

NGN Project Management Tool

12 July 2006

This is an introduction to the ITU-T NGN Project Management Tool available at <http://www.itu.int/ngnproject/>.

The NGN Project Management Tool concept was agreed in ITU-T Study Group 13 (SG 13), Q.1/13 “Project coordination and release planning for NGN” in December 2004 for the purpose of showing the present status of numerous standardization work items on-line which are relevant to the ITU-T NGN project and have been developed or are being progressed in ITU and also external Standards Development Organizations (SDOs) and other fora and consortia.

The NGN Project Management Tool is led by SG 13, the ITU-T Lead Study Group on Next Generation Networks (NGN), and is maintained under the banner of the NGN-GSI (Next Generation Networks – Global Standards Initiative). The responsibility for the decision on what to include in the NGN Project Management database resides with Q.1/13 “Project coordination and release planning for NGN”.

The NGN Project Management Tool mirrors the NGN Roadmap document, which is under development by Q.1/13, and allows an easy reference to the ongoing NGN work in all ITU-T Study Groups, SDOs, fora and consortia with pointers to actual documents.

Organizational and functional views

The database exists in two views: organizational (Figure 1) and functional (Figure 2).

The screenshot shows a Microsoft Internet Explorer browser window displaying the NGN Project Management Tool. The address bar shows the URL http://www.itu.int/ngnproject/main_table.aspx. The page title is "NGN Project Activities" with an RSS icon. Below the title, there are links for "Database Management" and "Download: PDF RTF XML Excel". A navigation bar includes "View: Organisational" (highlighted with a red circle), "Release: All", and "Stage: Any". There are also "Expand All" and "Collapse All" links. The main content is a table with columns for "Acronym", "Title", "Rel.", and progress bars for "2006" and "2007". The table lists various project activities, including ITU, SG 2, Q01/2, E.107, E.TDR, Q02/2, E.351 (03/00), SG 3, Q01/3, Q02/3, SG 4, M.3050.0 (07/04), and M.3050 Supplement 1 (05/04).

Acronym	Title	Rel.	2006				2007				
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
ITU	International Telecommunication Union										
SG 2	Study Group 2: Operational aspects of service provision, networks and performance										
Q01/2	Question 01/2: Application of Numbering, Naming, and Addressing Plans for telecommunications and Service and Operational aspects of numbering, including service definition										
E.107	Emergency Telecommunications Service (ETS) and Interconnection Framework for National Implementations of ETS	1									
E.TDR	Service and Operational framework for the provision of Telecommunication for Disaster Relief (TDR)	1									
Q02/2	Question 02/2: Routing and Interworking Plans for Fixed and Mobile Networks										
E.351 (03/00)	Routing of multimedia connections across TDM-, ATM- and IP-based networks	All									
SG 3	Study Group 3: Tariff and accounting principles including related telecommunication economic and policy issue										
Q01/3	Question 01/3: Development of charging and accounting/settlement mechanisms for international telecommunications services, including adaptation of existing D-series Recommendations to the evolving market environment										
Q02/3	Question 02/3: Study of economic and policy factors relevant to the efficient provision of international telecommunication services										
SG 4	Study Group 4: Telecommunication management										
M.3050.0 (07/04)	Enhanced Telecommunications Operations Map - Introduction	1									
M.3050 Supplement 1 (05/04)	Enhanced Telecommunications Operations Map (eTOM) - ITIL application note	1									

Figure 1: Organizational view of the NGN Project Management Tool

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The following organizations and their specifications as selected by ITU-T SG 13 are part of the NGN Project Management Tool:

Organization	Contact
ARIB	TBA
ATIS	Timothy Jeffries
ATSC	TBA
ETSI	David Bothwarthick
IEEE	TBA
IETF	TBA
OMA	TBA
TIA	David Thompson

Figure 2: Functional view of the NGN Project Management Tool

The organizational view gives the list of selected organizations working on NGN (and liaising with ITU-T SG13) and the deliverables of those organizations that ITU-T SG 13 has selected as part of ITU-T NGN and the work items (deliverables) performed in each one of them. The functional view shows the same deliverables as in the organizational view, but they are grouped according to the topics or functional categories.

The organizational view is set as a default view. In each view the deliverables may be sorted out by Releases and Stages. (To see the results of this search, please use *expand* view.)

Details of work item

For each work item (i.e. Recommendation/specification/deliverable) of the NGN Project Management Tool the following details are listed (see Figure 3):

- corresponding function in the functional view (Please refer to Figure2)
- *full title*
- *release* to which it applies
- *description stage(s)*¹: 1, 2, 3
- *priority*: high, medium, low
- *summary*
- *reference document(s)*
- *contact*

The screenshot shows a web browser window titled 'task_details - Microsoft Internet Explorer'. The address bar contains the URL: http://www.itu.int/ngnproject/task_details.aspx?isn=2898&isnView=1&isnRelease=1. The main content area is titled 'Work Item Details' and contains a table with the following data:

Acronym	Y.PIEA		
Title	PSTN/ISDN emulation architecture		
Release	1		
Stage	<input type="checkbox"/> Stage 1 <input checked="" type="checkbox"/> Stage 2 <input type="checkbox"/> Stage 3		
Priority	High		
Active	Yes		
Parent Work Item			
Summary	This document describes the functional architecture, interworking with other components, and interface requirement of the PSTN/ISDN emulation service component including Call server based approach and IMS based approach.		
Comment			
Reference	Document	Date	Active
	COM 13-C 9	2006-05-05	Yes
Milestones	Milestone	Expected	Achieved
	Start-PIEA	2006-01-01	
	End-PIEA	2006-07-01	
Contacts	Last Name	First Name	Title
	Yuan	Zhang	Editor for Y.PIEA

At the bottom of the page, there are three buttons: 'Main Table', 'Work Item Links', and 'Edit'.

Figure 3: Work item (Recommendation/specification) layout

¹ From Recommendation I.130 “Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN”:

- Stage 1 is an overall service description from the user’s standpoint
- Stage 2 is an overall description of the organization of the network functions to map service requirements into network capabilities.
- Stage 3 is the definition of switching and signalling capabilities needed to support services defined in stage 1.

Draft Recommendations/specifications have in addition:

- *milestones*. Those are for ITU-T NGN plans/Releases in terms of the ITU-T NGN project. Milestones are defined in 3 types: start, intermediate, end. Start and end milestones are symbolized with black bar. The date appears when you put your mouse on this bar. (Please refer to Figure 2.)

Color guide:

- **Blue** line stands for the amount of work already accomplished.
- **Red** line means the amount of work not yet accomplished/behind schedule.
- **Green** line stands for the amount of work not yet accomplished/ahead of schedule.
- **Yellow** bar signifies the clock or “today”.

One can scroll to the other year forward or back by clicking on the double arrow “>>” next to the current year.

Download function

There is a possibility to download the data from the NGN Project Management Tool in PDF, RTF, XML or Excel format. To do so, please use the buttons on the top of the main view web page (e.g., click on “Download PDF” key).

Status of NGN Project Management Tool

Since February 2006, the database has been populated with the NGN-related deliverables as in ITU-T SG 13 TD 55 Rev. 1 (WP1/13) “*NGN Roadmap*” and TD 4 Rev. 1 (WP1/13) “*Q.1/13 Living list*”, according to the results from the January 2006 ITU-T SG 13 meeting (captured in TD 51 Rev. 1 (WP 1/13)).

As per the results of the Q.1/13 Rapporteur group meeting 22 – 27 April 2006, alignment with updated “*Living List*” in document Kobe-Q.01/13-003-Rev.1 at Q.1/13 portion of SG 13 iFA and “*NGN Roadmap*” in document Kobe-Q.01/13-016 has been performed.

Going public

The Tool will go public after review by Q.1/13 in July 2006. It will be linked from the ITU-T NGN-GSI web page (<http://www.itu.int/ITU-T/ngn/index.phtml>) and relevant SGs home.

Updating the data in the NGN Project Management Tool

a) ITU-T input

A plan is in place to keep the NGN Project Management database up-to-date after each meeting of Q.1/13 whether independently held as an interim Rapporteur group meeting or in a SG timeframe as a Question meeting. Thus, the NGN Project Management Tool will reflect the latest deliverables agreed at the meeting of Question (Q.1/13), responsible for maintaining the NGN Project Management database.

NGN contact points of SGs may introduce the changes to the database in the organizational view of their Study Group at any time. Q.1/13 is to review new entries at its following meeting and to allocate each of new items to a particular category in the functional view, along with its corresponding Stage number and Release number. The NGN Roadmap document is to be used as a guideline for the structure of functional view and the population of the NGN project management database.

b) Other organizations

Deliverables from selected SDOs relevant to the NGN project are expected to be managed by each SDO. NGN contact points of selected SDOs may be given the write access to make an update to the database in the organizational view of their SDO at any time. (The alternative is by prior arrangement with the ITU/TSB, other SDOs/fora could provide the relevant information in a compatible electronic format for bulk up-load by TSB.)

Q.1/13 remains responsible for supervising this process.

Description of Release concept

The current ITU-T NGN work is planned on a Release basis.

Definition of the “Release” concept

A Release is a method of prioritizing by identifying a set of services to be addressed in a certain time frame. The work is progressed by defining the service requirements and capabilities needed to realize the services in addition to defining other associated capabilities as needed to facilitate a NGN in a first Release. The adoption of a release-based approach does not prevent other work, such as the development of more generic (release-independent) capabilities, and the collation of services, requirements and issues for later releases.

More in depth: Components of a Release

To use this “Release” concept as a method of prioritizing the work, it was considered to use operational components which are useful for managing development of each release. The following parameters are used in ITU-T during the development of important telecommunication infrastructure such as ISDN based on ITU-T Rec. I.130 “Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN”.

- Timing: for realization and/or producing deliverables
- Stages²: Stage 1 to 3 based on Recommendation I.130
- Depth: level of descriptions

Release		Stage and depth	
0	generic document; contains information that is not release specific	1	overall service description
		/1	service prose definition and description
		/2	formal service description using attributes and/or graphic means
1	release 1 document; all of the contents is applicable to ITU-T NGN release 1	2	overall description of the organization of the network functions to map service requirements into network capabilities
2	release 2 document; specifies additional capabilities and interfaces that are part of ITU-T NGN release 2	/1	derivation of a functional model
		/2	information flow diagrams and possibly further details e.g. SDL
3	etc.	3	definition of switching and signalling/protocol capabilities needed to support services defined in stage 1.

Release 1 consists of scope, requirements and description documents.

The [Scope document](#) provides the scope of Release 1 of the Next Generation Network, i.e. business roles, use cases and discusses the value of the release (please click on the underlined text to activate a hyperlink). The general objective of the first release of all release-based standards is to provide a framework that provides an extensible platform for future service and architecture development. The NGN framework is expected to support advanced architecture objectives, for the offer of a comprehensive set of services over a unifying IP layer network. The NGN is expected to support a multiplicity of access transport functions and a variety of mobile and fixed terminal types. Services

² Please see footnote 1.

are not limited to those provided by the “home network,” but may be obtained from multiple service providers and third parties. Services shall be able to traverse multiple providers’ networks. The objectives for NGN Release 1 are to provide an extensible platform and architecture supporting:

- Multimedia services
- PSTN/ISDN Emulation services
- PSTN/ISDN Simulation services
- Internet access
- Other services and applications
- Public Interest Services Aspects

The basic requirements of an NGN are contained in ITU-T recommendation Y.2001. The objectives for NGN Release 1 are to provide an extensible platform for services, and an overall architecture designed to be extensible, allowing new services to be incorporated.

The [Requirements document](#) provides high level requirements for services and capabilities of Next Generation Network Release 1 (please click on the underlined text to activate a hyperlink).

It contains a set of general requirements of NGN Release 1, including requirements of the NGN capabilities identified in NGN Release 1 scope. It is also aligned with the general goals and objectives of Recommendation Y.2001. Detailed requirements for support of the capabilities identified in NGN Release 1 scope are outside the scope of this document and are specified in related documents.

The *Description document* gives a description of Release 1 of an anticipated series of releases within ITU-T in terms of the overall requirements and high level overview of the functional features to be addressed.

In order to fulfill the general objectives and principles of an NGN identified in Recommendations Y.2001 “General overview of NGN” and Y.2011 “General principles and general reference model for next generation networks”, *Description document* focuses on key initial capabilities whilst ensuring the general and long term architectural direction of the NGN is maintained as flexible as possible to allow future enhancements and releases.
