Subject: Result of Release Process Discussion

Source: Nortel Networks (Iain Sharp - chair of email discussion)

Agenda: 5

For: Decision

Introduction

At SA#23 a report was presented (SP-040053) on the outcome of the Release process discussion that had taken place by email since SA#22. At SA#23 it was agreed to take the concept of "Early Implementation" described in section 3.1 and 4.1 of the SP-040053 and try and converge on a practical way of implementing this in 3GPP. This document contains the output of the discussion since SA#23.

There has been in general a good level of contribution to the discussions since SA#23 and several companies with different points of view have contributed to this report. The conclusions are presented below in the form of an Annex which could be attached to SP-040053 to form a complete report of the discussions.

In summary the proposal has the following key points:

- It is useful to the 3GPP community if certain features are implemented before the release that contains them is completed, or are implemented on a platform of a release earlier than the release that contains a feature. This concept is defined as "early implementation".
- Changes to 3GPP documentation are proposed to make early implementation more feasible and reduce the risks of technical incompatibilities as a result. These consist of:
 - Enhancements to the work item template to allow the status of individual features to be more carefully tracked, and to allow candidates for early implementation to be identified.
 - Creation of a template for an "early implementation technical report". This report
 would be created for all early implementation features. It contains information on the
 requirements for early implementation and technical guidance on how to make an
 early implementation.

Open Issues

A few issues remain open which were not resolved during the discussion. Those specifically identified in the report are:

- a) Whether changes to the 3GPP work plan should be made as a consequence of accepting this proposal.
- b) The numbering of early implementation reports (8xx series or 9xx series)
- c) Whether or not a list of CRs associated with the feature should be included in the report.

Conclusion

The improvements described in the report will make 3GPP better able to meet the market needs for our features while maintaining the advantages of the current release process. It will make the situation with respect to early implementation of key features clearer for implementers, operating companies and the 3GPP standards community. This clear proposal for early implementation will reduce the need for the use of the Release Independent concept which is badly defined and often poorly documented.

Apart from the open issues identified above the report represents a fair consensus as determined by the contributions to the email discussion.

It is therefore recommended that SA#24 approves the report and its conclusion. Specifically:

- 1. The open questions shall be resolved at SA#24
- 2. The WID template should be updated as shown in the report
- 3. The template for early implementation technical reports shall be created as shown in the report
- 4. 21.900 shall be updated

A. Annex A – Practical Realisation of "Early Implementation"

A.1 Overview

The concept of "early implementation" may be used to improve the ability of companies to bring new 3GPP features to the market place quickly. This is achieved by providing additional clarifying material on how to implement a new feature prior to the completion of the feature's parent release.

The mechanism may also be used to provide clarifying information on how to implement a new feature on a platform based on a release earlier than the one currently in development. In this case the new features are not added to the earlier releases by making CRs to early releases or any other method. The status of old releases is unchanged. Someone who wishes to fully implement a particular release (eg release 99) shall only be required to refer to documentation included in that release.

A practical realisation of the proposals to improve "early implementation" of features must deal with two aspects:

- 1) Enhancements to the status recording of individual "early implementation" work items and features.
- 2) Technical guidance on how to perform early implementation

It is proposed to capture "project" information which will change over time such as approval status, and timings by enhancements to the work item template. Changes to the work plan are FFS.

It is proposed to capture "static" information such as requirements or technical guidance on how to perform early implementation in a technical report.

A.2 Status Recording

It is proposed to enhance the work item template as a way of identifying the work item as a candidate for early implementation and performing status recording. A number of requirements for this are outlined in section 3.1 of the report. The following additions to the template are proposed:

X Work Item Status

Not Approved
Approved and work in progress
Approved and technically complete
Approved and frozen
Deleted or stopped

Indicate the current status of the work item. Mark the current status with an "X". A new work item proposal shall be initially presented with "Not Approved" checked.

(X+1) Reason for This Proposal

Create a new Work Item					
Revise the text of a work item without changing its status					
Change the status of the work item (possibly also including revisions to the text). Indicate proposed new status here:					
Clean version produced after TSG approval of revisions (A clean version of a WID shall be produced after TSG approval of any revisions. This box shall be checked in the clean version)					

Indicate the reason for this document as indicated above. Proposals which have not yet been TSG approved shall use one of the first three boxes. Following TSG approval of revisions a clean version shall be produced with the final box checked. When a new work item is approved the status shall be set to "Approved and work in progress".

(X+2) Candidate for Early Implementation

To be completed when the work item is created. Indicate at a high level whether the "early implementation" should be considered. If "early implementation" is considered then an "early implementation technical report" shall be created and captured in the list of impacted specifications.

In addition to these enhancements to the work item description there may be an "early implementation technical report" created during the work item (see below). If so this should be captured in the list of impacted specifications (and also recorded in the list of "actual impacted specifications") once the work item is complete.

A.3 Early Implementation Technical Report

The technical report shall give guidance on how to perform early implementation of a work item. This report shall not define any new technical requirements. It is there to help implementers identify which parts of the specifications are relevant to the work item and how they should be handled when early implementation is performed.

The early implementation technical report shall be identified in the list of impacted documents in the WID. The early implementation technical report is part of the same release as the feature to which is relates.

It is proposed that early implementation technical reports shall be numbered as part of the xx.9xx or xx.8xx range [Report numbering is FFS]..

Where a single early implementation feature consists of several work items then the number of different TRs should be minimised. The aim shall be for a single report to written for the appropriate highest level work item (typically the feature level). However, flexibility should is left to take account of different ways work items may be structured.

It is proposed that the technical report template shall include the following sections:

1 Scope

Refer to 21.8012.

2 References

Refer to 21.8012.

3 Definitions, Symbols and Abbreviations

Refer to 21.80<u>1</u>2.

4 Early Implementation Requirements

Indicate what are the requirements for the early implementation of the feature. For "stage 2 and stage 3" level work items this section may refer to the corresponding "stage 1" report.

It is possible to use the "early implementation" mechanism as a way of allowing features to be implemented on a platform based on a release older than the last approved release. If this approach is used then this section should also indicate the minimum set of old releases early implementation should be considered for.

5 Specification Impacts

This section should indicate which specifications are actually impacted by the work item.

Spec	New specification or Modified Specification?
xx.yyy	New
WW.ZZZ	Modified

It may also list the impacting Specifications Change requests. [Including the list of CRs is FFS. Alternative proposals on how best to identify the specification impacts are invited]

Spec	CR	Cat	Version	Subject	WI Code

6 Early Implementation Status

Comment on the extent to which the objectives were achieved and those that were not

7 Early Implementation Guidance

Provide guidance to people wishing to make an early implementation.

A.4 Process

When a new WID is created the working group shall complete section "X+2 Candiate For Early Implementation" to show the possible requirement for early implementation. Where WIDs are part of the same parent feature the working groups shall cooperate to keep this information consistent.

The status in section "X Work Item Status" in the WID shall initially be set to "not approved". This shall be updated by the working group as the work item progresses. Changes to the status shall be proposed be the responsible working group and approved by the relevant TSG. Once the TSG approves the change in status the work item sheet shall be updated to reflect the TSG agreement.

If early implementation is considered, an "early implementation technical report" shall be created which shall be included in the list of impacted documents. Where several work items are part of the same parent then a common early implementation technical report may be shared between them.

Work on the early implementation technical report shall begin with the identification of the requirements for early implementation.

The contents of the early implementation technical report shall be developed in parallel to the overall progress on standardisation of the work item. The responsible working groups shall keep the report up to date – particularly the sections "specification impacts" and "Early Implementation Status" which must be completed before finalisation of the WID and maintained if they are impacted by any essential corrections subsequently.

Once a specification is frozen for a particular WID then only that WID code may only be used on "category F" CRs against that specification. Once a work item is in the "approved and frozen" state then the relevant work item code may only be used on "category F" CRs for all specifications.

A.5 Comments

This annex has shown how the existing 3GPP processes can be enhanced to clarify the handling of "early implementation". These enhancements would offer the following benefits:

- Much clearer view of which features may need "early implementation". This provides essential guidance to groups working on the technical design.
- Much greater clarity on the status of individual work items and whether they are suitable for early implementation. This provide important benefits to implementers of the specification.
- A clear mechanism to freeze individual features which will help the overall progress of releases towards stability.
- Better time to market for key features via an effective mechanism for "early implementation"

The proposal has the following disadvantages:

- There is no complete and consistent specification set available for "early implementation". Implementers must still refer to the relevant WIDs and (if available) the "early implementation technical report" as well as a stable release.
- Some increase in complexity of the WID template (however this mostly reflects complexity that is hidden today as it is not adequately tracked).

If this approach is agreed then:

- The FFS questions should be resolved
- The WID template should be updated
- The template for early implementation technical reports shall be created
- The MCC shall propose a mechanism for numbering early implementation technical reports
- 21.900 shall be updated

It is proposed that once this process is introduced it may be applied to any release subject to the normal rules in 3GPP for approval of new proposals.

Revision History

Revision	Date	Prepared By	Comments
1	19/4/2004	I. Sharp	First Draft
2	26/4/2004	I. Sharp	Second Draft
3	5/5/2004	I <u>.</u> Sharp	Third Draft
<u>4</u>	7/5/2004	I. Sharp	Fourth Draft