



**UNITED STATES
CONSUMER PRODUCT SAFETY COMMISSION
4330 EAST WEST HIGHWAY
BETHESDA, MD 20814**

CPSC RECALLS DATABASE MOBILE APP AND WEB SERVICES PROJECT INTERFACE REQUIREMENTS

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Table of Contents

Introduction	3
Project Context	3
System Interface Requirements	3
SI0000 General System Interface Requirements	3
SI0010 Data Conventions.....	3
SI0020 Security	3
SI1000 Search Recall By UPC Code.....	4
SI2000 Search Recall By A Key Word	6
SI3000 Search Recall By Dates.....	6
SI4000 Subscribe to CPSC Recalls and Product Safety News E-mail Lists	7
SI5000 Report An Incident	8

INTRODUCTION

This document defines the Recalls Database Mobile App and Web Services System Interface requirement for the U.S. Consumer Product Safety Commission (CPSC). This document encompasses five methods for using the web service, including searching CPSC's recall database by UPC, text description, and date; subscribing to CPSC listservs; and obtaining information on where to report an incident involving an injury, death, or unsafe product.

Searches by UPC can be problematic for several reasons: CPSC does not have UPCs for every product recalled and companies use and re-use UPCs differently. For these reasons, a search by UPC can lead to false positive or false negative results. Although CPSC provides a Search by UPC method, we strongly recommend using the key word search (SI2000) for more complete and accurate recall information.

PROJECT CONTEXT

The purpose of the project context is to define the environment in which the Recalls Database Mobile App and Web Service will operate and identify the external systems with which the App and Web Services will interface. The primary external system is the CPSC online recalls database, a MySQL database.

SYSTEM INTERFACE REQUIREMENTS

SI0000 – General System Interface Requirements

SI0010 – Data Conventions

The following data conventions are used when transferring data between systems:

Type	Format	Comments
GUID	00000000-0000-0000-0000-000000000000	32 Hexadecimal characters separated by 4 hyphens. This is the standard format produced by SQL or .NET
Date	YYYY-MM-dd	
Time	YYYY-MM-ddTHH:mm:ss	XML sortable time format
Boolean	0 or 1	Do not use "true" or "false"
NULL values		Attribute with null value is omitted from the message
Number	Integer	
Email	XXXX@YYY.ZZZ	A string containing only one "@" and at least one "." following the "@" symbol

SI0020 – Security

Communications

Requirement ID	Rule
SI0020-0010	All Web Services communications between systems must be conducted through

	secured sockets layer(SSL)
SI0020-0020	All Web Services calls will include two string parameters. (CPSC does not validate these parameters for public release – that is, while the fields are present and must have values, the API does not require a specific userID or password at this time.) <ul style="list-style-type: none"> • “userID” – the user id of calling system • “password” – the password to authenticate the calling system

SI1000 – Search Recall by UPC Code

Caller submits recall information through a web service method based on the UPC.

Searches by UPC can be problematic for several reasons: CPSC does not have UPCs for every product recalled and companies use and re-use UPCs differently. For these reasons, a search by UPC can lead to false positive or false negative results. Although CPSC provides a Search by UPC method, we strongly recommend using the key word search (SI2000) for more complete and accurate recall information.

Method name: getRecallByUPC
Method Parameter: message1, userID, password

Access

Requirement ID	Rule
SI1010-0010	The getRecallByUPC call is accessed at the following URL: http://www.cpsc.gov/cgibin/CPSCUpcWS/CPSCUpcSvc.asmx

getRecallByUPC Calling parameters

Requirement ID	Name	Type	Size	Req.	Description
SI1010-1010	message1	String	*	Y	The XML request message. Contain one or many UPC code(s) (See sample below)
SI1010-1020	userId	String	50	Y	The user ID assigned by CPSC
SI1010-1030	Password	String	50	Y	The password assigned by CPSC

Sample message1 XML string

```
<xml>
  <cpu>1234345</cpu>
  <cpu>3345456</cpu>
</xml>
```

getRecallByUPC return message

Requirement ID	Name	Type	Size	Req.	Description
SI1020-1000	Message	Element		Y	The XML request message. Contain one or many UPC

					code(s) (See sample below)
SI1020-2000	outcome	Attribute String	10	Y	Either “ success ” or “ failure ”
SI1020-3000	transactionID	Attribute GUID	32	Y	The GUID generated by the CPSC system for each web service response (see SI0010, data convention)
SI1020-4000	errorMsg	Attribute String	500	N	Optional xml attribute to describe the error, if the outcome is failure
SI1020-1100	results	Element		N	Optional xml element leads a successful incident data
SI1020-1110	result	Element		N	One xml element with recall info
SI1020-1111	UPC	Attribute String	20	N	UPC code, as the one passed in from the caller
SI1020-1112	recallURL	Attribute String	15	N	The system ID per recall
SI1020-1113	recDate	Attribute String	20	N	The date of the recall (see SI0010, data convention)
SI1020-1114	y2k	Attribute String	20	N	Sort order, to ensure newer recalls appear before older recalls and recalls before recall alerts
SI1020-1115	manufacturer	Attribute String	100	N	Manufacturer, Importer, Distributor, Retailer, Brand
SI1020-1116	type	Attribute String	20	N	The product type
SI1020-1117	prname	Attribute String	100	N	The product description
SI1020-1118	hazard	Attribute String	500	N	The hazard
SI1020-1119	country_mfg	Attribute String	100	N	The country or administrative area of manufacture
SI1020-1120	recallNo	Attribute String	15	N	Recall Number

Sample getRecallByUPC return message

Sample 1

```
<message outcome='failure' errorMsg='invalid user id or password'
transactionID='1234-123456-1234-123-1234545' />
</message>
```

Sample 2

```
<message outcome='success' transactionID='1234-123456-1234-123-1234545' />
<results>
<result UPC='1234434' recallNo='10101'
recallURL='http://www.cpsc.gov/cpsc/pub/prerel/prhtml10/10101.html'
Manufacturer='abc company' type='Clothing (Childrens)'
prname='abc company childrens clothing product'
Hazard='Strangulation' country_mfg='China' />
```

```

        <result UPC='1234434' recallURL ='' .....>
        <result UPC='6734434' recallNo='' .....>
        <result UPC='6734434' recallNo='' .....>
    </results>
</message>

```

SI2000 – Search Recall by a Key Word

Caller submits a key word to get a return list of CPSC recall data.

Method name: getRecallByWord
Method Parameter: message1, userId, password

Access

Requirement ID	Rule
SI2010-0010	The getRecallByWord call is accessed at the following URL: http://www.cpsc.gov/cgibin/CPSCUpcWS/CPSCUpcSvc.aspx

getRecallByWord Calling parameters

Requirement ID	Name	Type	Size	Req.	Description
SI2010-1010	message1	String	*	Y	A string request message.
SI2010-1020	userId	String	50	Y	The user ID assigned by CPSC
SI2010-1030	Password	String	50	Y	The password assigned by CPSC

getRecallByWord return message

(The same as getRecallByCPU return message)

SI3000 – Search Recall by Dates

Caller submits a range of days to get a return list of CPSC recall data.

Method name: getRecallByDate
Method Parameter: startDate, endDate, userId, password

Access

Requirement ID	Rule
SI3010-0010	The getRecallByDate call is accessed at the following URL: http://www.cpsc.gov/cgibin/CPSCUpcWS/CPSCUpcSvc.aspx

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getRecallByDate Calling parameters

Requirement ID	Name	Type	Size	Req.	Description
SI3010-1010	startDate	String	20	Y	A date string (see SI0010, data convention)
SI3010-1020	endDate	String	20	Y	A date string (see SI0010, data convention) <ul style="list-style-type: none"> • Start date and end data can be the same • End date must greater than start date
SI3010-1030	userId	String	50	Y	The user ID assigned by CPSC
SI3010-1040	Password	String	50	Y	The password assigned by CPSC

getRecallByDate return message

(The same as getRecallByUPC's return message)

SI4000 – Subscribe to CPSC Recalls and Product Safety News E-mail Lists

Caller submits a request to subscribe to one of CPSC's ten e-mail lists. The Web Service returns the URL for the existing public Web page.

Method name: getEmailSubscription

Method Parameter: userId, password

Access

Requirement ID	Rule
SI4010-0010	The Recalls and Product Safety News E-mail List is accessed at the following URL: http://www.cpsc.gov/cgibin/CPSCUpcWS/CPSCUpcSvc.asmx

getEmailSubscription Calling parameters

Requirement ID	Name	Type	Size	Req.	Description
SI4010-1010	userId	String	50	Y	The user ID assigned by CPSC
SI4010-1020	Password	String	50	Y	The password assigned by CPSC

getEmailSubscription return message

Requirement ID	Name	Type	Size	Req.	Description
SI4020-1010	message	Element		Y	
SI4020-1020	outcome	Attribute String	50	Y	Either “success” or “failure”
SI4020-1030	Msg	Attribute String	500	N	Result of request, from Listserv server
SI4020-1040	transactionID	Attribute String	32	Y	The GUID generated by the CPSC system for each web service response (see SI0010, data convention)
SI5020-1050	errorMsg	Attribute String	500	N	Optional xml attribute to describe the error, if the outcome is failure

Sample getEmailSubscription return message

Sample 1

```
<message outcome='failure' Msg='That is not a valid email address.'
transactionID='1234-123456-1234-123-1234545' />
</message>
```

Sample 2

```
<message outcome='success' Msg='https://www.cpsc.gov/cpsclist.aspx'
transactionID='1234-123456-1234-123-1234545' />
</message>
```

SI5000 – Report An Incident

Caller submits a request to report an incident through the web service. The CPSC web service returns the contact phone, email, and URL on existing CPSC web site.

Method name: reportIncident
Method Parameter: userId, password

Access

Requirement ID	Rule
SI5010-0010	The reportIncident is accessed at the following URL: http://www.cpsc.gov/cgi-bin/CPSCUpcWS/CPSCUpcSvc.aspx

reportIncident Calling parameters

Requirement ID	Name	Type	Size	Req.	Description
SI5010-1020	userId	String	50	Y	The user ID assigned by CPSC
SI5010-1030	Password	String	50	Y	The password assigned by

					CPSC
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reportIncident return message

Requirement ID	Name	Type	Size	Req.	Description
SI5020-1010	message	Element		Y	
SI5020-1020	outcome	Attribute String	50	Y	Either “success” or “failure”
SI5020-1030	transactionID	Attribute String	32	Y	The GUID generated by the CPSC system for each web service response(see SI0010, data convention)
SI5020-1030	errorMsg	Attribute String	500	N	Optional xml attribute to describe the error, if the outcome is failure
SI5020-1040	contactEmail	Attribute String	100	N	CPSC contact email
SI5020-1050	contactPhone	Attribute String	20	N	CPSC contact phone
SI5020-1060	URL	Attribute String	200	N	URL to the CPSC public incident report form

Sample reportIncident return message

Sample 1

```
<message outcome='failure' errorMsg='a note of error ...'
transactionID='1234-123456-1234-123-1234545' />
</message>
```

Sample 2

```
<message outcome='success' transactionID='1234-123456-1234-123-1234545'
contactEmail='info@cpsc.gov' contactPhone='800-638-2772'
URL='http://www.cpsc.gov/talk.html' >
</message>
```