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**Source:** SA5 (Telecom Management)  
**Title:** Rel-4 CR 32.613 (Bulk configuration management IRP CORBA SS)  
: Add missing CORBA exceptions and descriptions of CORBA  
exception usage  
**Document for:** Approval  
**Agenda Item:** 7.5.3

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Doc-1 <sup>st</sup> -Level	Spec	CR	R	Phase	Subject	Cat	Ver Cur	Ver New	Doc-2 <sup>nd</sup> -Level	Workite m
SP-020297	32.613	003	-	Rel-4	Add missing CORBA exceptions and descriptions of CORBA exception usage	F	4.1.0	4.2.0	S5-026074	OAM-CM

## CHANGE REQUEST

⌘ **32.613 CR 003** ⌘ rev **-** ⌘ Current version: **4.1.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

**Proposed change affects:** ⌘ (U)SIM  ME/UE  Radio Access Network  Core Network

<b>Title:</b>	⌘ Add missing CORBA exceptions and descriptions of CORBA exception usage		
<b>Source:</b>	⌘ SA5		
<b>Work item code:</b>	⌘ OAM-CM	<b>Date:</b>	⌘ 05/04/2002
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ REL-4
	Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

<b>Reason for change:</b>	⌘ There are missing CORBA exceptions and descriptions of CORBA exception usage.
<b>Summary of change:</b>	⌘ <ul style="list-style-type: none"> <li>• For each CORBA method, add missing CORBA exception "&lt;operation-name&gt;Exception", or align name of existing CORBA exception.</li> <li>• Add missing CORBA exception "NotValidInCurrentStateException" on CORBA methods "upload", "download", "activate", "fallback", "end_session" and "abort_session_operation" and remove superseded CORBA exceptions "TransitionStateException" and "NoActiveOperationException".</li> <li>• Add missing CORBA exception "MaxSessionReachedException" on CORBA methods "start_session", "upload" and "download".</li> <li>• In the IDL, for each existing CORBA exception, add missing commentary describing CORBA exception usage.</li> <li>• Correct erroneous CORBA exception in operation "upload" mapping table.</li> <li>• Correct erroneous CORBA method in operation and notification mapping table.</li> <li>• Editorial modifications.</li> </ul>
<b>Consequences if not approved:</b>	⌘ It would be impossible to implement the Bulk CM IRP in a fully interoperable manner (see "Other comments").

<b>Clauses affected:</b>	⌘ 4.2, 4.3, Annex B									
<b>Other specs affected:</b>	⌘ <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"><input type="checkbox"/> Other core specifications</td> <td style="width: 30%;"></td> <td style="width: 30%;"></td> </tr> <tr> <td><input type="checkbox"/> Test specifications</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> O&amp;M Specifications</td> <td></td> <td></td> </tr> </table>	<input type="checkbox"/> Other core specifications			<input type="checkbox"/> Test specifications			<input type="checkbox"/> O&M Specifications		
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<input type="checkbox"/> O&M Specifications										
<b>Other comments:</b>	⌘ Without the added exceptions described below, a Bulk CM IRP Agent would have no mean to inform an IRPManager of the error cases corresponding to those exceptions.  .../...									

.../...

Each method generically requires an exception "<operation-name>Exception" for the cases where the request failed because of unspecified reasons (e.g. memory overflow, disk full, software error).

Methods "upload", "download", "activate", "fallback", "end\_session" and "abort\_session\_operation" further require the new exception "NotValidInCurrentStateException" for the cases where the request cannot be processed because the request is not valid in the current state of the configuration session.

E.g.:

- Method "upload" called as current state is "upload completed".
- Method "download" called as current state is "upload in progress".
- Method "abort\_session\_operation" called as current state is "idle".

The new exception "NotValidInCurrentStateException" supersedes exceptions "TransitionStateException" and "NoActiveOperationException" as:

- For methods "upload", "download", "activate", "fallback" and "end\_session", exception "TransitionStateException" covers the cases where the request cannot be processed because current state of the configuration session is "xxx in progress" state and the request is not valid in such a state.
- For method "abort\_session\_operation", exception "NoActiveOperationException" covers the cases where the request cannot be processed because current state of the configuration session is not "xxx in progress" state and the request is not valid in such a state.

Methods "start\_session", "upload" and "download" also require the new exception "MaxSessionReachedException" for the cases where the request cannot be processed because the maximum number of simultaneously running configuration sessions, for upload or download/activate activity, or globally, has been reached.

## 4.2 Operation and Notification mapping



Table 1: Mapping from IM Notification/Operation to SS equivalents

IS Operation/ notification	SS Method	Qualifier
getBulkCmIRPVersion	<del>get_bulk_cm_IRP_version</del> <a href="#">get_bulk_CM_IRP_versions</a>	M

## 4.3 Operation Parameter Mapping



Table 2: Mapping from IS startSession parameters to SS equivalents

IS Operation parameter	SS parameter	Qualifier
status	<a href="#">exception StartSessionException</a> , <a href="#">exception SessionIdInUseException</a> , <a href="#">MaxSessionReachedException</a>	M

Table 3: Mapping from IS endSession parameters to SS equivalents

IS Operation parameter	SS Method parameter	Qualifier
status	<a href="#">exception EndSessionException</a> , <a href="#">exception UnknownSessionIdException</a> , <a href="#">TransitionStateException</a> , <a href="#">NotValidInCurrentStateException</a>	M

Table 4: Mapping from IS upload parameters to SS equivalents

IS Operation parameter	SS Method parameter	Qualifier
status	<a href="#">exception UploadException</a> , <a href="#">exception UnknownSessionIdException</a> , <a href="#">exception MaxSessionReachedException</a> , <a href="#">TransitionStateException</a> , <a href="#">NotValidInCurrentStateException</a> , <a href="#">exception ConcurrencyException</a> , <a href="#">exception IllegalDistinguishedNameFormatException</a> , <a href="#">IllegalDNFormatException</a> , <a href="#">exception IllegalFilterFormatException</a> , <a href="#">exception IllegalScopeTypeException</a> , <a href="#">exception IllegalScopeLevelException</a> , <a href="#">exception IllegalURLFormatException</a>	M

Table 5: Mapping from IS download parameters to SS equivalents

IS Operation parameter	SS Method parameter	Qualifier
status	<a href="#">exception DownloadException</a> , <a href="#">exception UnknownSessionIdException</a> , <a href="#">exception MaxSessionReachedException</a> , <a href="#">TransitionStateException</a> , <a href="#">NotValidInCurrentStateException</a> , <a href="#">exception IllegalURLFormatException</a>	M

Table 6: Mapping from IS activate parameters to SS equivalents

IS Operation parameter	SS Method parameter	Qualifier
●●●		
status	<a href="#">exception ActivateException</a> , exception UnknownSessionIdException, exception <del>TransitionStateException</del> <a href="#">NotValidInCurrentStateException</a> , exception ConcurrencyException	M

Table 7: Mapping from IS fallback parameters to SS equivalents

IS Operation parameter	SS Method parameter	Qualifier
●●●		
status	<a href="#">exception FallbackException</a> , exception UnknownSessionIdException, exception NoFallbackException, exception <del>TransitionStateException</del> <a href="#">NotValidInCurrentStateException</a> , exception ConcurrencyException	M

Table 8: Mapping from IS abortSessionOperation parameters to SS equivalents

IS Operation parameter	SS Method parameter	Qualifier
●●●		
status	<a href="#">exception AbortSessionOperationException</a> , exception UnknownSessionIdException, exception <del>NoActiveOperationException</del> <a href="#">NotValidInCurrentStateException</a>	M

Table 9: Mapping from IS getSessionIds parameters to SS equivalents

IS Operation parameter	SS Method parameter	Qualifier
●●●		
status	<del>-no-error-condition-identified</del> <a href="#">exception GetSessionIdsException</a>	M

Table 10: Mapping from IS getSessionStatus parameters to SS equivalents

IS Operation parameter	SS Method parameter	Qualifier
●●●		
<del>status</del> Not specified in IS.	BulkCmIRPConstDefs::ErrorInformation error_information	M
status	<a href="#">exception GetSessionStatusException</a> , exception UnknownSessionIdException	M

Table 11: Mapping from IS getSessionLog parameters to SS equivalents

IS Operation parameter	SS Method parameter	Qualifier
●●●		
status	<a href="#">exception GetSessionLogException</a> , exception UnknownSessionIdException, exception ConcurrencyException, exception IllegalURLFormatException	M

●●●

Table 12: Mapping from IS getBulkCmIRPVersion parameters to SS equivalents

IS Operation parameter	SS Method parameter	Qualifier
versionNumberList	return of type ManagedGenericIRPConstDefs::VersionNumberSet	M
status	exception GetBulkCmIRPVersions <a href="#">Exception</a>	M

●●●

## Annex B (normative): IDL: BulkCmIRPSystem



```
module BulkCmIRPSystem
```

```
{
```

```
  /*
```

```
  The request cannot be processed due to a situation of concurrency.  
  E.g. two concurrent activation requests involving the same ManagedElement  
  instance. The semantics carried in reason is outside the scope of this IRP.
```

```
  */
```

```
  exception ConcurrencyException { string reason; };
```

```
  /*
```

```
  The provided filter is malformed or invalid. The semantics carried in reason  
  is outside the scope of this IRP.
```

```
  */
```

```
  exception IllegalFilterFormatException { string reason; };
```

```
  /*
```

```
  The provided Distinguished Name is malformed or invalid. The semantics  
  carried in reason is outside the scope of this IRP.
```

```
  */
```

```
  exception IllegalDNFormatException { string reason; };
```

```
  /*
```

```
  The provided scope type is illegal. The semantics carried in reason is  
  outside the scope of this IRP.
```

```
  */
```

```
  exception IllegalScopeTypeException { string reason; };
```

```
  /*
```

```
  The provided scope level is illegal. The semantics carried in reason is  
  outside the scope of this IRP.
```

```
  */
```

```
  exception IllegalScopeLevelException { string reason; };
```

```
  /*
```

```
  The request cannot be processed because no fallback data is available, i.e.  
  fallback capability was previously not asked for.
```

```
  */
```

```
  exception NoFallbackException {};
```

```
  /*
```

```
  The provided sessionId value is already used for another configuration  
  session. The semantics carried in reason is outside the scope of this IRP.
```

```
  */
```

```
  exception SessionIdInUseException { string reason; };
```

```
  /*
```

```
  The provided URL is malformed or invalid. The semantics carried in reason is  
  outside the scope of this IRP.
```

```
  */
```

```
  exception IllegalURLFormatException { string reason; };
```

```
  /*
```

```
  The provided sessionId value does not identify any existing configuration  
  session.
```

```
  */
```

```
  exception UnknownSessionIdException {};
```

```

/*
The request cannot be processed because it is not valid in the current state
of the configuration session.
*/
exception NotValidInCurrentStateException
{
BulkCmIRPConstDefs::SessionState current_state;
};

/*
The request cannot be processed because the maximum number of simultaneously
running configuration sessions has been reached. The semantics carried in
reason is outside the scope of this IRP.
*/
exception MaxSessionReachedException { string reason; };

/*
System otherwise fails to complete the operation. System can provide reason
to qualify the exception. The semantics carried in reason
is outside the scope of this IRP.
*/
exception GetBulkCmIRPVersionsException { string reason; };
exception ConcurrencyException { string reason; };
exception IllegalFilterFormatException { string reason; };
exception IllegalDNFormatException { string reason; };
exception IllegalScopeTypeException { string reason; };
exception IllegalScopeLevelException { string reason; };
exception NoFallbackException {};
exception SessionIdInUseException { string reason; };
exception TransitionStateException { string reason; };
exception IllegalURLFormatException { string reason; };
exception UnknownSessionIdException {};
exception NoActiveOperationException {};
exception UploadException { string reason; };
exception DownloadException { string reason; };
exception ActivateException { string reason; };
exception GetSessionLogException { string reason; };
exception StartSessionException { string reason; };
exception GetSessionStatusException { string reason; };
exception FallbackException { string reason; };
exception EndSessionException { string reason; };
exception AbortSessionOperationException { string reason; };
exception GetSessionIdsException { string reason; };

```

```

...
interface BulkCmIRP
{
...
ManagedGenericIRPConstDefs::VersionNumberSet get_bulk_CM_IRP_versions (
)
raises (GetBulkCmIRPVersionsException);

...
void upload (
in BulkCmIRPConstDefs::SessionId session_id,
in BulkCmIRPConstDefs::FileDestination sink,
in BulkCmIRPConstDefs::DistinguishedName base_object,
in BulkCmIRPConstDefs::SearchControl search_control
)
raises (UploadException, UnknownSessionIdException,
MaxSessionReachedException,
TransitionStateException, NotValidInCurrentStateException,
ConcurrencyException,

```

```

        IllegalDNFormatException, IllegalFilterFormatException,
        IllegalScopeTypeException, IllegalScopeLevelException,
        IllegalURLFormatException);

```

●●●

```

void download (
    in BulkCmIRPConstDefs::SessionId session_id,
    in BulkCmIRPConstDefs::FileDestination source
)
raises (DownloadException, UnknownSessionIdException,
        MaxSessionReachedException,
TransitionStateExceptionNotValidInCurrentStateException,
        IllegalURLFormatException);

```

●●●

```

void activate (
    in BulkCmIRPConstDefs::SessionId session_id,
    in boolean fallback
)
raises (ActivateException, UnknownSessionIdException,
TransitionStateExceptionNotValidInCurrentStateException,
        ConcurrencyException);

```

●●●

```

void get_session_log (
    in BulkCmIRPConstDefs::FileDestination sink,
    in BulkCmIRPConstDefs::SessionId session_id,
    in boolean only_error_info
)
raises (GetSessionLogException, UnknownSessionIdException,
ConcurrencyException,
        IllegalURLFormatException);

```

●●●

```

void start_session (
    in BulkCmIRPConstDefs::SessionId session_id
)
raises (StartSessionException, SessionIdInUseException,
MaxSessionReachedException);

```

●●●

```

BulkCmIRPConstDefs::SessionState get_session_status (
    in BulkCmIRPConstDefs::SessionId session_id,
    out BulkCmIRPConstDefs::ErrorInformation error_information
)
raises (GetSessionStatusException, UnknownSessionIdException);

```

●●●

```

void fallback (
    in BulkCmIRPConstDefs::SessionId session_id
)
raises (FallbackException, UnknownSessionIdException, NoFallbackException,
TransitionStateExceptionNotValidInCurrentStateException,
        ConcurrencyException);

```

●●●

```

void end_session (
    in BulkCmIRPConstDefs::SessionId session_id
)
raises (EndSessionException, UnknownSessionIdException,
TransitionStateExceptionNotValidInCurrentStateException);

```



●●●

```
void abort_session_operation (  
    in BulkCmIRPConstDefs::SessionId session_id  
)  
    raises (AbortSessionOperationException, UnknownSessionIdException,  
           NoActiveOperationExceptionNotValidInCurrentStateException);
```

●●●

```
BulkCmIRPConstDefs::SessionIdList get_session_ids (  
    )  
    raises (GetSessionIdsException);  
};
```

●●●