국제 표준화소식

제3회 ITSC Ad hoc 그룹 회의 소개

GSMM 모임 결과요약
(Global Standards Making Management)

- 일 시   1992년 6월 11일 ~ 12일
- 장 소   Stouffer Oak Brook Hotel, Illinois, USA
- 참가자   21명

TTC			
TTC	飯田德雄 전무이사	CCITT	Mr. Irmer 위원장외 1명
	石川宏 표준화회의부의장	ETSI	헨드릭스 사무국 정보교환 서비스부장
	松本允介 기술조사부문위원회 부문위원장	T1	피터슨 부의장 외 5명
	小宮辛三 기술조사부문위원회 부부문위원장	ACC (호주)	호톤의장 외 1명
	原田建夫 사무국 국제부장	TSACC (캐나다)	이스라엘 CCITT SG I 의장 외 1명
	富永昌彦 NTT America	TTA	심범석 망간 인터페이스 위원회 의장외 1명

- 자료   TTC 기고서 7건, ITU 기고서 1건, ETSI 기고서 3건, T1 기고서 9건, 기타 2건

이글은 일본 TTC Reprot에서 발췌·번역하여 재편집한 내용입니다.

회의개요

GSMM은 ITSC의 Ad hoc그룹으로서 효율적인 국제표준화활동을 도모키 위해 국제 및 각 지역표준화기구의 전문가들이 모여 상호정보교환, 표준화작업의 중복방지, 표준화과제의 기획조정 등 ITSC의 기본활동방향을 제시하고 있으며, 금번회의는 과거 2년간 ITSC 활동을 재평가하고 새로운 전개를 꾀하는 전환기에 이를 위한 기본정책을 의논하는 중요한 회의이라는 인식하에 참가하였다. 그러나, 의외로 ETSI에서 참가한 사람은 단지 1명 뿐이었으며, 게다가 ITSC의 개방성, 협조과제 등의 중요과제에 관해서도 거의 의견을 교환 할 수 없었다. ETSI에서는 직면한 내부문제 처리가 보다 중요하여 직접적인 이해가 없는 ITSC에까지 대응하기에는 손을 쓸 수 없는 상황으로 예상되었다. 그러나, 통신시장의 목소리를 반영하고 있는 국제표준을 효율적으로 작성하기 위한 목적으로 시작한 ITSC 활동은 지역의 균형이라는 점에서 ETSI가 적극적으로 기여 참여해야 성립되는 것이므로 ETSI에서는 본 활동에 대하여 한층 더 이해해 주기를 바란다.

이번의 Ad hoc Group 회의에서는 ETSI의 기여는 적었으나 앞으로의 ITSC 활동을 전개하는데 중요한 개방성 적용, 협조과제 설정에 관하여 의논하여 11월에 개최되는 ITSC3에 대한 제안이 정리되었다. ITSC3에는 ETSI에서도 10명 정도의 대표가 참가할 예정인데, 이번의 Ad hoc 그룹회의에서는 제안된 것을 바탕으로 의논하였는데 결론은 앞으로의 ITSC 활동의 성패여부와 관련된 매우 중요한 것이라 생각된다.

의사개요

1. 의장인사, 출석자 소개

GSMM 의장인 Irmer CCITT 위원장으로부터, 이 회의은 지금까지 2년간의 경험을 바탕으로 ITSC의 앞으로의 방향을 정하여 올해 11월 동경에서 개최되는 ITSC3에 입력하기 위한 것으로 전날 개최되었던 EDH 회의과 똑같이 생산적인 회의가 되어 성공리에 폐회할 수 있기를 기대한다는 인사가 있었다.

또한, ETSI에서는 자체 회의일정과 중복되었기 때문에 이 회의에는 1명만 참가하게 되었다는 설명이 있었다는 보고가 있었다.

2. 의제 승인

의장이 제안한 의제가 승인되었다.

3. 현황·진척보고

(1) Liaison Rapporteur

Mr. Hendrickx(ETSI)가 6개의 중점 관심과제(High Interest Projects)에 대한 ETSI, T1, TTC의 리에존 라포터의 성명, 연락처를 정리한 문서를 보고하였다. ACC(호주), TSACC(캐나다), TTA(한국)도 참가희망이 있으면 Liaison Rapporteur를 문서에 추가하기로 하였다. Mr. Hendrickx는 계속하여 상기문서의 갱신을 접수하는데 동의하였다.

(2) RSO 작업과 CCITT 과제에 대한 매핑(CCITT Question Mapping)[참고자료 참조]

Mr. Minneman(T1)이 CCITT 과제와 각 RSO 관심항목, 활동상황의 매핑 결과를 보고하여 6개의 중점협조과제에서 ISDN, AVS를 제외할 것을 제안하였다. 각 참가자들은 이 매핑 매트릭스가 CCITT에서 다음 회기(1993~96) 과제들의 우선순위 결정에 도움이 될 수 있다는 등 높이 평가하였다. 새로운 과제가 가시화 되는 올해말에 개정 배포할 것, CCIR의 과제가 CCITT로 이행된 후 매핑을 다시 평가하기로 하였다.

(3) EDH 진행 상황 보고

原田국제부장(TTC)은 EDH 회합에 대한 보고를 하였고 Email에서는 X.400을 지원해 나가도록 강조되었다. ITSC3에서의 Email 전시는 Dr. Irmer, Mr. Saleh(CCITT), Mr. Hendrickx(ETSI), Mr. Minneman(T1), 原田국제부장(TTC)의 5명이 기획, 준비하기로 하였다.

보고 후 회의장에서 ETSI의 전자게시판 서비스(BBS)로의 액세스, ITU의 TIES 경유해서 ETSI의 BBC로의 액세스, 또한 T1의 BBS로의 액세스· 시범이 이루어졌다.

4. 앞으로의 ITSC 활동의 방향결정

ITSC의 앞으로의 방향결정은 T1, TTC의 기고서들을 바탕으로 하여 의논하였다.

(1) 주제분야별 진행사항점검

T1 및 TTC의 기고서 내용중 각 분야별 표준화 진행사항을 평가하여 시장의 요구를 바탕으로 표준작성한 메카니즘에 대하여 의견을 교환하였다.

(2) 표준작성 과정의 개방성

T1에서 서로 협조하기로 합의한 과제

에 관해 각 기관의 작업에 효율적으로 참가할 수 있다고 정의된 개방성 적용이 세부적으로 제안하였다. 이 규칙은 ETSI, T1, TTC 이외의 기관에도 적용하기로 하고 이 제안에 대한 언급이 있으면 각 기관은 8월 1일까지 T1의 Mr. Perterson에게 제출하여 문제가 없으면 ITSC3에 입력하기로 하였다.

또한 TTC 회의는 일본어로 실시되는데, 이것은 개방성에 저촉되는 것이 아니라는 점이 확인되었다.

(3) 협조활동 평가

BISDN, IN, TMN, UPT, AVS, ISDN에 관한 ITSC2 이후의 활동평가가 T1에서 제출되어 다음과 같은 점을 보충하여 승인 되었다.

· BISDN에 대해서는 TTC의 후원에 따라 올 4월 宮崎에서 개최된 워크숍도 서로의 이해에 도움이 되었다.

· IN에 대하여, ETSI의 T1에 대한 협조는 CCITT의 Q.1200 시리즈의 권고 작성에 도움이 되었다고 T1 서류의 원래 표현을 약화시켰다.

또한, 위의 평가를 바탕으로 하여 앞으로의 ITSC 활동을 활성화하기 위한 T1으로부터 다음과 같은 제안이 승낙을 받았다.

· PSO' 간의 개방성 승낙(즉시)
· Liaison Rapporteur의 협력을

얻어 각 PSO 기술전문가의 참가 목표설정(즉시)

· 각 PSO로부터 ITSC3에서 실적보고

주) 예전의 RSO(Regional Standars Organization) 호출방법은 ETSI, T1, TTC를 가르켜 사용되어 왔으나 ITSC에 참가할 모든 기관을 호칭하는데 PSO(Participating Standards Organization)을 사용하기로 하였다.

(4) 중요협조과제 재평가

· BSIDN과 IN은 예전과 마찬가지로 중요 협조과제로 한다.

· 새로운 중요 협조과제로 SDH/SONET를 추가한다. 단, CCITT 기존의 권고에서 취급되지 않은 새로운 항목을 T1이 구체적으로 제시하여 각 PSO 전문가의 의견을 조정하여 그 결과를 ITSC3에 입력하기로 하였다.

· TMN에 대해서는 예전과 마찬가지로 중요 협조과제이지만 영역을 확대하여 NM(망관리)을 포함한다.

· UPT는 예전과 마찬가지로 중요 협조과제이지만 영역을 확대하여 무선분야를 포함한다.

· ISDN, AVS는 중요협조과제 목록에서 제외하지만 Liaison을 계속한다.

(5) 워크숍

TTC는 宮崎(미야자키)에서 개최된 제

2회 B-ISDN 테크니컬 워크숍 평가를 바탕으로 기술정보 교환 수단으로서 워크숍의 유용성이 보고되어 워크숍도 정보교환이 유효한 수단의 하나라는 점을 승낙받았다.

(6) 각 RSO의 표준화 계획

T1 및 TTC에서 각각 표준화 계획에 대하여 설명하였다.

(7) 각 RSO의 회의 일정

T1 및 TTC에서는 각각 1992년에서 1993년의 회의일정에 대하여 설명하였다.

5. ITSC 3

(1) 참가기관

TTC에서 초대할 기관은 CCITT, CCIR, ETSI, T1, ACC, TSACC, TTA로 하고자 제안하여 승인되었다.

또한 초대손님으로 APT, PTC, ISO, IEC, AIC를 초대하기로 합의하였따.

각 PSO로부터의 출석예정자는 다음과 같다.

ITU;5　ETSI;25　T1;25　ACC;4 TSACC;5 TTA;5. 단, 옵저버를 포함한다. 참가자수는 9월 30일까지 확정하기로 하였다.

(2) 의제

TTC 의제안을 바탕으로 논의하여 각 기관의 활동보고로 새로 참가하기로 되어 있는 ACC, TSACC, TTA의 활동보고도 하기로 하였다.

Mr. Horton(ACC)은 의제 「사용자의 표준화 활동에 대한 관심촉진」과 관련하여 우정성이 실시한 BISDN 사용자 설문의 결과에 대한 프리젠테이션을 실시해 주었으면 한다는 요망을 발표하였다.

6. 다음의 GSMM 회의

ITSC3로의 입력을 최종적으로 확인하기 위하여 ITSC3 개최 직전에(11월 4일)다음의 GSMM 회의를 개최하기로 하였다.

7. 기타

• 오스트레일리아 및 캐나다가 ITSC3에 이어지는 회의를 개최할 수 있다고 표명하였다.

• ITSC3의 의장은 TTC의 의장으로 하며, 부의장은 ETSI 및 T1에서 지명하도록(계 2명) 합의되었다. 그러나, ITSC4 이후는 부의장을 1명으로 하기로 하였다.

• ITSC3에 대한 기고서는 10월 21일까지 TTC로 송부하기로 합의되었다.

EDH 모임 결과 요약
(Electronic Data Handling)

■ 일　시 : 1992년 6월 10일

■ 장　소 : Stouffer Oak Brook Hotel, Illinois, USA

■ 참석자 : 12명

TTC	松本允介 기술조사부문위원회 위원장, 原田建夫 사무국 국제부장
CCITT	Th. Irmer 위원장, W. Saleh(Ad-hoc Group Rapporteur－Res.18)
ETSI	H. Hendrickx 사무국 정보교환 서비스 부장
T1	S. Minneman T1AG 위원, A. Graham T1 Mechanization 위원회 위원장, J. Kemp T1 Mechanization 위원회 서기
ACC	B. Horton 의장
TSACC	B. Higgins Bell－Northern Research 표준조정부문과장
TTA	B. S. Shim 망간 인터페이스 위원회의장, N. K. Kwak Korea Tele-com기술기준국 과장

회의개요

ITSC/EDH 회의는 1991년 9월에 개최된 제2회 ITSC Ad hoc 그룹 회의에서 RSO 간의 전자적 정보교환을 촉진하기 위하여 Ad-hoc 그룹으로부터 실효적 활동을 하기 쉬운 Task Force 팀으로 개칭 탄생되었다. 팀장으로는 ETSI의 H. Hendrickx 사무국 정보교환 서비스 부장이 지명되었다. 이 활동은 ITSC의 모든 활동 중에서 구체적인 성과가 기대되고 있는 CCITT의 전자정보교환 서비스를 시범적으로 도입하려고 힘을 쏟고 있는 분야이다. 회의에서는 RSO 간에 유익하게 운용하기 쉬운 서비스를 조기에 도입하기 위하여 세부적인 사항들을 결정하고 있다.

의사개요

1. 현안사항 검토

(1) 공통 캘린더 포맷

TTC, T1 모두 제1회 회의에서 합의된 포맷으로 1992년 및 1993년의 캘린더를 전자게시판(ITSC BB)에 게시되었다고 보고하였다.

(2) 각 RSO 위원회의 설명

ETSI의 ITSC BB의 각 RSO 위원회의 설명을 싣기 위하여 TTC 및 T1는 Mr. Hendrickx에 7월 31일까지 전자적인 형태로 정보를 제공하기로 하였다. (서류로는 이미 정보가 전해졌다.)

(3) RSO 표준 게재

TTC는 4월 표준화 회의에서 승인된 표준을 BB에 게재하였다. T1도 승인된 표준 목록을 T1BBS2에 게재하였다.

(4) Email Address 게재

ETSI는 Liaison Rapporteur의 Email 어드레스 정보를 수집하고 있는데 수집되면 BB에 게재한다. TTC는 Liaison Rapporteur의 Email 어드레스를 6월 30일까지 확인한다. Email 어드레스는 앞으로 변경될 때마다 갱신한다.

(5) ITSC/EDH 멤버의 TIES 가입

모든 ITSC/EDH 멤버가 가입하였다.

(6) ITSC3에 대한 기고서를 전자우편으로 송부

ITSC3에 대한 기고서를 전자우편으로 TTC 국제부장에게 송부한다. 이것을 TTC BB의 ITSC3 메뉴에 게재한다. 또한 Mr. Hendrickx는 이것을 ETSI의 ITSC BB에도 싣는다. Mr. Irmer는 Dr. Tarjanne가 ITSC3의 출석자에게 전자적으로 환영메세지를 송부하려는 것을 Dr. Tarjanne에게 10월 20일까지 이야기한다.

(7) ITSC3에서의 X.25 사용

ITSC3에서의 EDH 전시를 위하여 X.25를 사용할 수 있는데 TTC 국제부장이 조사하여 소그룹(다음에 설명)으로 보고한다.

(8) ITSC/EDH2 회의의사록 Email에 의한 송부

T1의 Mr. Minneman에 의해 실시되었다.

(9) ITSC3에서의 EDH 전시

전시기획, 준비를 위하여 소그룹(CCITT;Mr. Irmer, Mr. Saleh, ETSI;Mr. Hendrickx, T1;Mr. Minneman, TTC;국제부장)을 설치한다. 테스트를 9월 15일까지 실시한다.

2. ITSC/EDH 그룹 진척상황

ETSI에 의한 ITSC BB 개설과 정기적

인 갱신, 모든 참가자가 억세스 할 수 있는 등 많은 발전이 있었다. 앞으로 중점 협조과제인 Liaison Rapporteur를 받아들여 이러한 것들을 활용할 것 및 이러한 것들 사이에서 Email 교환은 진척시켜 나갈 필요가 있다. ITU에 의한 TIES 이용에 의해 X.400에 의한 Email 교환을 시작할 수 있게 되었다.

Mr. Irmer는 TIES 및 TELEDOC의 캘린더를 ITSC/EDH 회의에서 합의된 포맷으로 쓸 수 있는가, 캘린더의 갱신한 날짜를 기입할 수 있는가를 6월 30일까지 조사한다.

3. T1 Mechanization 진척상황 보고

T1 Mechanization 위원회 위원장인 Mr. Graham이 T1BBS2의 개발상황, 억세스에 대하여 설명하였다. T1BBS2 운영시작에 따라 T1BBS(1)은 종료되었다.

4. T1BBS2 전시

T1의 새로운 BBS인 T1BBS2가 전시되었다. 사용자에게 매우 친근한 시스템이다. 멤버의 요청으로 X.25에서 억세스 할 수 있다는 점, Email 인터페이스로 X.400을 사용한다는 점을 들고 있다.

5. ETSI BB, ITSC BB 전시

Mr. Hendrichkx에 의해 ETSI BB, ITSC BB가 전시되었다. ETSI의 TSC 위원장 이름을 게재하자는 요망도 발표되었다.

6. TELEDOC

Mr. Irmer는 ITU가 개발하고 있는 전자적 도큐먼트 교환 서비스인 TELEDOC에 대한 진행상황을 설명하였다. TIES는 ITU의 컴퓨터부가 사용자의 의견을 고려치 않고 설계된 것인데 TELEDOC은 사용자 요구를 염두에 두어 설계되었기 때문에 매우 사용하기 쉽게 되어있다고 설명하였다. 현재 15개 기관에서 시행하고 있다. 현행 권고를 일람할 수 있는 CCITT/REC/CATALOG는 현재 이용할 수 없으나 앞으로 이용할 수 있게 될 것이다.

7. X.400 Liaisons

Mr. Hendrickx는 ITSC/EDH 멤버간의 X.400에 의한 접속상태를 나타내는 매트릭스를 작성하여 발송하는데 동의하였다.

8. ITSC3에서의 ITSC/EDH 전시

ITSC3에서의 ITSC/EDH 전시에 대한 각종 아이디어에 대하여 의논하였다. 예를 들면, RSO의 책임자들간의 Email 교환, 기고서를 Email로 송부, ETSI BBS, T1BBS2, TTC BBS로의 억세스, TTC BBS에 ITSC3 메뉴를 설치하여 참가자 및 기고서의 목록을 게개하고, ITU 사무총장으로로부터 ITSC3 참가자에게 Email로 인사를 보내는 등의 아이디어가 나왔다. 이러한 아이디어를 고려하여 소그룹이 기획, 준비를 진행시켜 나가기로 하였다. 특히, 아이디어가 있으면 8월 1일까지 소그룹으로 제출하기로 하였다.

9. ENS/RISE 프로젝트 진행상황

Mr. Hendrichx는 ENS/RISE(European Nervous System/Retrieval and Interchange of Standards in Europe) 프로젝트의 진상황을 설명하였다. 파이로트 프로젝트는 92년 1월부터 93년 12월까지 실시된다. ETSI는 최근 위성용 링크를 설치하였다.

10. 앞으로의 ITSC/EDH 개발

Mr. Kemp로부터 지금까지 매우 커다란 성과를 얻었다고 생각되지만 투자에 대해서는 어느정도의 효과가 있었는가 정량적인 평가가 필요하다는 의견이 발표되었다.

11. 다음 회의

- 소그룹회의 : 9월 3일, 샌프란시스코
- ITSC/EDH4 회의 : 11월 2일, 동경

참고자료

DOCUMENT NUMBER: GSMM/92-06

CONTRIBUTION TO
GLOBAL STANDARDS MAKING MANAGEMENT
GSMM
OAK BROOK, IL JUNE 11-12, 1992

TITLE: COMPLETED MATRIX CORRELATING RSO WORK WITH CCITT

ABSTRACT: This contribution provides the completed
matrix showing the responses from ETSI,
TTC, and T1 with regard to which CCITT
questions they are working on and which
CCITT questions fall into the six high
interest areas. It makes recommendations
based on an analysis of the matrix

SOURCE: Committee T1 - Telecommunications
1200 G Street N.W.
Suite 500
Washington, D.C. 20005
(202) 434-8845

Completed Matrix Correlating RSO Work with CCITT

1.0 Introduction

This contribution provides the completed matrix showing the responses from ETSI, TTC, and T1 with regard to which CCITT questions they are working on and which CCITT questions fall into the six high interest areas.

The following legend is used under the columns entitled "H.I." (High Interest) to indicate which of the six high interest areas, the RSO thinks that question falls into:

      A Audio Video Services
      B Broadband ISDN
      D ISDN
      I Intelligent Networks
      T Telecommunications Management Network
      U Universal Personal Telecommunications

The following legends are used under the "Wrk" (Work) columns to indicate which TCs or TSCs are working on a given question in each RSO:

ETSI:	TTC:	T1:
B BT	1 TSC I	A T1A1
E EE	2 TSC II	E T1E1
H HF	3 TSC III	M T1M1
M TM	4 TSC IV	P T1P1
N NA	5 TSC V	S T1S1
S SPS		X T1X1
T TE		

2.0 Analysis

In reviewing the completed matrix, it immediately becomes apparent that the different RSOs have differing views on some of the questions, having indicated that those questions fall into different High Interest areas. This is entirely appropriate, as they may be working on different aspects of these questions. However, there are two significant items to be noted in the completed matrix:

    a. Almost all the questions which were marked by one or more RSOs as High Interest questions have one or more RSOs doing work on them. There are a few questions marked as High Interest on which no RSO is working. Almost all of these questions (marked as High Interest with no RSO working on them) fall into the Audio Video or ISDN areas.

    b. There are many questions on which none of the three RSOs is working.

3.0 Recommendations

Due to the fact that there are a number of CCITT questions on ISDN and Audio Video on which none of the three RSOs is doing work, these two areas should be removed from the list of High Interest areas. These results were also confirmed by a survey just completed by T1. The survey results did not include ISDN nor Audio Video in the top 10 interest areas of the T1 membership.

The CCITT may wish to take into account the results of this analysis when determining questions for the next Study Period.

Some good results were obtained from this exercise. The nature of the results is that they show in which areas standardization efforts should be concentrated. It has been two years since the first ITSC adhoc group established the initial set of six high interest areas. Another similar analysis of the work of the RSOs versus the CCITT questions should be performed in about two years, to ensure that the High Interest areas remain valid.

Correlation of CCITT Questions
To RSO Subject Areas of High Interest
and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
1	I	Regulatory provisions						
2	I	Official service documents						
3	I	Terminology	A/U			N		A
4	I	Telegram service						
5	I	Phototelegraph services						
6	I	Telemessage service						
7	I	Telex service						
8	I	Mobile telephone, telegraph, telematic and data services		U				P
9	I	Teletex service						
10	I	General service framework for document communication						
11	I	A general service framework for interactive modes to be used by telematic services with document transfer capabilities						
12	I	Bureaufax service						
13	I	Subscriber facsimile service	D			T		A
14	I	Facsimile store-and-forward services						
15	I	Message handling services						
16	I	International public directory services						
17	I	Audiovisual services	A/D	A	A	H/T		A
18	I	Videotex service	A/D			T		A
20	I	International multi-destination telecommunication services via satellite						
21	I	New services on the ISDN	A/I/D		D	B/H/N		A/S
22	I	Broadband services on the ISDN	A/B/D	B	B	B/H/N		A/S
23	I	Existing telematic and data transmission services on the ISDN	D					A
24	I	Suitability of new services and facilities to meet the needs of users	A/D		A	B		A

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
25	I	International Telephone Instructions and operation of telephone relations						
26	I	New international telecommunication services	D/I			H/N		
27	I	Customer satisfaction and efficiency when using world-wide telecommunications	A/D/U			H		
28	I	Symbols, pictograms and keypad layout	A/D			H		
29	I	Customer control procedures in the PSDN and ISDN	D/I/U			H/N		
30	I	User indications in the PSTN and the ISDN	A/D					
31	I	Human factors aspects of access to voice and non-voice terminals using public terminals	A/D			H/T		
32	I	Human factors issues of new telecommunications services	D/U	U		H/T		
33	I	Computerized directory assistance for numbers in foreign countries						
34	I	International telecommunication credit card service	I			N	.	M
35	I	Service Description for UPT	U	U	U	B/N	2	P
3	II	Network operational aspects of international telephone service						
4	II	International interconnection of mobile services and the PSTN		U				A/P
5	II	Evolution of numbering and numbering plan interworking for ISDN era	D/U	U	U	N	2	P
6	II	Evolution of routing plan in the ISDN era	D	U	U	N		P
7	II	Non-voice aspects of networks during transition from PSTN to ISDN	D					
8	II	Service quality of networks (PSTN/ISDN)	D	T				A
9	II	International network management		T				M
10	II	Traffic measurement requirements on telecommunications networks						M
11	II	Terms and definitions for QOS, dependability and traffic engineering						A
12	II	Traffic, operational and network planning objectives of common channel signalling networks						M
13	II	Design alternatives for telecommunication networks						

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
14	II	Methods for forecasting international traffic						
15	II	Traffic models and measurements for traffic offered to network and grade of service		T				
16	II	Application of traffic measurements in telecommunication networks	D	T				
17	II	Traffic reference models for ISDN traffic engineering						
18	II	Grade of service during and after a total failure of network components or traffic peak conditions						
19	II	Call oriented models for the serveability performance in networks						A
20	II	Serveability performance and service integrity of telecommunication services						A
21	II	CCITT Handbook(s) on application and implementation of Recommendations on quality of service						A
1	III	General principles for the lease of international private telecommunication circuits						
2	III	Special conditions for the lease of continental telecommunication circuits for private service						
3	III	Special conditions for the lease of intercontinental telecommunication circuits for private service	I			N		
4	III	Tariff principles for the leasing of international transmission facilities intended for the transmission of data by digital techniques	I			N		
5	III	Development of tariff principles for international telecommunication services to meet the specific requirements of certain categories of users	A/I			N		
6	III	General tariff principles applicable to data communication on public data networks	I			N		
7	III	Tariff principles and accounting arrangements for public data communication services on public packet-switched networks						
8	III	Tariff principles and accounting arrangements applicable to public data communication services in public circuit-switched networks						
9	III	General tariff and accounting principles for the different public data communication network interworking options	I/T			N		

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
10	III	Tariff principles in the international public telegram service	T			N		
11	III	Tariff principles in the international public telemessage service						
12	III	Tariff principles for the international telex service						
13	III	Tariff principles for international public facsimile services						
14	III	Tariff principles for the international Teletex service						
15	III	Tariff and international accounting principles to be applied to the Videotex services						
16	III	Charging and accounting principles in the international telephone service						
17	III	Occasional provision of circuits for international sound and television programme transmissions						A
18	III	Leased international sound and television programme circuits						A
19	III	General tariff principles for mobile telecommunications services						
20	III	Tariff and accounting principles for services not covered by a specific question						
21	III	Charging and accounting principles to be applied to the services offered by an integrated services digital network	A/D					
22	III	General charging and accounting principles for non-voice services provided by interworking between the ISDN and existing public data networks	D					
23	III	Tariff and accounting principles to be applied to permanent and reserved services within the ISDN	A/D					
24	III	General charging and accounting principles to be applied to multi-point-to-point international telecommunication services via satellite	A					
25	III	General charging and accounting principles to be applied to two-way multiple access international telecommunication services via satellite	A					
26	III	General consideration of the tariff and accounting provisions of D-Series Recommendations in light of the content of the new International Telecommunication Regulations adopted by the WATTC-88						

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
27	III	Cost studies for determining the basic tariff components for telecommunication services						
28	III	Cost study for determining the basic tariff components for sound- and television-programme transmissions						
29	III	Methodology to be followed for the determination of costs and the establishment of national tariffs						
30	III	Terms and definitions for the Recommendations dealing with tariff and accounting principles						
31	III	Amendments and additions to be made to Rec. C.1 relating to telecommunication statistics						
33	III	Charging and Accounting Principles for UPT	U		U	N		P
1	IV	Terminology and definitions						A
2	IV	Use of the CCITT Man-Machine Language for maintenance		T			1	M
4	IV	Maintenance of mobile telecommunications systems						
5	IV	Standardized information exchange between administrations		T			1	
6	IV	Maintenance philosophy, principles and strategy for networks and services			T			M
7	IV	Keeping Volume IV of the CCITT Book up to date						
8	IV	Assessment of network performance and exchange of information for maintenance purposes						X
9	IV	Restoration of failed international exchanges, transmission systems, path, etc.						X
10	IV	Measuring instrument specifications						M
11	IV	Transmission measuring equipment and associated maintenance test access lines						M
12	IV	Maintenance of international sound-programme circuits						A
13	IV	Maintenance of international television circuits						A
14	IV	General maintenance organization						
15	IV	Maintenance of international videoconference circuits	A					A

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
16	IV	Maintenance of Digital Blocks, Sections, Paths, etc.						M
17	IV	Designation of international circuits, groups, blocks etc. and related information						M
18	IV	Maintenance of telephone type circuits (other than leased or special circuits)						M
19	IV	Maintenance of leased and special circuits with analogue presentation at the users premises						M
20	IV	Maintenance aspects of data transmission systems, leased and special circuits with digital presentation at the users premises		T				M
21	IV	Maintenance of ISDNs	D	T	B/D		1	E/M
23	IV	Telecommunication Management Networks (TMNs) and their relationship to associated network elements	T	T	T	N	1	M/X
1	V	Arrangement and purpose of protective components fitted at main distribution frames and other connection points						
5	V	Protection policy against over-voltages						
6	V	Coordinated protection schemes for telecommunication cables						
7	V	Characteristics and testing of protective components and assemblies						
8	V	Interference testing and measurement						
11	V	Disturbance to telecommunications circuits from powerline carrier systems						
13	V	Unbalance of telephone installations						
15	V	Magnitudes of harmonics in power and traction lines and methods to reduce their effects						
16	V	Levels of voltages and currents related to disturbances from power and traction installations						E
17	V	Electromagnetic compatibility (EMC) of telecommunications networks and equipment	A/D			E		E
18	V	Radiated radio frequency interference and telecommunications equipment and systems	A/D			E		
19	V	Conducted radio frequency interference on telecommunication equipment and systems	D			E		

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
20	V	Survey on provisions intended to mitigate adverse effects (danger and disturbance) of electromagnetic origin						
21	V	Test to be carried out on repeaters or regenerators to check the efficiency of protection from external interference with local or remote power feeding						
22	V	Protection of telecommunication lines and installations against lightning	D			E		E
24	V	Earthing in telecommunication systems	D			E		E
26	V	Directives concerning the protection of telecommunication lines against harmful effects from electric power and electrified railway lines	D			E		E
1	VI	Conductive plastic materials as protective covering for metal cable sheaths						
2	VI	Fire safety of telecommunication installation	D			E		E
3	VI	Application of computers and micro-processors to the construction, installation and protection of telecommunication cables						
4	VI	Coordinated protection schemes for telecommunication cables						E
5	VI	Amendments and additions to the Handbook outside plant technologies for public networks						
6	VI	Copper networks for ISDN services.	D					
7	VI	Optical fibre cable installations						E
8	VI	Optical fibre cable restoration						
9	VI	Optical fibre cable construction						
10	VI	Performance tests for optical fibre cables and associated hardware						
11	VI	Optical fibre cables inside buildings						
12	VI	Optical fibre cable distribution networks						E
13	VI	Passive optical components						
1	VII	Standardization of the technical characteristics of user classes of service, international data transmission services and optional user facilities in PDNs and ISDNs and the categories of access for DTEs	D			B/N		S
2	VII	Call progress signals						

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
3	VII	Technical characteristics of connectionless services in public networks						S
4	VII	Network performance and quality of service in data communications networks						A/S
5	VII	Testing and verification of data communication protocols						
6	VII	Further study on Recommendations for DTE-DCE interfaces for circuit switched services						
7	VII	Further study of DTE-DCE interfaces for terminals operating in the packet mode						
8	VII	Study of DTE/DCE interface procedures for dissimilar terminal interworking						
9	VII	Principles of maintenance in user-network interfaces for public data networks		T			1	
10	VII	General technical principles for interworking between public networks or between public networks and other networks for the provision of data services						S
11	VII	Arrangements generic to different interworking (circuit and packet modes) between public networks or between public networks and other networks, for the provision of data services						S
12	VII	Management aspects of interworking between public networks, and between public networks and other networks when involved in the provision of data services		T			1	M
13	VII	Interworking between circuit-switched public data network (CSPDN) and Integrated Services Digital Network (ISDN)	D		D	N		S
14	VII	Interworking between public data networks and the telex network						
15	VII	Arrangements for interworking between networks other than ISDNs and telex, for the provision of data services	D			N		
16	VII	Packet mode signalling between public networks providing data transmission services						A/S
17	VII	Arrangements for CSPDNs interworking and associated inter-network signalling						
18	VII	Message handling systems						

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
19	VII	Framework for support of distributed applications						
20	VII	Directory systems						
21	VII	Numbering plan for public data networks						
22	VII	Routing principles for public data networks						
23	VII	Open Systems Interconnection (OSI) Architecture	T			M/N/T		M
24	VII	Open Systems Interconnection (OSI) Management	T	T		N/T	1/4	M
25	VII	Open Systems Interconnection (OSI) Application Layer	T			N/T		M
26	VII	Open Systems Interconnection (OSI) Presentation and Session Layers						M
27	VII	Open Systems Interconnection (OSI) Transport and Network Layers						A/M S
28	VII	Open Systems Interconnection (0SI) Data link and physical layers						A/M
29	VII	Application of formal description techniques to X-Series recommendations						
30	VII	Support of X-Series interfaces in an ISDN and new interface aspects for data services in ISDNs	D			N/T		A
31	VII	Requirements and arrangements for the provision of data services in ISDNs	D		D	N		A/S
32	VII	Continue the preparation of definitions which arise during the study of all Questions entrusted to Study Group VII						
33	VII	Revision of recommendations						
1	VIII	Revision of Recommendations						
2	VIII	Definitions						
3	VIII	Study of telephone-type circuit dependent problems in facsimile transmission						
4	VIII	Group 4 facsimile apparatus						
5	VIII	Choice of modulation techniques to be used with telematic services connected to the PSTN						
6	VIII	Terminal characteristics for mixed mode and processable mode						
7	VIII	Digital phototelegraphy equipment						

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
8	VIII	Coding of alphanumeric characters and associated control functions for telematic services						
9	VIII	Protocols for interactive audiovisual services	A	A		T		
10	VIII	Terminal characteristics and standardized options for the teletex terminals						
11	VIII	Conversion						
12	VIII	Telematic interworking						
13	VIII	Development of conformance procedures to ensure the international compatibility of teletex						
14	VIII	Syntax aspects of interactive Videotex	D			T		
15	VIII	Protocol aspects of interactive Videotex	A/D			T		
16	VIII	Common components for image communications	A					
17	VIII	Terminal characteristics and protocols for telematic services on ISDN	D					
18	VIII	Group 3 facsimile apparatus	D			T		
19	VIII	Operational structure application profiles						
20	VIII	Imaging conversion rules interworking between different facsimile apparatus groups						
21	VIII	Development of session control procedures for telematic services						
22	VIII	Network independent basic transport protocol for telematic application						
23	VIII	Equipment characteristics and protocols for audiographic conferencing	A	A		T		A
24	VIII	Communication application profiles	A			T		
25	VIII	Enhancement to the application rules to physical, data link and network layer protocols for telematic application						
26	VIII	Document application profiles for Teletex, Facsimile Group 4 and message handling services	D			T		
27	VIII	Document architecture, Transfer and Manipulation				T		
1	IX	Revision of recommendations						
2	IX	Mobile (satellite) service transmission standards and the interconnection of mobile (satellite) telegraph and telematic services with the international telex network						

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
3	IX	Quality, reliability and availability of telegraph transmission						
4	IX	Transmission standards for terminal equipment using modulation rates up to 300 bauds						
7	IX	Automatic maintenance tests of telegraph circuits						
8	IX	Technical aspects of the store and forward service for telex subscribers						
9	IX	Standardization of modems for telegraph TDM system in the R-Series Recommendations						
10	IX	TDM systems for telegraphy employing a new technique of multiplexing						
11	IX	Definitions concerning telegraph networks and terminals						
12	IX	Statistical muldexes and muldexes/concentrators						
14	IX	Code and speed dependent TDM systems						
15	IX	Interworking between the telex and teletex services						
16	IX	Further standardization of signalling systems						
17	IX	Integration of the telex network with other networks that use common channel signalling, particularly ISDN						
18	IX	Use of data networks for provision of the international telex service						
19	IX	Network plans for telegraph networks						
20	IX	Interworking between telex and services provided on other networks						
21	IX	Various telex network facilities to be provided in real time						
22	IX	Unavailability of telex terminals/store and forward units/non-telex terminals						
23	IX	Expanded coding techniques for text transmission over the international telex networks						
24	IX	Transmission aspects of data communication networks						
25	IX	Numbering plan for telex networks						
1	X	Reorganization and extension of existing Recommendations Z.311 to Z.323						M

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
2	X	New recommendations and maintenance of existing Recommendations to account for centralized environments						M
3	X	Supplementing international standardization work to enhance the use of CCITT MML in interfacing to telecommunication networks	T			H		M
4	X	Improved methodology to specify Human-Machine Interface (HMI)	A/T		T	H		M
5	X	Specification of the Human-Machine Interface to support the management of telecommunication networks	T	T	T	N		M
6	X	Support environments for telecommunication systems through their lifetimes						
7	X	Software quality, software testing and verification for telecommunication systems						
8	X	Maintenance of SDL						
9	X	Specification and description techniques needed for telecommunication systems						
10	X	Quality assurance, testing and verification for telecommunications specifications						
11	X	Harmonization of the use of SDL and CHILL						
12	X	Maintenance, training, compliance and promotion aspects of CHILL						
1	XI	New switching and signalling techniques	I	I	B/I	N	1	S
2	XI	Signalling and OAM protocol architecture		T			1	S
3	XI	Switching functions and signalling information flows for implementation of basic and supplementary services	U		D	N		S
4	XI	Switching functions and signalling information flows for implementation of OAM functions	T	T		N		M
5	XI	Application of the stage 2 Recommendations to the signalling protocols for services	D/I		D	N/S		S
6	XI	Application of the stage 2 Recommendations to the signalling protocols for OAM	T	T		N/M	1	M
7	XI	Updating of Q-series Recommendations	I			N		
8	XI	Structure and use of Signalling System No. 7 networks	I			N/S		S

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
9	XI	Common channel Signalling System No. 7 - Signalling Connection Control Part	D			S		S
10	XI	Evolution of the ISDN user part	D		B/D	S		S
11	XI	Call control and bearer control protocols in Signalling System No. 7 for the full range of ISDN telecommunication services	D		D	S		S
12	XI	Transaction capabilities	D/I			N/S		S
13	XI	Signalling System No. 7 Operation, Maintenance, and Administration Part (OMAP)	D/T	T	T	N/S	1	M/S
14	XI	Signalling System No. 7 protocol testing and test specification	D			S		
15	XI	Guidelines for implementing Signalling System No. 7 in national networks	D			S		S
16	XI	Interworking of Signalling Systems	D		D	S		A/S
17	XI	Signalling for existing and future land mobile systems	I	U	U	N	2	P/S
18	XI	Interworking with mobile satellite networks						
19	XI	Signalling requirements for new transmission equipments						A/S
20	XI	Updating and enhancements of ISDN user-network interface call control protocol	B/D/ I/U		D	S		A/S
21	XI	Updating and enhancements of ISDN user-network interface data link layer protocol	B/I/ D/U		B/D	S		A/S
22	XI	ISDN user-network protocol (DSS 1) conformance	D		D			S
23	XI	Common channel Signalling System No. 7 - Message transfer part	D			S		S
24	XI	Enhancement and extension of the Q.500-Q.544 series of Recommendations on digital exchanges	T			N		
25	XI	Protocols for remote operation of specific OAM applications	D/T	T	T	M/N/ S	1	M
26	XI	Definitions for switching and signalling			D			S
1	XII	Future programme of work						A
2	XII	Hands free telephony.	A/D			H		
3	XII	Definitions in the field of telephonometry and of characteristics of international connections and circuits						

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
4	XII	Updating of the CCITT telephonometric and transmission planning Handbooks						
5	XII	Speech synthesis/recognition systems						
6	XII	Harmonization of G.100-Series of Recommendations						
7	XII	Models for predicting transmission quality from objective measurements						A
8	XII	Improvement of the methods for the determination of loudness ratings						
9	XII	Sidetone						
10	XII	Speech transmission characteristics for digital handset telephones			D			A
11	XII	Transmission degradation introduced by interaction between voice operated devices			D			A
12	XII	Artificial mouths and ears						
13	XII	Methods for the evaluation of non-linear distortions						A
14	XII	Application for the artificial voice						
15	XII	Loudness rating, algorithm and application rules						
16	XII	Impedance strategy in the local network						
17	XII	Actual and preferred speech levels in telephone connections			D			A
18	XII	Transmission performance of digital systems			D			A
19	XII	Recommended values for loudness ratings			D			A
20	XII	Wideband telephony	A/D		D	H		A
21	XII	Relative level at the boundary between national systems and the international chain						
22	XII	International telephone conference						
23	XII	Coupling of hearing aids to telephone receivers	D			H		
24	XII	Integration of mobile systems into the public switched network			U			A
25	XII	Transmission impairments in the evolving mixed analogue/digital and ISDN networks	D		D			A
26	XII	Setting objectives for mixed analogue-digital circuits	D					

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
27	XII	Talker echo, propagation time, and stability in telephone networks, ISDN and interconnection with ISDN	D		A/B D/U			A
28	XII	Listener echo (receive and echo) in the public switched telephone networks						A
29	XII	Transmission plan aspects of the interworking between PSTN and ISDN in the evolving network	D		D			A
30	XII	Methods for evaluating the transmission performance of digital telephone sets						
1	XV	Characteristics of equipment for digital transmission of sound programme signals	A		A	M		A
2	XV	Characteristics of equipment for digital transmission of television signals	A		A			A
3	XV	Visual telephone systems including videoconferencing and videophone	A/D	A	A	H/M/T	5	A
4	XV	Harmonization of audiovisual systems	A	A	A	M/T	5	A
5	XV	Characteristics of direct transmission restoration systems of the 1+1 and N+M type (link protection switching)						X
6	XV	Characteristics of automatic rerouting systems for the restoration of transmission links (network protection switching)	T			M		X
7	XV	Characteristics of network echo control equipment			A			A
8	XV	Characteristics of acoustic echo control equipment	A		A	M		A
9	XV	Operations, Administration and Maintenance (OAM) interfaces for transmission equipment intended for connection to a Telecommunication Management Network (TMN)	T	T	T	M/N	1	M/X
10	XV	Characteristics of Digital Circuit Multiplication Equipment (DCME) and Systems (DCMS)						
11	XV	Characteristics and test methods for single-mode optical fibre cables	B		B	M		E
12	XV	Characteristics and test methods for multi-mode optical fibre cables	B		B	M		E
13	XV	Characteristics for submarine optical fibre cables and systems	B					
14	XV	Characteristics of optical cables for local networks	B			M		

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
15	XV	Characteristics of line systems on optical fibre cables	B			M		
16	XV	Characteristics of digital line systems for use in local networks, including narrow-band and broadband ISDN access	B/D		B/D	M		E
17	XV	Characteristics of coding (e.g. PCM, ADPCM) and digital multiplexing equipment for use in local networks, including narrow-band and broadband ISDN access	A/B/D		A	M/T		A E/X
18	XV	Availability and reliability of line systems on optical fibres	B			M		A
19	XV	Characteristics of digital multiplexing equipment for the new synchronous hierarchy	B	T	B	M	1	A/E X
20	XV	Characteristics of digital cross-connect equipment	B			M		A/X
21	XV	16 kbit/s speech signal encoding and extension to other bandwidths and bit rates	A	A	A	M/T		A
22	XV	Encoding of stored digitized voice signals	A		A	T		A
23	XV	Encoding of speech signals into bit rates of less than 16 kbit/s	A	A	A	M/T		A
24	XV	Speech packetization systems	A		A	T		A
25	XV	Characteristics of monitoring points on digital transmission equipments and systems	T					X
26	XV	Harmonization and update of the texts in Recommendations in Vol. III of the Blue Book insofar as they relate to transmission equipment metallic cables and systems						
27	XV	Terminology for transmission equipment, media and systems			B/D			A/E
28	XV	Characteristics of new multiplexing equipment for the digital hierarchy as given in G.702	B			M		A/X
29	XV	Characteristics of digital systems on optical fibre cables for the synchronous hierarchy	B			M		
30	XV	Performance characteristics of PCM and ADPCM channels at voice frequencies			A			A
31	XV	Guide for the application of new technologies in local networks			A			A

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
32	XV	Enhancement and extension of the Q.550-Series of Recommendations on the transmission performance of digital exchanges						
1	XVII	Supplement to the vocabulary for data transmissions						
2	XVII	Measurement on telephone-type circuits used for data transmission systems between subscribers						
3	XVII	Modems for transmission of data and other digital signals on the General Switched Telephone Network (GSTN) and on two-wire telephone-type leased circuits						
4	XVII	Modems for the transmission of data and other digital signals on four-wire telephone-type leased circuits						
5	XVII	Error control in modems						
6	XVII	Characteristics of a device used to interface a DTE to digital channels other than ISDN	D					
8	XVII	Measuring criteria for telephone-type circuits appropriate to their use for transmission of data signals						A
9	XVII	Network management		T				
11	XVII	Support of DTEs (TE2) with V-series type interfaces on an ISDN, and interworking of DTEs with modems on PSTNs with TE2s and TE1s on ISDNs	D					
12	XVII	Comparative tests of data communication equipments for use over telephone-type circuits						
13	XVII	Interchange circuits						
14	XVII	Refinement and extension of Recommendation V.25bis functions and protocols						
15	XVII	Data transmission over intercontinental switched telephone connections						
18	XVII	Revision of the existing Series-V Recommendations						
22	XVII	Digital performance of data transmission services using V-series modems over the telephone network						A
23	XVII	General data communication interface						
1	XVIII	General aspects of ISDN	D					S
2	XVIII	Asynchronous transfer mode (ATM)	B	B	B	N	2	A/S

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
3	xviii	Network aspects of synchronous digital hierarchies	A	T	B			E/S X
4	xviii	Network application of Synchronous Digital Hierarchy with reference to the Network Node Interface (NNI)						X
5	xviii	General aspects of quality of service and network performance in digital networks including ISDNs	A/D		B/D			A/S
6	xviii	Network performance objectives for ISDN circuit mode information transfer	D		B/D	B		A
7	xviii	Performance objectives for timing and controlled slips (synchronization), filter, wander and propagation delay	D			B		X
8	xviii	Network performance objectives for ISDN connection, processing and packet mode information transfer	D		D			A
9	xviii	Performance objectives for ISDN availability	D		B/D	B		Q
10	xviii	Impact of signal processing on ISDN	D					A
11	xviii	Internetworking of ISDNs with other networks, including compatibility checking and terminal selection	D		D	B/N		A/S
12	xviii	Interworking between networks using different digital hierarchies -Layer 1 functionality						
13	xviii	Network capabilities for the support of broadband services in ISDNs	A/B/D	B	B/D	B/N	2	A/S
14	xviii	ISDN network capabilities for the support of additional and/or new services	A/D/I/U	U	D/U	B/N	2	A/P/S
15	xviii	ISDN packet mode bearer services - services and user-network interface aspects	A/D					A/S
16	xviii	ISDN architecture and functional principles, characterisation methods and reference configurations (including user/network interfaces)	A/B/D			B/N		
17	xviii	ISDN protocol reference model	B/D			N		
18	xviii	ISDN connection types	A/D					
19	xviii	Network capabilities for the integration of mobile network services into the ISDN	D/I/U			B/N		
20	xviii	Layer 1 characteristics of ISDN interfaces and ISDN access	D		B/D			E
21	xviii	Vocabulary for ISDNs	D					

Correlation of CCITT Questions To RSO Subject Areas of High Interest and RSO Areas of Work

Qstn	Study Grp	Title	ETSI H.I.	TTC H.I.	T1 H.I.	ETSI Wrk	TTC Wrk	T1 Wrk
22	xviii	Broadband ISDN influence on principles for video encoding	A/B/ D	A/B	B	N	2/5	A/S
23	xviii	Guidelines for implementing ISDN field trials in developing countries	D					