substance

All chlorinated and brominated organic compounds not restricted by legislation

Antimony and Antimony compounds

Arsenic and Arsenic compounds

Barium and Barium compounds

Bismuth and Bismuth compounds

Indium and Indium compounds

Magnesium

Organic compounds and materials in plastics

Precious metals and their compounds: Gold, Palladium, Silver, Platinum

Radioactive substances

Selenium and Selenium compounds

Tellurium and Tellurium compounds

Thallium and Thallium compounds

Trimethylphosphate and triphenylphosphine and phosphor based flame retardants

Page 1
Page 4
Page 5
Page 6

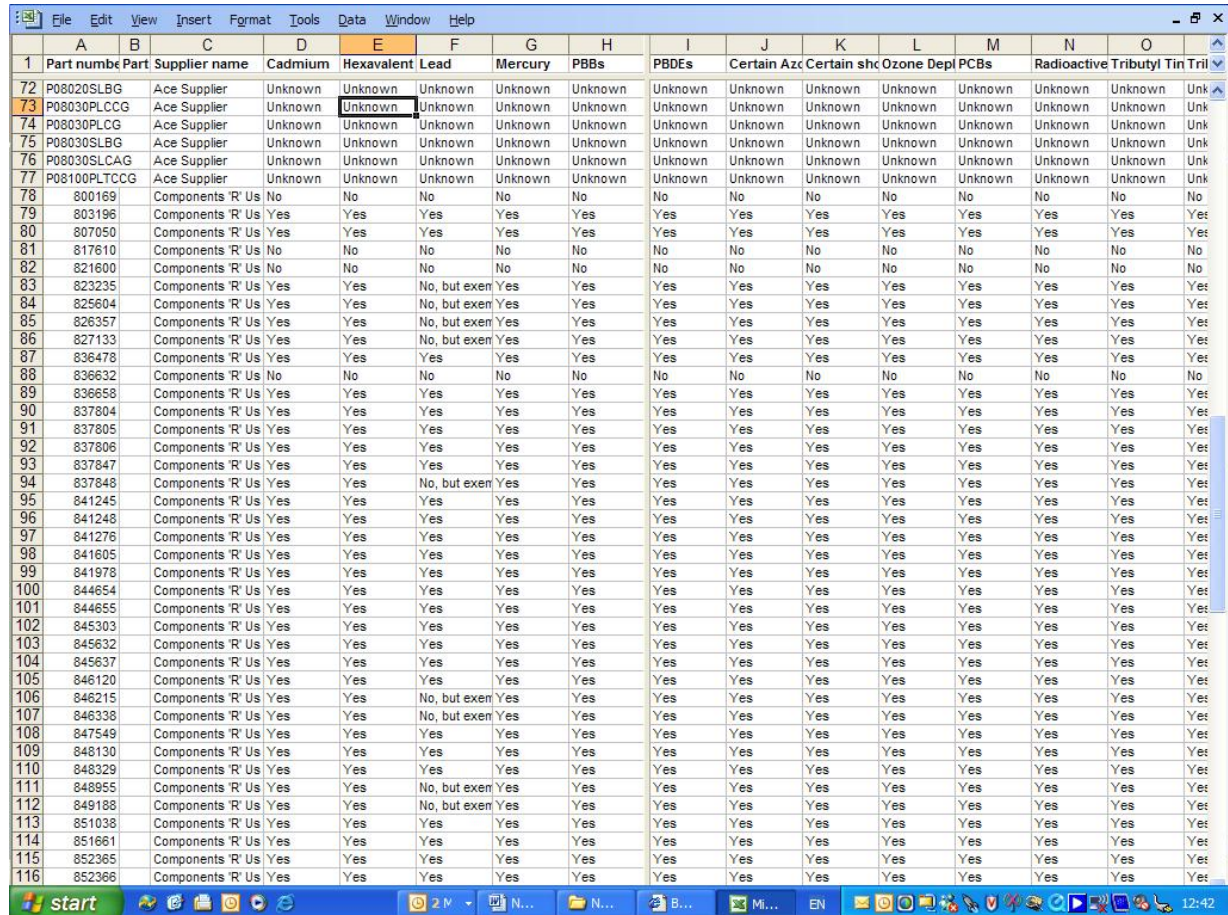
4 Parts compliance CSV file with supplier electronic signatures

The manufacturer can download a CSV file containing all of the compliance data for the list of supplier part numbers which is in the Bill of Materials (BOM) for a product.

CSV (Comma Separated Value) is a very simple file format which can be read by all database applications.

The CSV file contains the suppliers' electronic signatures.

Figure 4. Parts compliance CSV file with suppliers' electronic signatures



1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Part numbe	Part	Supplier name	Cadmium	Hexavalent	Lead	Mercury	PBBs	PBDEs	Certain Az	Certain sh	Ozone Depl	PCBs	Radioactive	Tributyl	Tin Tril
72	P08020SLBG	Ace Supplier	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
73	P08030PLCCG	Ace Supplier	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
74	P08030PLCG	Ace Supplier	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
75	P08030SLBG	Ace Supplier	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
76	P08030SLCAG	Ace Supplier	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
77	P08100PLTCCG	Ace Supplier	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
78	800169	Components 'R' Us	No	No	No	No	No	No	No	No	No	No	No	No	No
79	803196	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
80	807050	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
81	817610	Components 'R' Us	No	No	No	No	No	No	No	No	No	No	No	No	No
82	821600	Components 'R' Us	No	No	No	No	No	No	No	No	No	No	No	No	No
83	823235	Components 'R' Us	Yes	Yes	No, but exten	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
84	825604	Components 'R' Us	Yes	Yes	No, but exten	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
85	826357	Components 'R' Us	Yes	Yes	No, but exten	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
86	827133	Components 'R' Us	Yes	Yes	No, but exten	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
87	836478	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
88	836632	Components 'R' Us	No	No	No	No	No	No	No	No	No	No	No	No	No
89	836658	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
90	837804	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
91	837805	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
92	837806	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
93	837847	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
94	837848	Components 'R' Us	Yes	Yes	No, but exten	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
95	841245	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
96	841248	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
97	841276	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
98	841605	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
99	841978	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
100	844654	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
101	844655	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
102	845303	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
103	845632	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
104	845637	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
105	846120	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
106	846215	Components 'R' Us	Yes	Yes	No, but exten	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
107	846338	Components 'R' Us	Yes	Yes	No, but exten	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
108	847549	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
109	848130	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
110	848329	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
111	848955	Components 'R' Us	Yes	Yes	No, but exten	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
112	849188	Components 'R' Us	Yes	Yes	No, but exten	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
113	851038	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
114	851661	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
115	852365	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
116	852366	Components 'R' Us	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

The manufacturer can also choose to download all of the BOMcheck supplier data in one very large file! This is useful for manufacturers who wish to use their own database applications to process the raw data.

5 Parts compliance XML file with supplier electronic signatures

The manufacturer can also choose to download the supplier data as an XML file. This allows the inclusion of additional data and declaration hierarchy information for each part. This format will also allow for the addition of extra declaration data in future with minimal disruption to existing data import and manipulation routines.

The hierarchy is: Supplier -> Declaration Info -> Parts, whereby the parts are grouped by their supplier and current declaration status, Figure 4.

Figure 5. Example XML file structure

```

<?xml version="1.0" encoding="utf-8" ?>
- <complianceData>
  <datePrepared>2008-04-30</datePrepared>
- <suppliers>
- <supplier>
  <name>Ace Supplier</name>
- <authorisee>
  <firstName>Fred</firstName>
  <lastName>Smith</lastName>
  <position>Quality Director</position>
  </authorisee>
- <declarations>
- <declaration>
  <effectiveDate>2005-01-01 00:00:00</effectiveDate>
  <approvalDate>2008-04-30 10:27:28</approvalDate>
  <status>Approved</status>
- <restrictions>
- <category>
  <name>RoHS</name>
  <status>Yes</status>
+ <substances>
  </category>
- <category>
  <name>Restricted Substances</name>
  <status>Yes</status>
+ <substances>
  </category>
- <category>
  <name>Relevant Substances</name>
  <status>Yes</status>
+ <substances>
  </category>
  </restrictions>
  <evidenceDoc>http://www.bomcheck.net/files/evidence/1/SGS test report on ceramic
    material for capacitors.pdf</evidenceDoc>
+ <parts>
  </declaration>
+ <declaration>
+ <declaration>
+ <declaration>
  </declarations>
  </supplier>
+ <supplier>
  </suppliers>
</complianceData>

```

6 Web service for automatic download of data from BOMcheck

BOMcheck also provides a web-service for automatic download of data into the manufacturer's PLM system (e.g. SAP, Agile etc). This allows the manufacturer to develop a solution to periodically update the declaration data held on their PLM systems without the need for user interaction.

At a high level this involves your PLM system sending a HTTP request to BOMcheck.net including login details, and information regarding the parts data (and format) required and the last download date. The BOMcheck.net system will then authenticate the request and provide the required data via a HTTP response to your PLM system. BOMcheck provides low-level technical details



regarding the format of both the request and possible responses. To improve the speed of the download, BOMcheck provides the option for you to request to download only the data that has changed or been added to BOMcheck since the last download date.

7 About ENVIRON

A leading international consultancy, ENVIRON partners with clients to assess and manage the potential environmental, energy, and health issues associated with their activities and products. Decision makers rely on us as they strive to reduce or eliminate health and environmental impacts throughout their business life cycles - from acquisition to ongoing operations to restructuring or divestiture. Whether responding to existing challenges or seeking strategies to prevent future liabilities, clients around the world benefit from our blend of universally high technical skills and knowledge of local requirements and practices.

8 Further information

To request a free web demonstration or to receive a manufacturer agreement for your company, please contact:

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