

CYCLADES

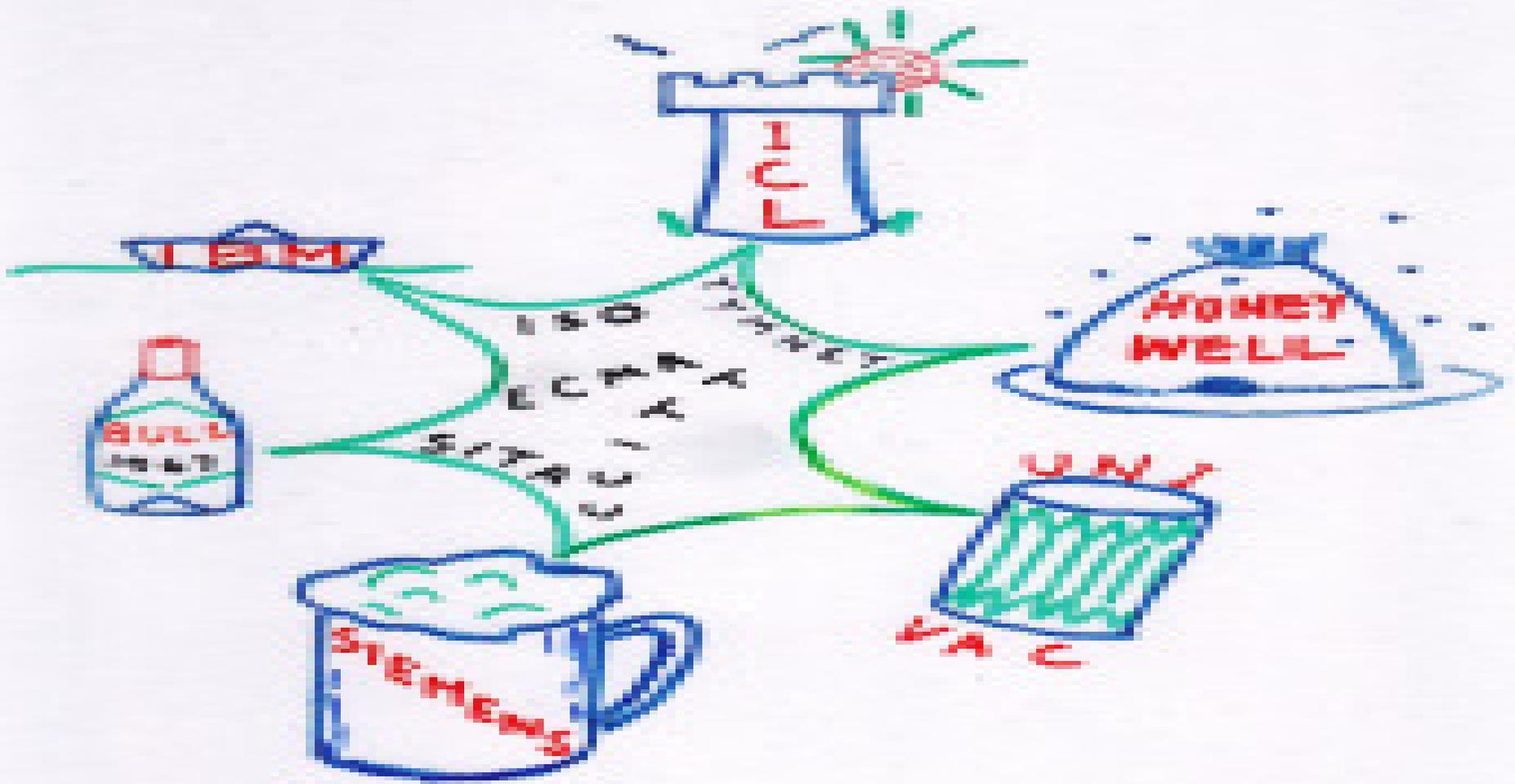
BASE DES RÉSEAUX DE RÉSEAUX

RÉSEAU CYCLADES



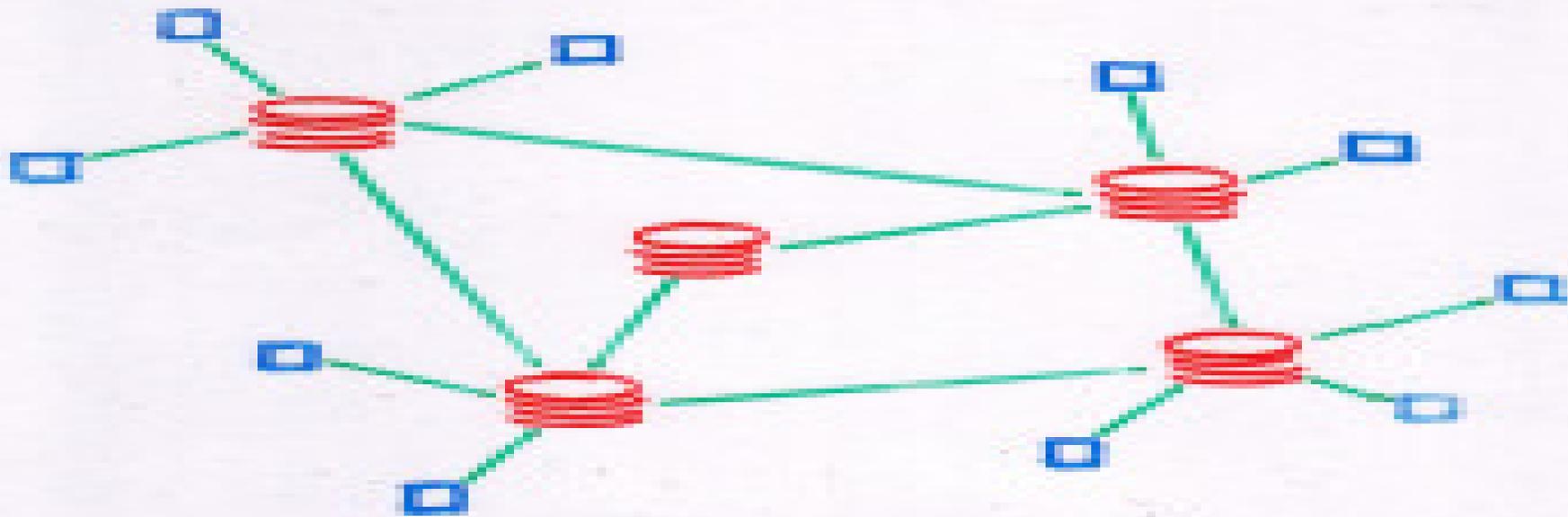
reseau cyclades





Heterogeneous
computer
network

OBJECTIFS



Outils : exploitation réelle

Banc d'essai

- communic. inter-ordinateurs
- bases de données réparties
- interfaces normalisées
- partage de ressources

1972

CYCLADES

1975

CONSEIL DE DIRECTION

Armées *Déleg. Informatique*
Educ. Nat. *Finances* IRIA *P&T*

- *Maitrise d'oeuvre* *Déleg. Inform.*
IRIA
- *Financement* *Déleg. Inf.* *DRME*
CNRS *P&T* *Participants*
- *Personnel* *CCETT* *IRIA* *Part.* *SCI*
- *S / Traitance* *CU* *Industrie*

PLANNING

72



73



74



75

Trans



Raccord.



Tests



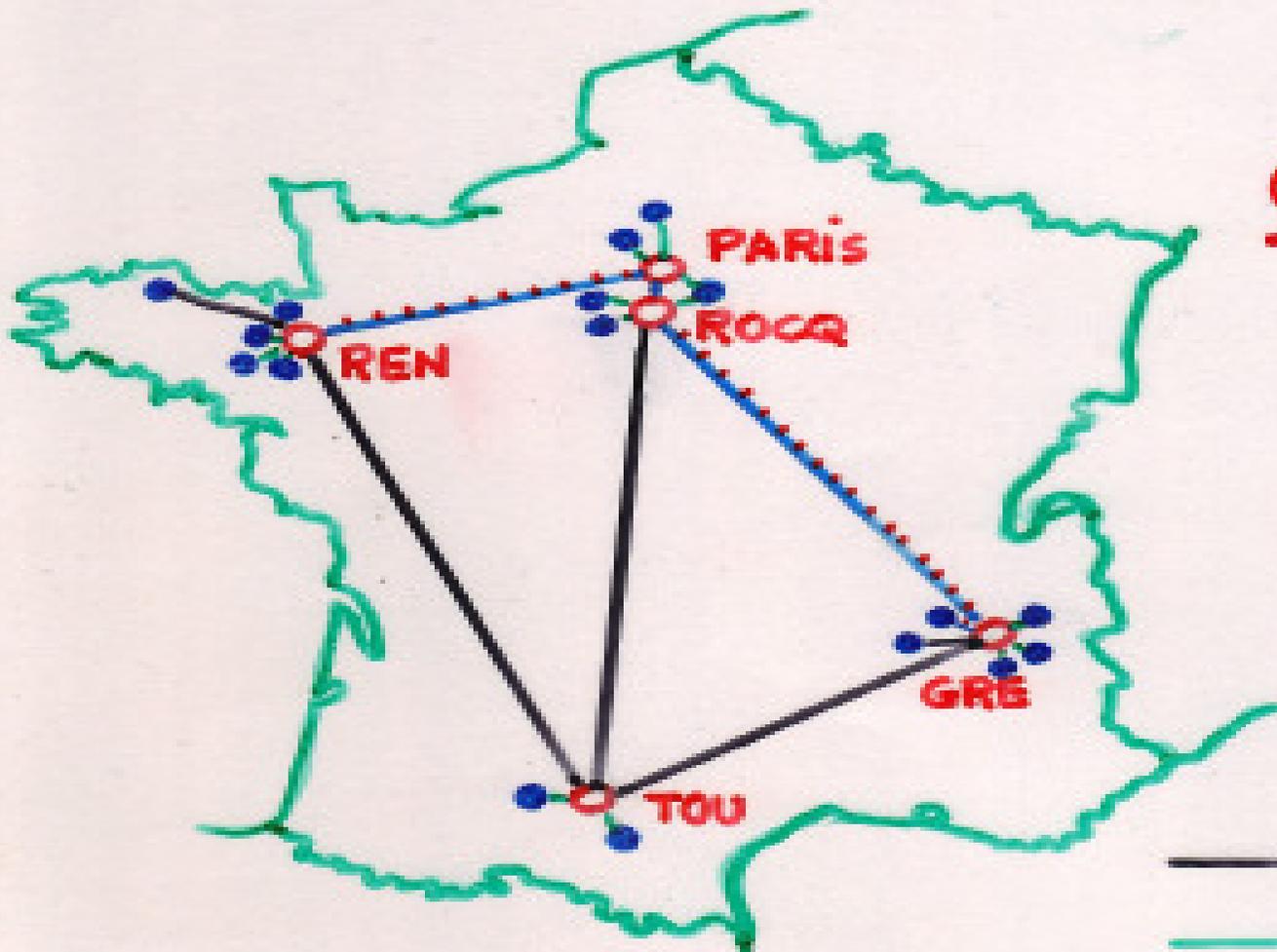
Outils



Applications



CYCLADES



CIGALE

Comm. paquets

CII-MITRA 15

— 4.8 Kb
- - - 19.2 Kb
· · · 48 Kb

CII 10 070

.. IRIS 80

.. IRIS 50

SIEMENS 4004

IBM 360 / 67

CDC 6000

PHILIPS 1200

TELEM. T1600

Materiel + Logici

PHYSICAL COMPONENTS

- **MITRA 15**

- Mini CII
- cycle = 800 ns
- 16 bit word - 16K words
- 32 interrupt levels

- **TELEPHONE LINES**

- Leased lines
- Node - Node : 4.8 & 48 Kbits/s
- Node - Host : 19.2 Kbits/s

- **MODEMS**

- CCITT standards : V24 / V35
- No automatic looping
(unfortunately)

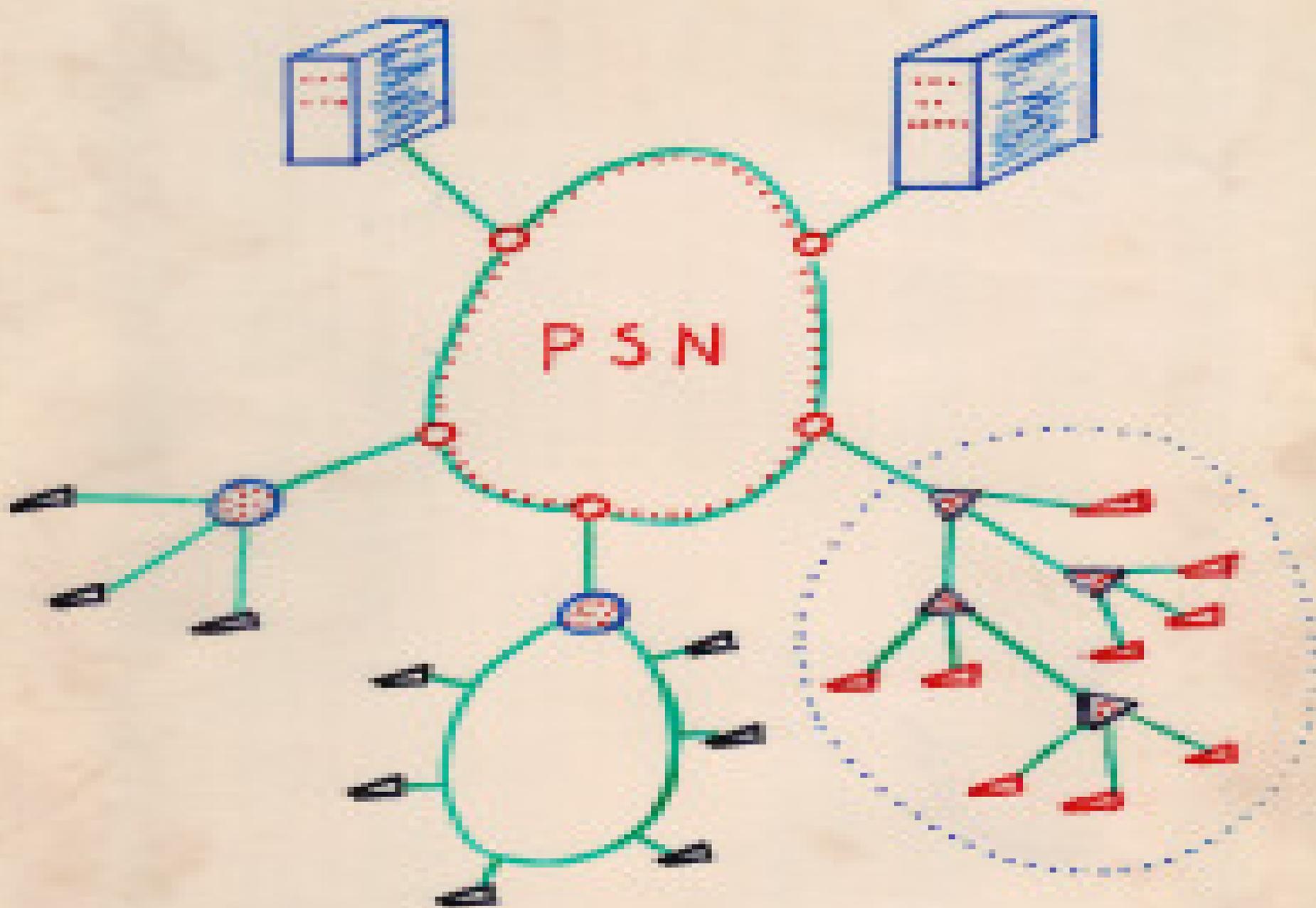
COMP - COMP COMM



- High level protocols
- Standards
- Independent from transmiss.

Good transmiss.

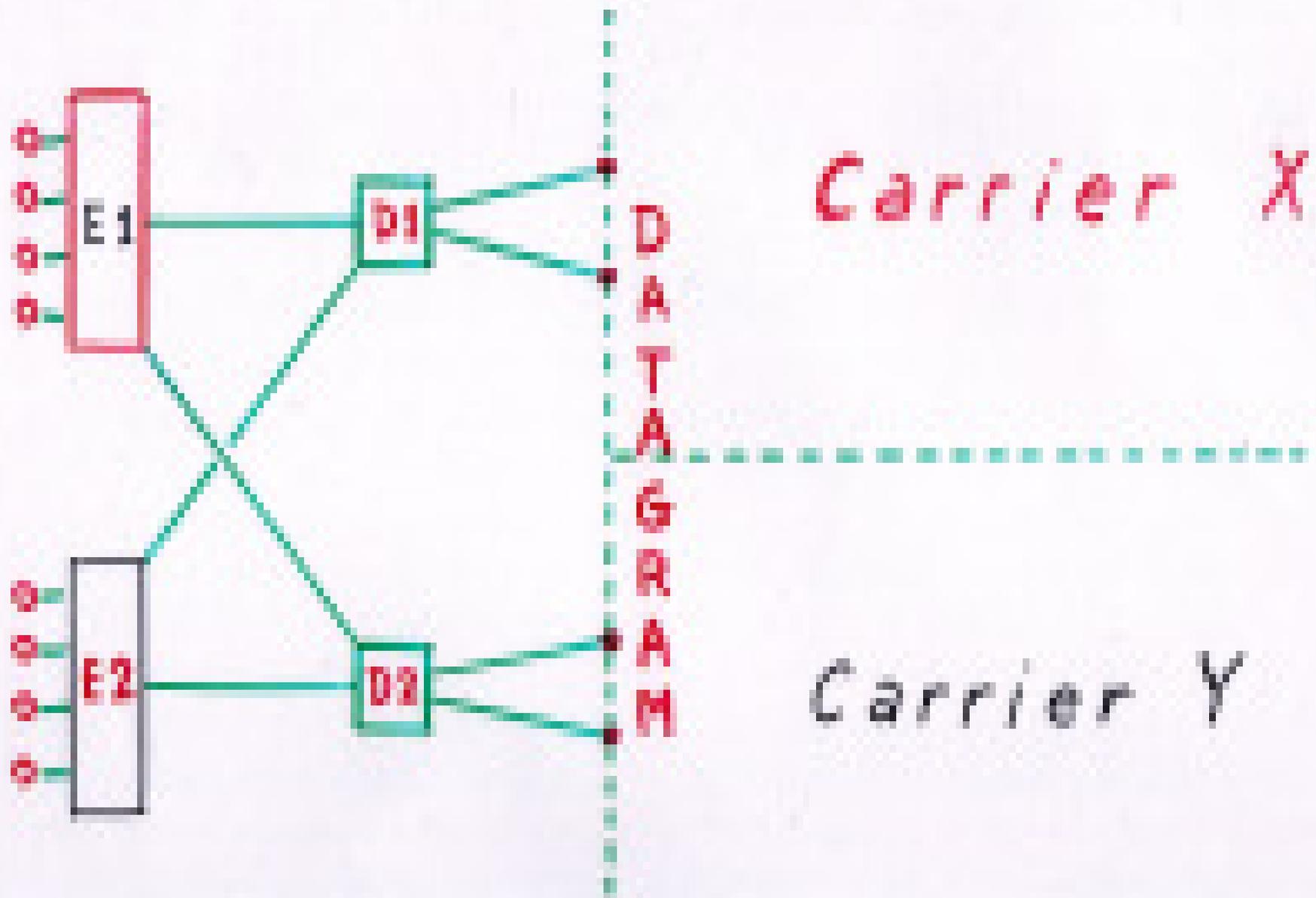
{ Simple
Reliable
Transparent



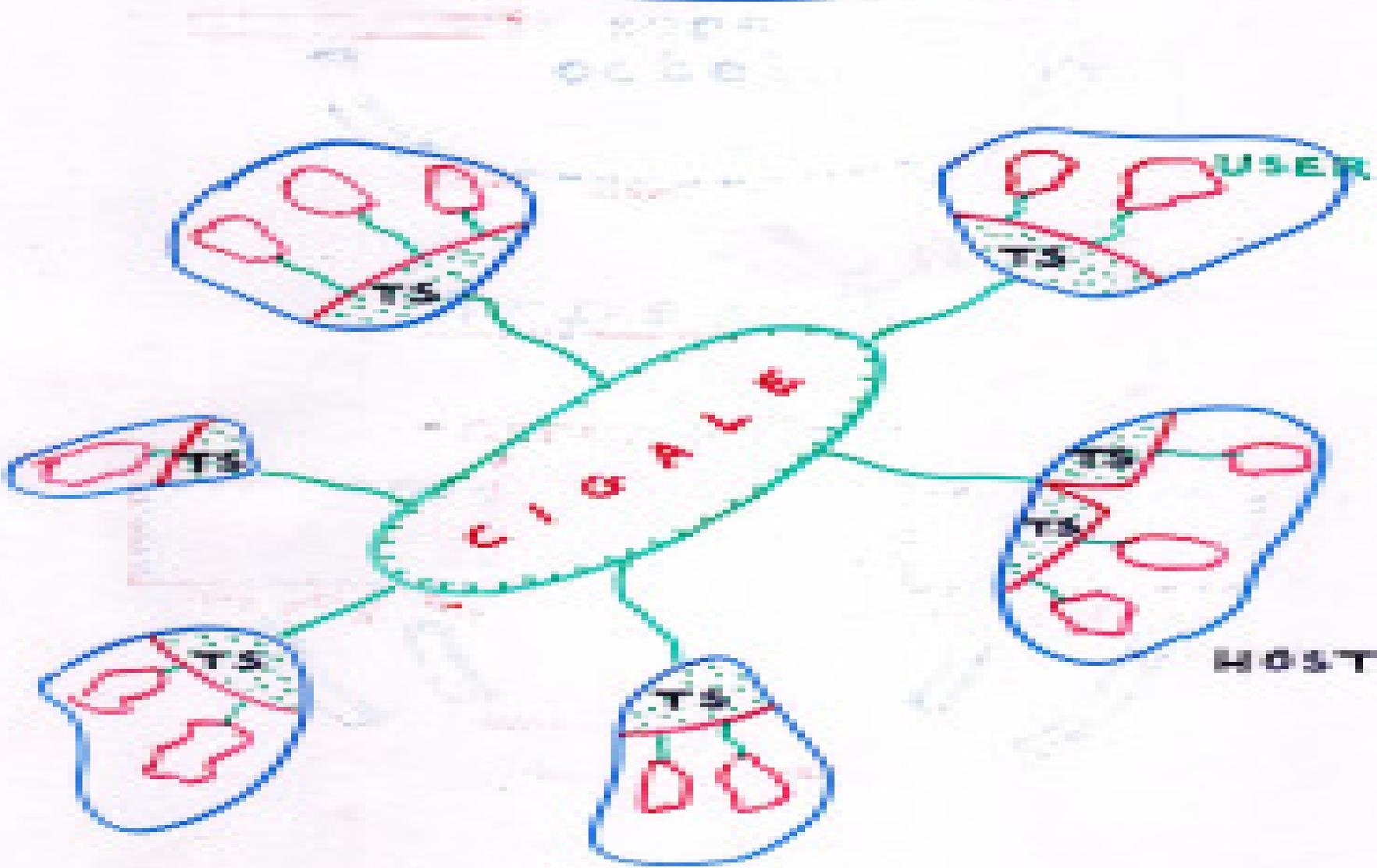


DATAGRAM interface

TRANSMISSION facility



HOST - HOST PROTOCOLS



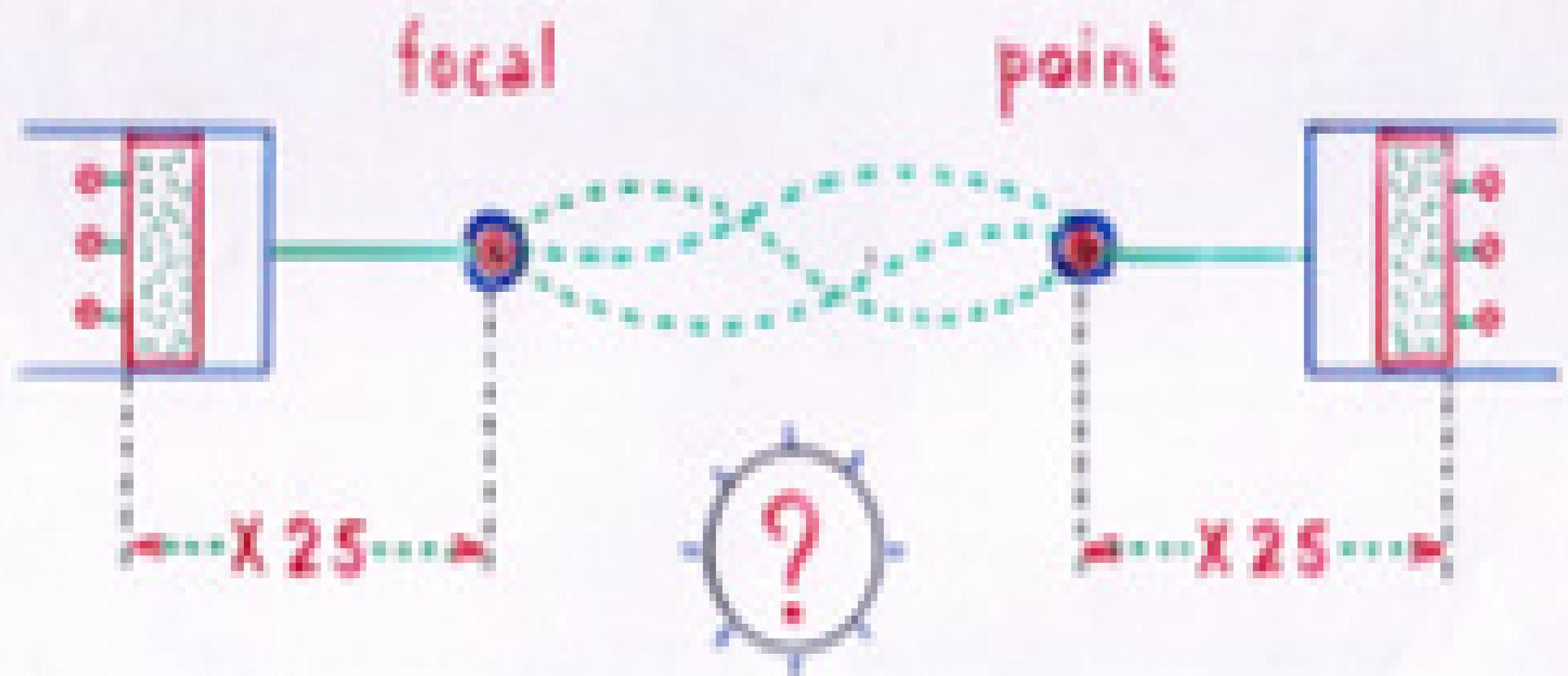
C I G A L E

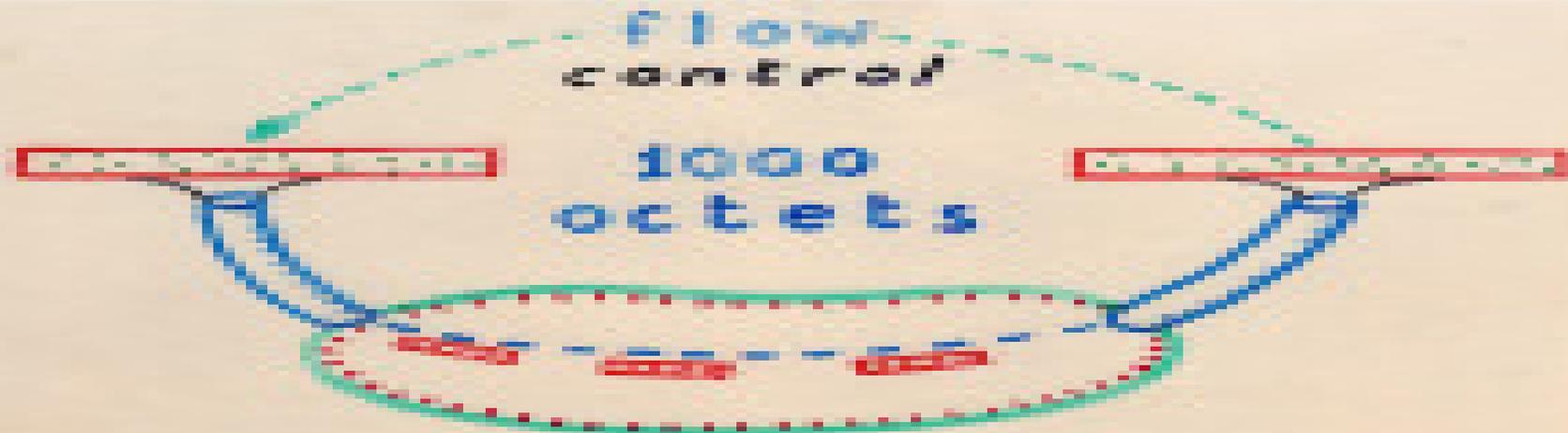
- Packet switching
- Adaptive routing
- Congestion control
- Control center

Nono's

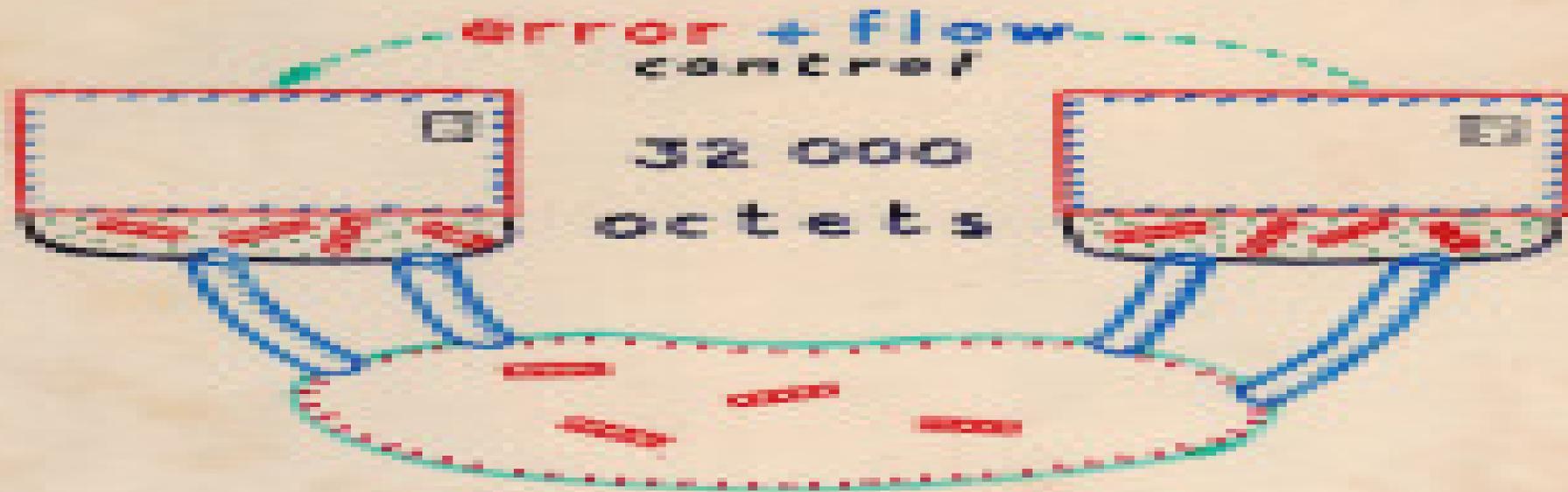
- Fragmentation
- Sequencing
- Links or virtual circuits
- End-to-end error control
- Terminal Handling

VIRTUAL CIRCUIT





Arpanet



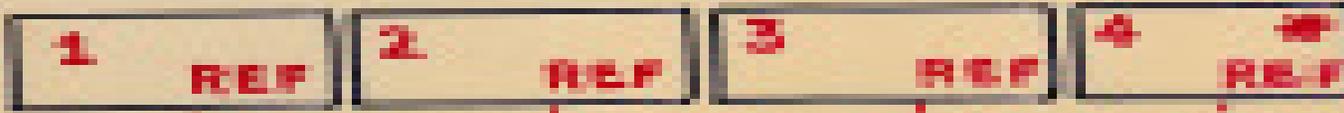
Cyclades

LET

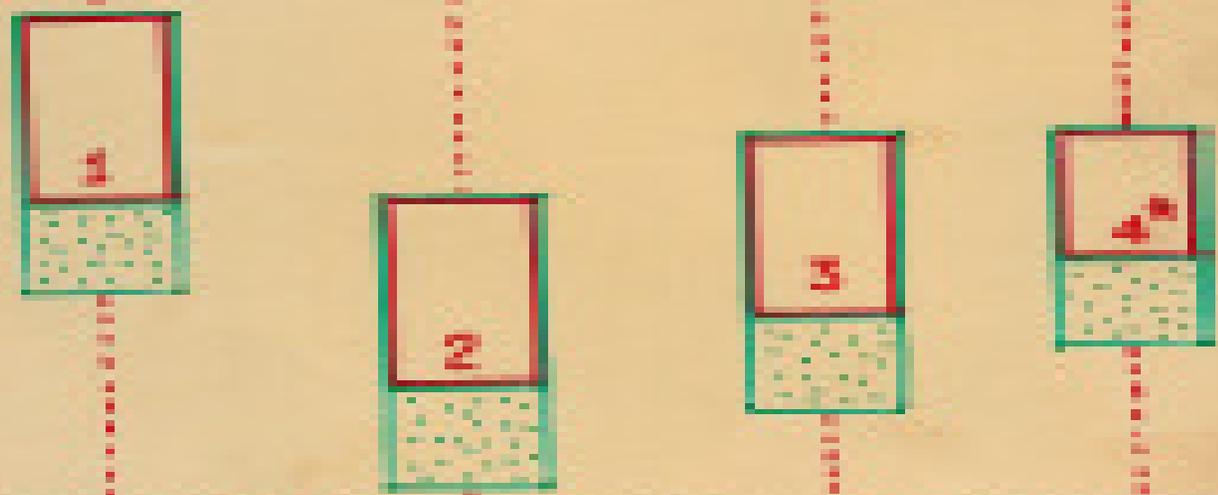


SOI

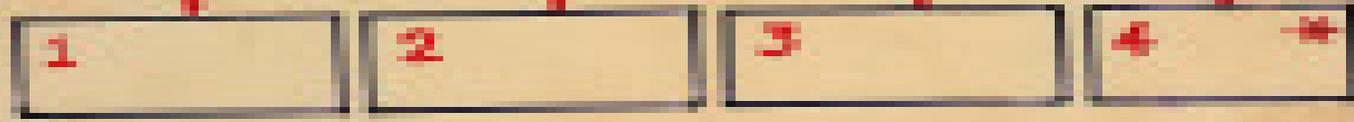
FRG



PACKETS



FRG

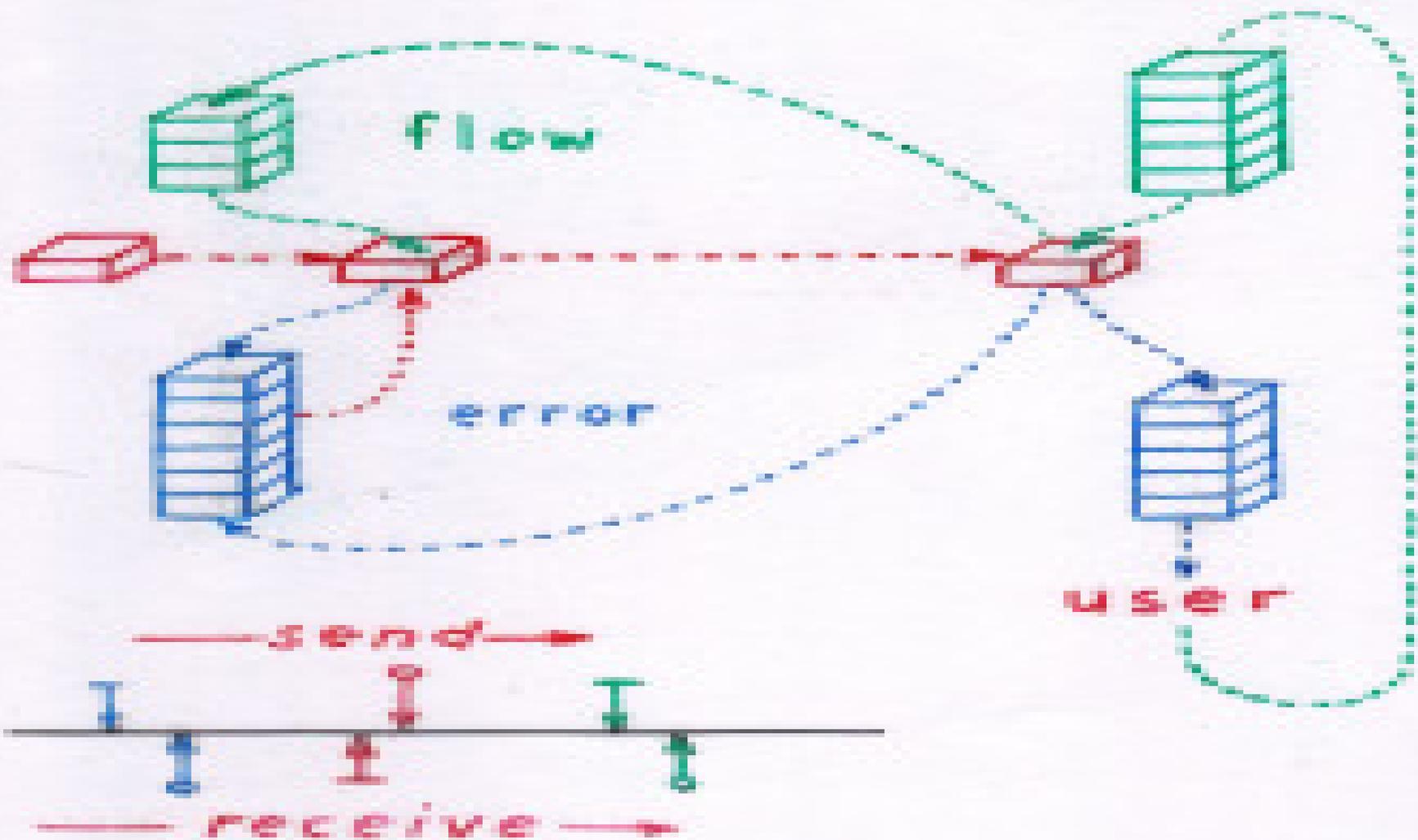


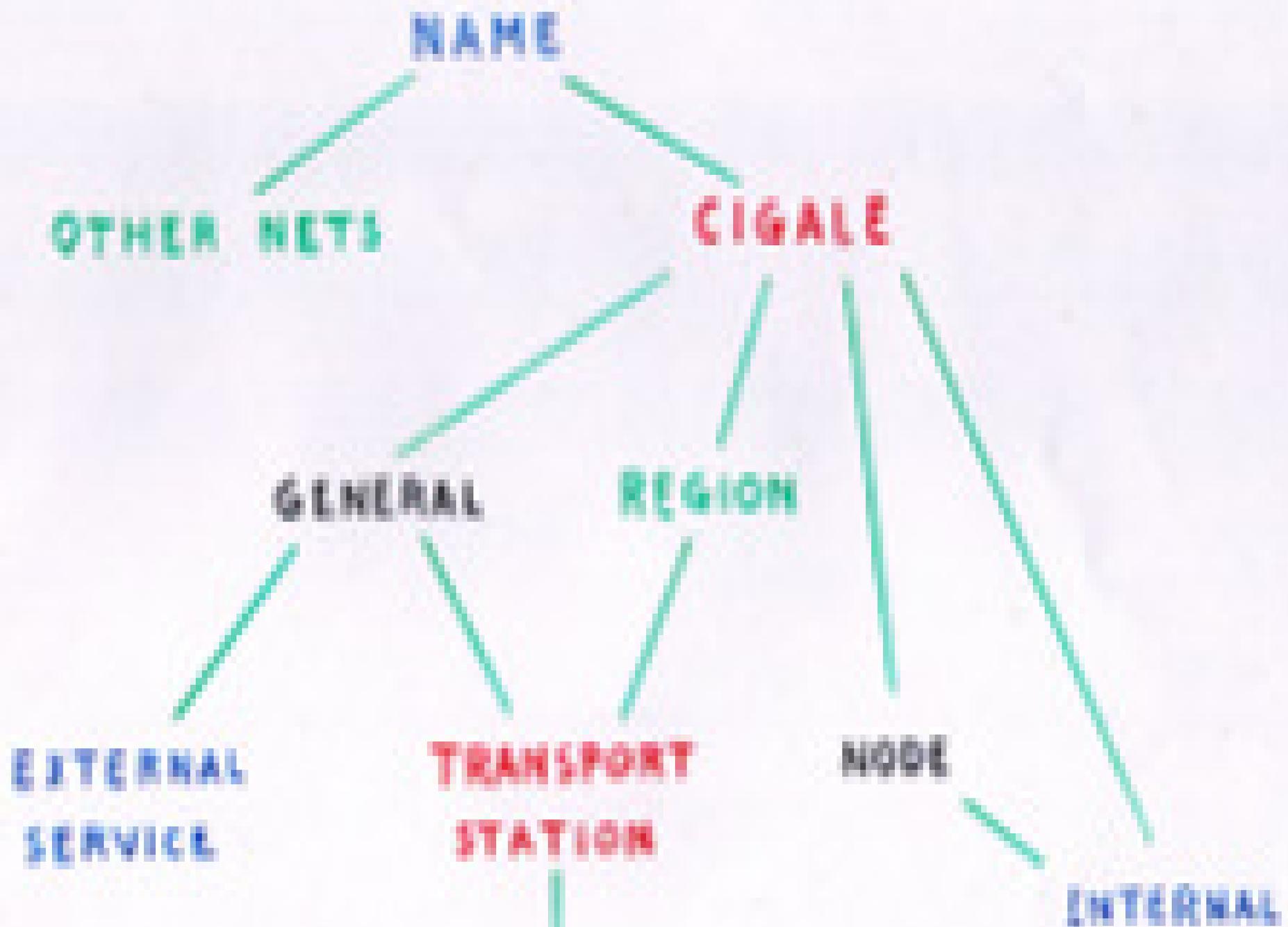
LET



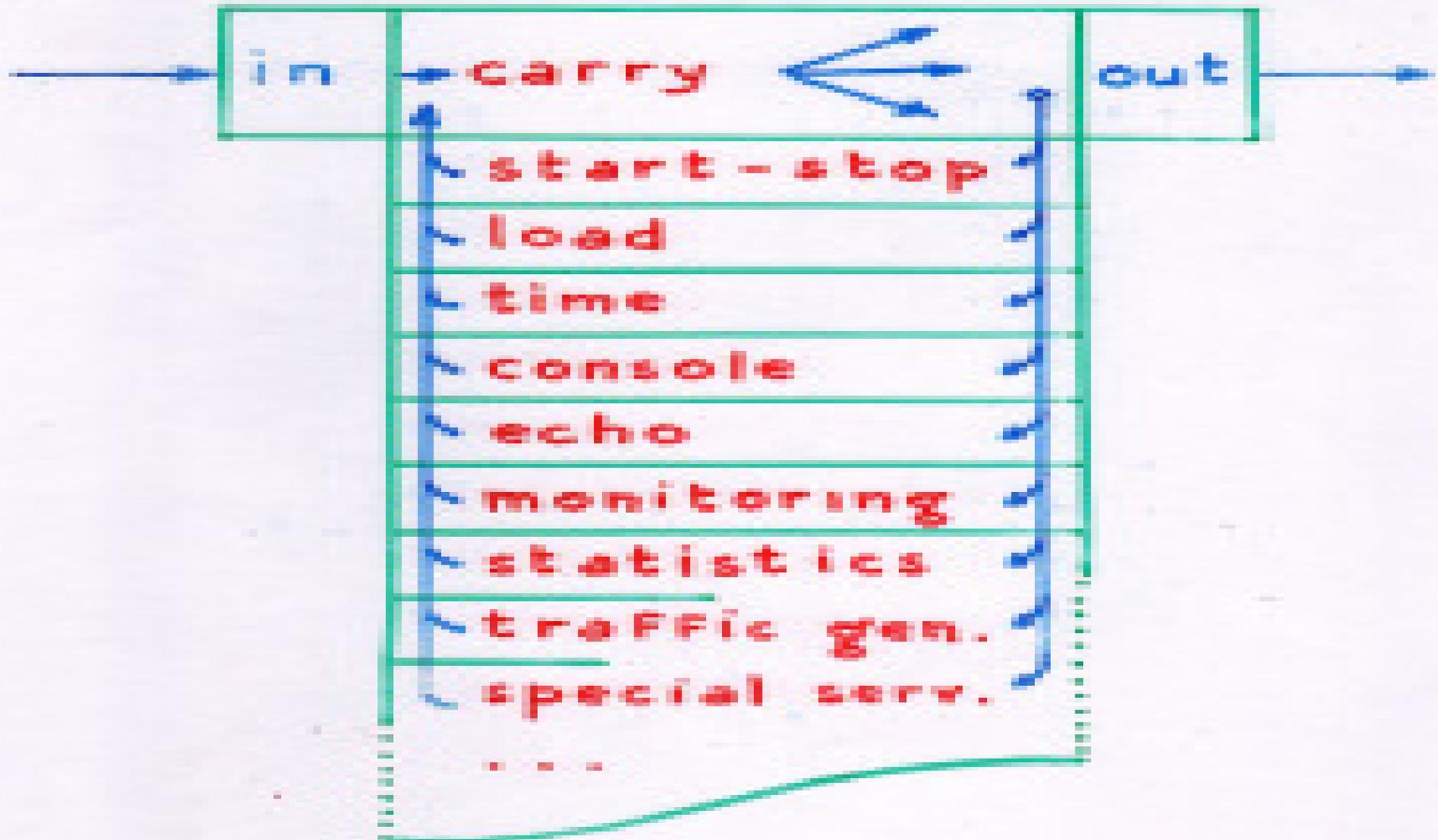
SOI

Error & Flow control

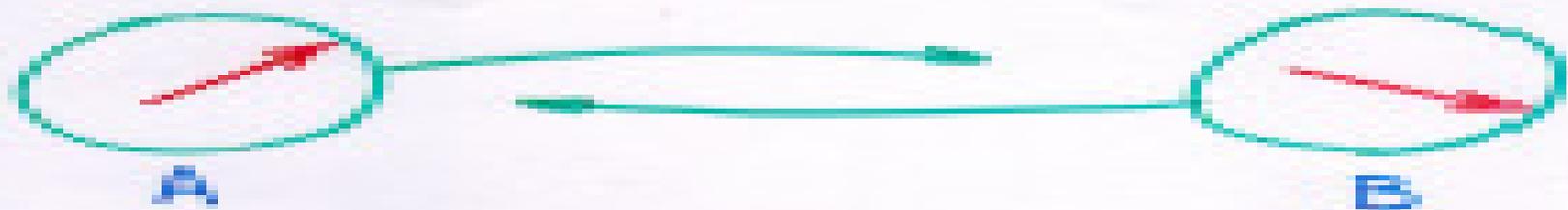




Data switching machine



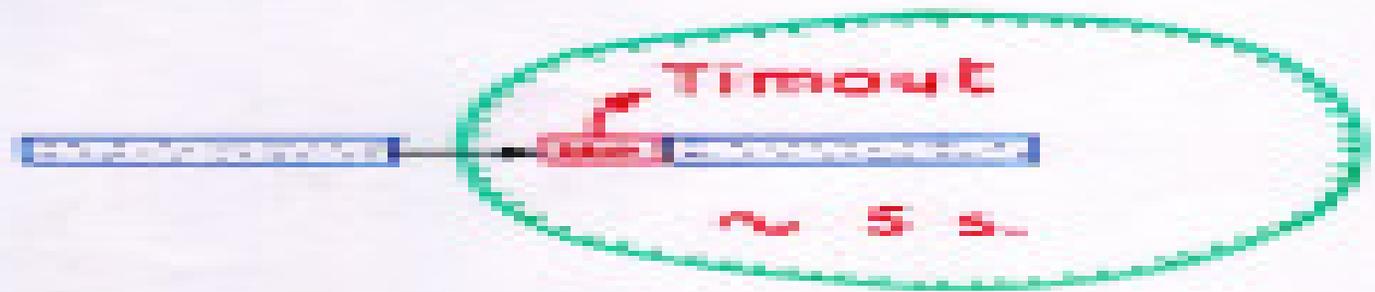
NETWORK TIME



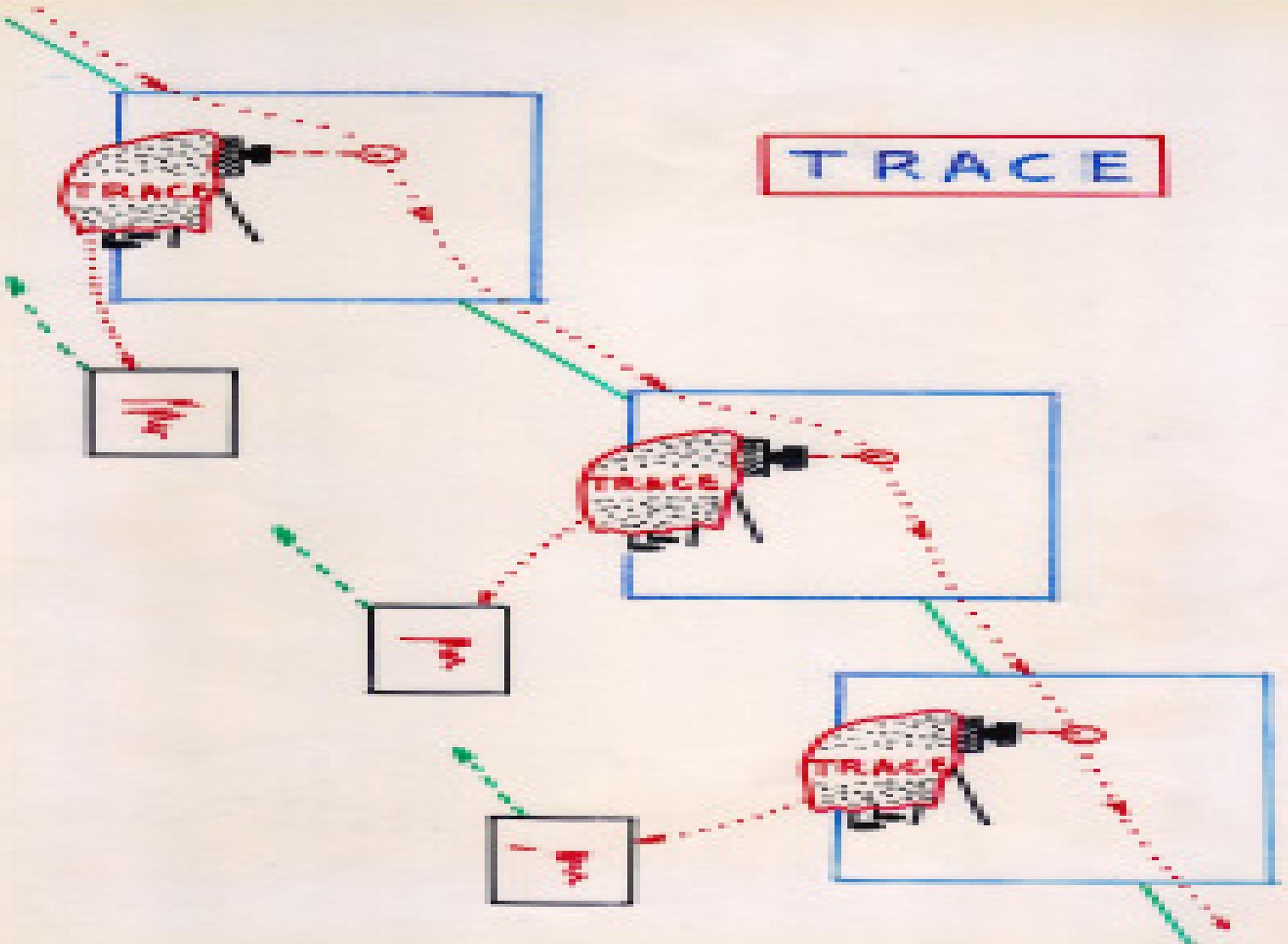
if $T_B + \text{delay} - T_A$



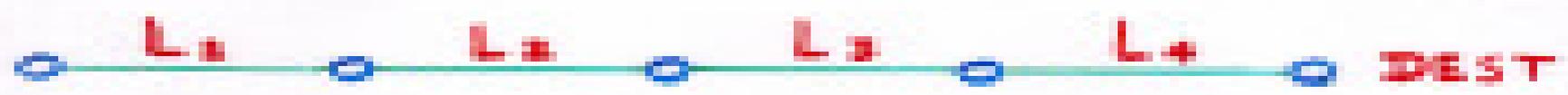
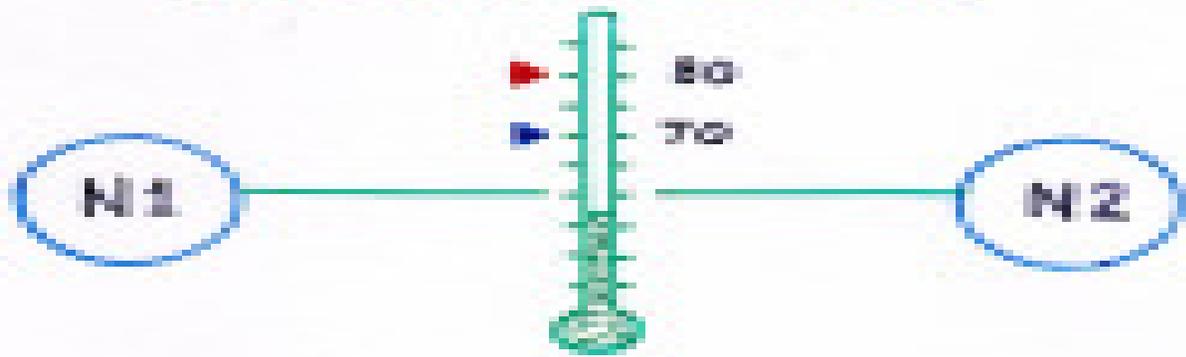
then $T_A := T_B + \text{delay}$



TRACE

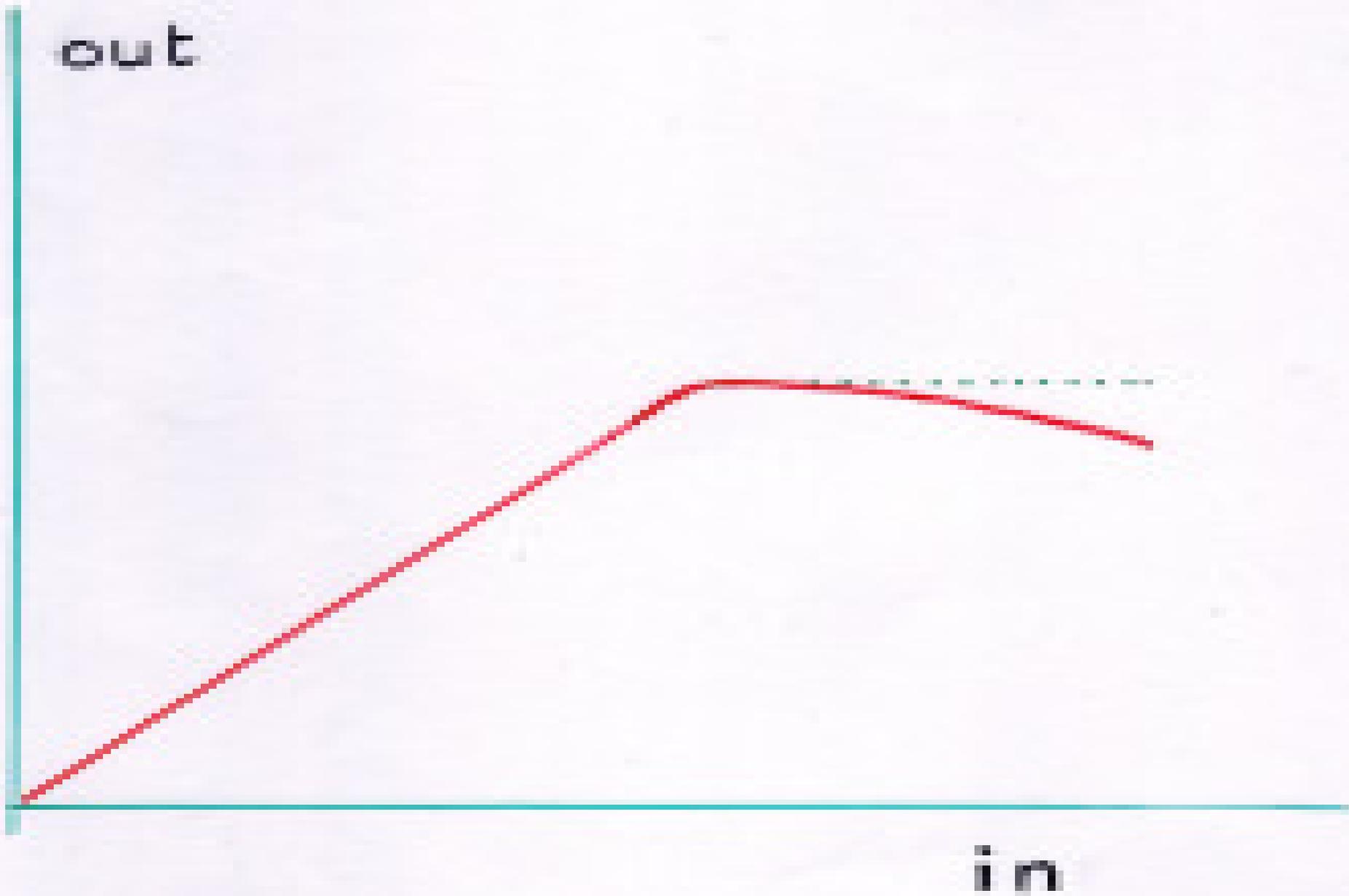


LINE LOAD



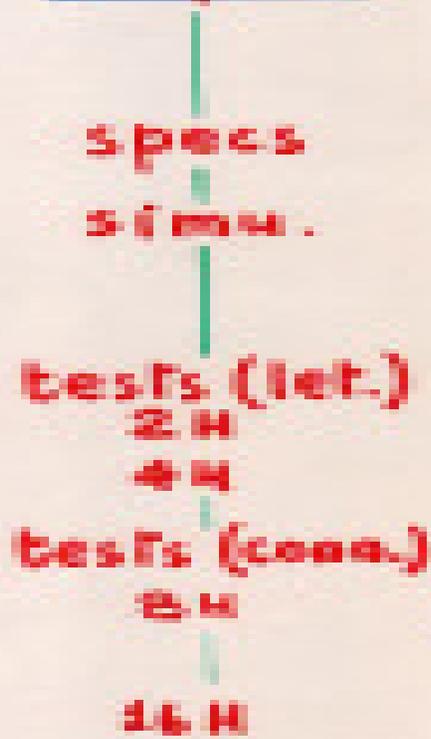
$$L_{DEST} = \text{Max} \{ L_4 \}$$





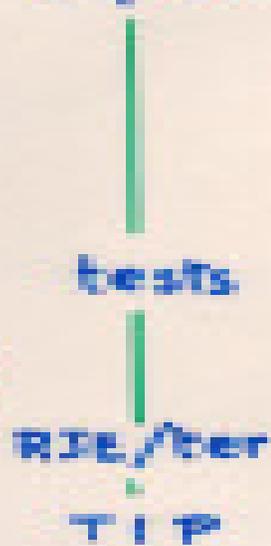
PLANNING

H-H prot



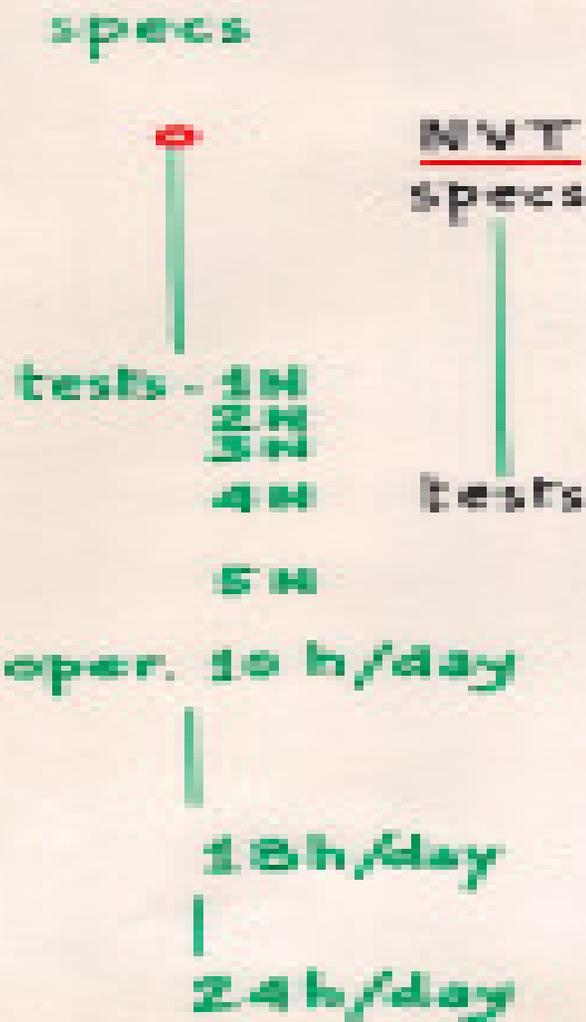
④

RJE/heat specs



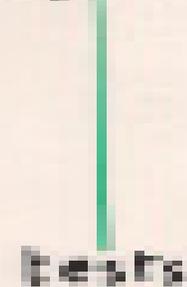
②

Pak. sw.

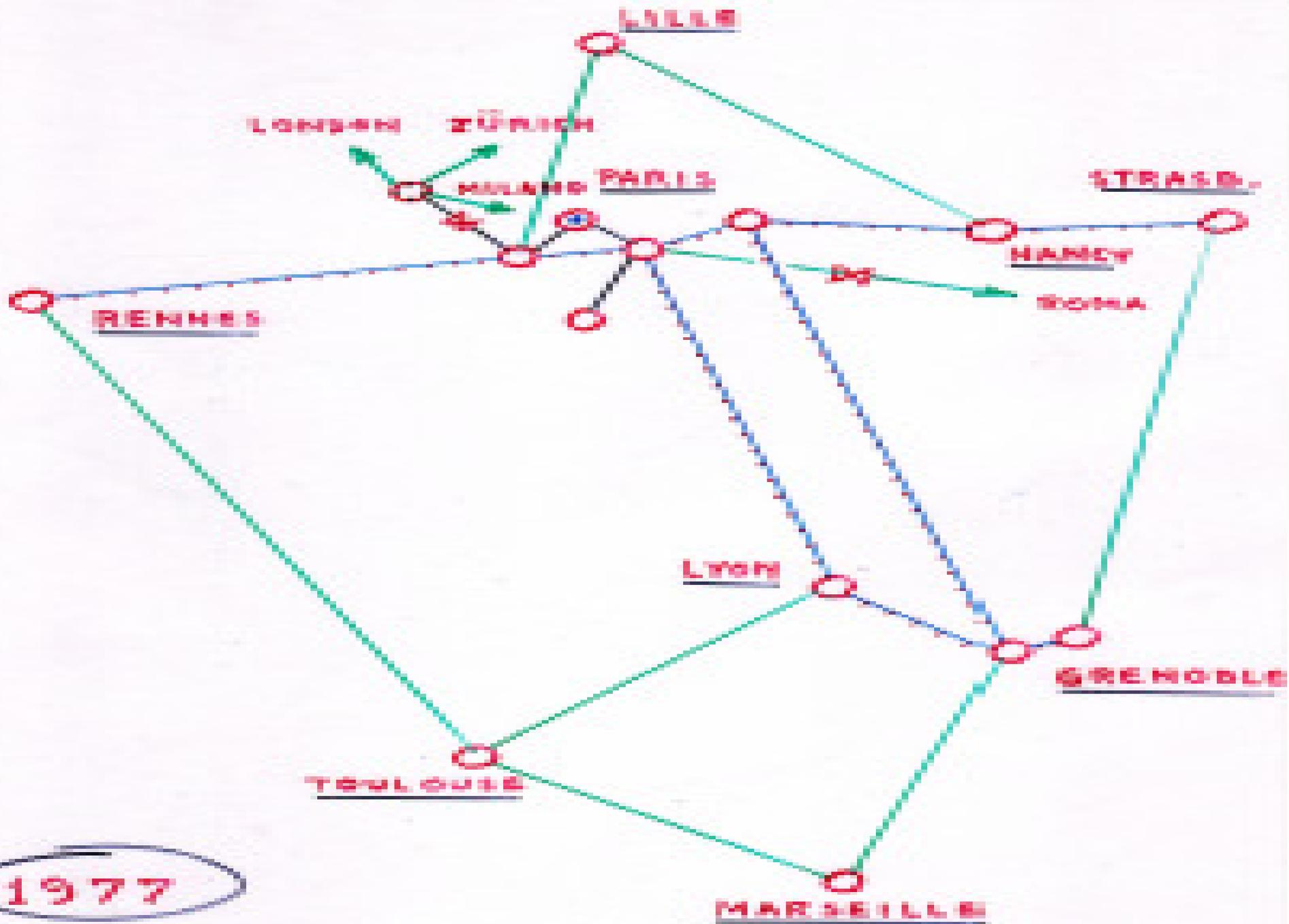


③

NVT specs



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	K15
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----



1977

INDUSTRY

- CIGALE
- Concentrators
- Front-ends
- Gateways
- Host software
- Packet terminals
- Engineering
- Standards

PACKAGES

- Circuit design
- System modelling
- Symbolic calculation
- Statistical processors
- Biomedical analysis
- Drug selection
- Medical diagnostic
- Data bases :
 - NASA METABEX COMPENDEX
 - NUCLEAR NTIS INSPEC
 - CHEMABS ESCI ELECOMPS
 - THERMODATA

COSTS

2000000

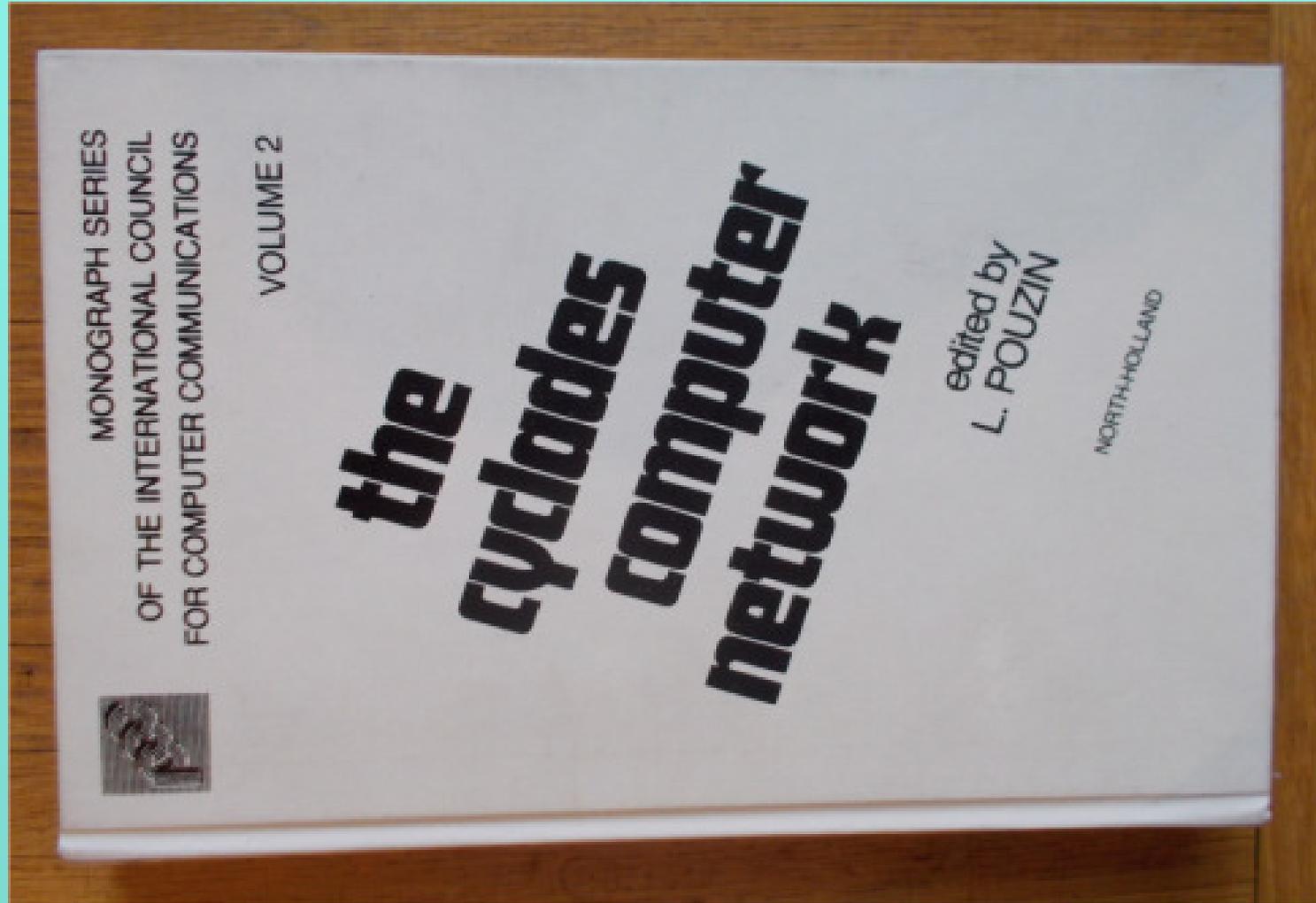


20 centres
5 nodes
7 concent

inforep

- Association loi de 1901
- Ouverte aux utilisateurs
- Création début 1976
- 30 membres : publics - privés
- 30% du parc informatique

ISBN 0 444 86482 2 (1982)



Thank
you

FOR your ATTENTION

www.CW.CW

eurolinc

Commonwealth Secretariat

WWW.CW.CW

Google

 The Commonwealth



"Nelson Mandela, a man of the Commonwealth who touched the world"

5 December 2013
South Africa

www.BJ.AFRICA



← www.bj.africa ☆ ↻ Google 🔍 ⬇️ 🏠



République du Bénin Portail Officiel du Gouvernement

Recherche

[Accueil](#) [Actualités](#) [Tout sur le Bénin](#) [Marina](#) [Gouvernement](#) [Gardons le contact](#)

Les activités du Chef de l'Etat



Audiences à la Marina: Plusieurs personnalités au cabinet de Boni Yayi

05/12/2013

Le chef de l'Etat a reçu à son cabinet dans la matinée de ce mardi 3 décembre 2013 plusieurs personnalités. L'ambassadeur du Bénin près la Russie Gabriel Anicet Kotchoffa est allé faire le point de la coopération bénino-russe.

WWW.BF.AFRICA



The screenshot shows a web browser window with the address bar displaying "www.bf.africa". The page title is "PORTAL DU GOUVERNEMENT DU BURKINA FASO". The main banner features a collage of images: hands holding a white bird, a modern highway interchange, a tall monument, and a smiling woman and child. Below the banner is a horizontal bar with the colors of the Burkinabe flag (green, red, green) and a yellow star in the center. The main text reads: "Portail gouvernemental du Burkina Faso. Informations politiques, économiques, culturelles, sociales, diplomatiques, etc., proposées par les services du Premier ministre et les directions de la communication des ministères". A date "lundi 9 décembre 2013" is displayed. On the right, there are buttons for "Ecrire au Premier ministre" and "Webmail de l'Administration", along with a search bar containing the word "Rechercher" and an "ok" button. A small image of a woman and a man is partially visible at the bottom right of the screenshot.



www.ci.africa

FLASH INFOS [Accueil](#) | [Contacts](#)

- ▶ Communiqué du 02-12-2013
- ▶ Communiqué du 26-11-2013
- ▶ Communiqué du 14-11-2013

[+] Voir plus

06-12-2013
SOMMET POUR LA PAIX ET LA SECURITE EN AFRIQUE: LE CHEF DE L'ETAT A PRIS PART AUX TRAVAUX DE PARIS

1- Le Gouvern de l'usage du pensez-vous c

- Bonne
- Mauvaise
- Sans opinic

2- Pourquoi le

www.QEprize



www.qeprize

Queen Elizabeth Prize for Engineering

- Home
- Nominate
- Questions & Quotes
- Winners
- Judging
- Resources
- Create the Trophy
- Judges
- Case Studies
- QEPrize News
- Team
- Contact

Award of the inaugural Queen Elizabeth Prize for Engineering at Buckingham Palace. 25/06/2013

Home
Our vision
QEPrize News
Press Release
Twitter Feed

Louis Pouzin, Robert Kahn, Vint Cerf, Tim Berners Lee, Marc Andreessen are the joint winners of the first Queen Elizabeth Prize for Engineering. They have been awarded the prize for the

WWW.OPEN-ROOT



The screenshot shows a web browser window with the address bar displaying "www.open-root". The browser's search engine is set to Google. The website's navigation menu includes links for "Accueil", "Notre offre", "Nos tarifs", "Commander", "Découvrir Open-Root", "Les usages", "Contact", and "La do". The main header features the "open-root" logo, a language selector for "fr | en", and a search bar labeled "Rechercher".

Votre extension personnalisée en toute liberté

La vente d'extensions est une autre façon de concevoir le nommage de l'internet. Une idée simple, développée par **Louis Pouzin**, inventeur du **Datagramme**, l'un des protocoles majeurs de l'internet.

Une Root, des routes... utilisez les possibilités des réseaux !

[Notre offre](#) [Nos tarifs](#)

A row of diverse, colorful cartoon characters with various hairstyles and expressions, looking towards the left.

MERCI DE VOTRE ATTENTION

pouzin@eurolinc.eu