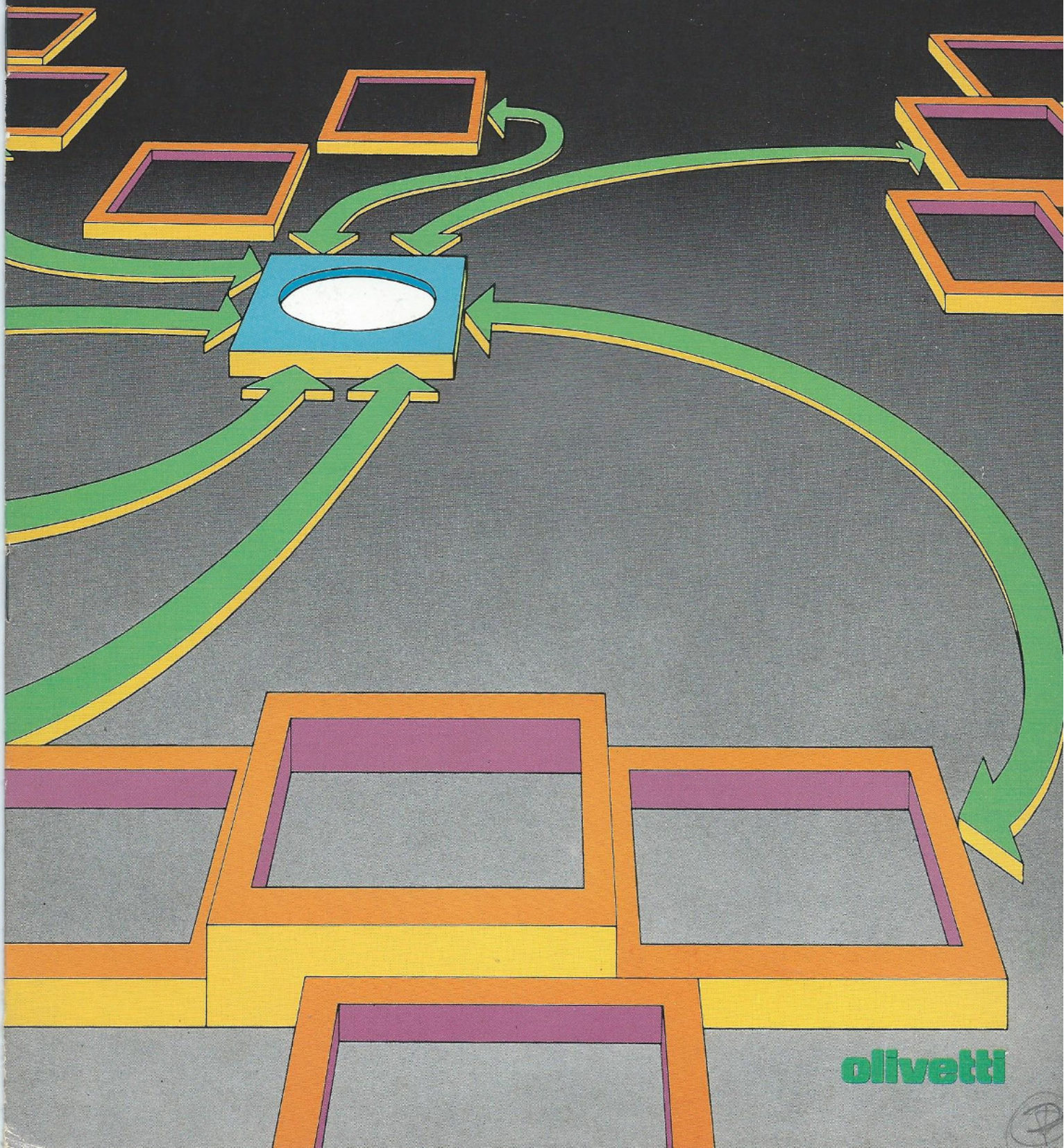
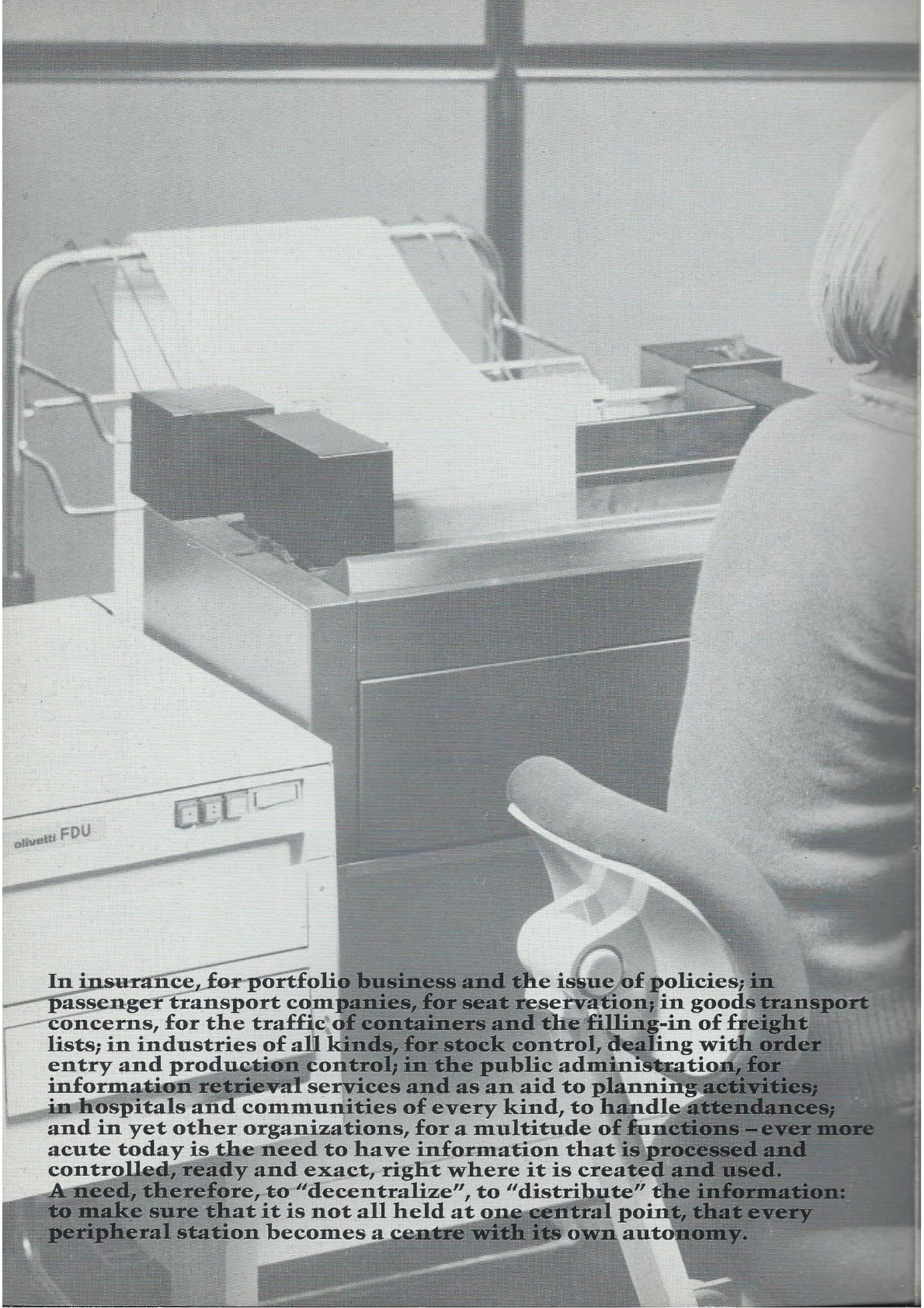


TC 800 MODULAR TERMINAL SYSTEM



olivetti



In insurance, for portfolio business and the issue of policies; in passenger transport companies, for seat reservation; in goods transport concerns, for the traffic of containers and the filling-in of freight lists; in industries of all kinds, for stock control, dealing with order entry and production control; in the public administration, for information retrieval services and as an aid to planning activities; in hospitals and communities of every kind, to handle attendances; and in yet other organizations, for a multitude of functions – ever more acute today is the need to have information that is processed and controlled, ready and exact, right where it is created and used. A need, therefore, to “decentralize”, to “distribute” the information: to make sure that it is not all held at one central point, that every peripheral station becomes a centre with its own autonomy.



An information system so conceived can only use a "terminal system" that is "intelligent", that is to say, that has its own capacity to control the input data, to process them locally, to memorize them, to "clean" them before they start using the distant, costly resources of the large central computers, to transmit them, receive them re-processed and print them as desired. All this also means rationalizing work, giving every office all the operative information immediately, economizing on the use of transmission lines and on the services of the large central computers.

Olivetti's "intelligent" answer to this complex of requirements, in its very own "distributed information" line, is the TC 800, a modular, programmable system for the exchange of interactive or batch type information.



The system architecture of the TC 800 is based on modularity. This is indeed the feature that makes possible the greatest flexibility and, therefore, ready, easy and perfect compliance with any application level or complexity, with optimal operator-system dialogue, with the achievement of objectives and with situations as they undergo change. The Olivetti TC 800 can be inserted into any working environment, whether it already has teleprocessing or not, and assist development and growth, both in terms of the quality and quantity of information and in terms of network.

The control system comprises particularly powerful logical units, the fruit of the most advanced technology, microprograms and software (operational and applicational).



The work station consists of modules (keyboard-console, display, printer). Therefore, there is the broadest configurability of the work station: the modules can either be grouped around the work station, or spread "open", if the various and typical working environments so require.

The peripheral units complete the TC 800's architecture according to the particular applicational and systems requirements. They comprise: external transmission line control units for on-line connection to computer or concentrator; transmission line control units for connection between master and satellites; auxiliary fast printers; auxiliary magnetic memories (cassette units, floppy disk units, cartridge disk units); optical and magnetic character readers; paper tape and punched card readers; tape and card punches; computer compatible magnetic tape units.

A variety of system configurations is possible with the TC 800. In the stand alone configuration, the TC 800 system is particularly suitable for the problems of a small periphery with a single work station. It can be connected by external transmission line to the central computer with which it interacts directly.

In the cluster configuration, several satellite TC 800 terminals are concentrated and managed by a main TC 800 master terminal. With this set-up, the system solves the problems of the peripheral with several work stations or several peripheral points close to each other. The TC 800 satellites are connected to the TC 800 master by a transmission line; the TC 800 master controls the flow of messages between the satellite terminals and the central computer.

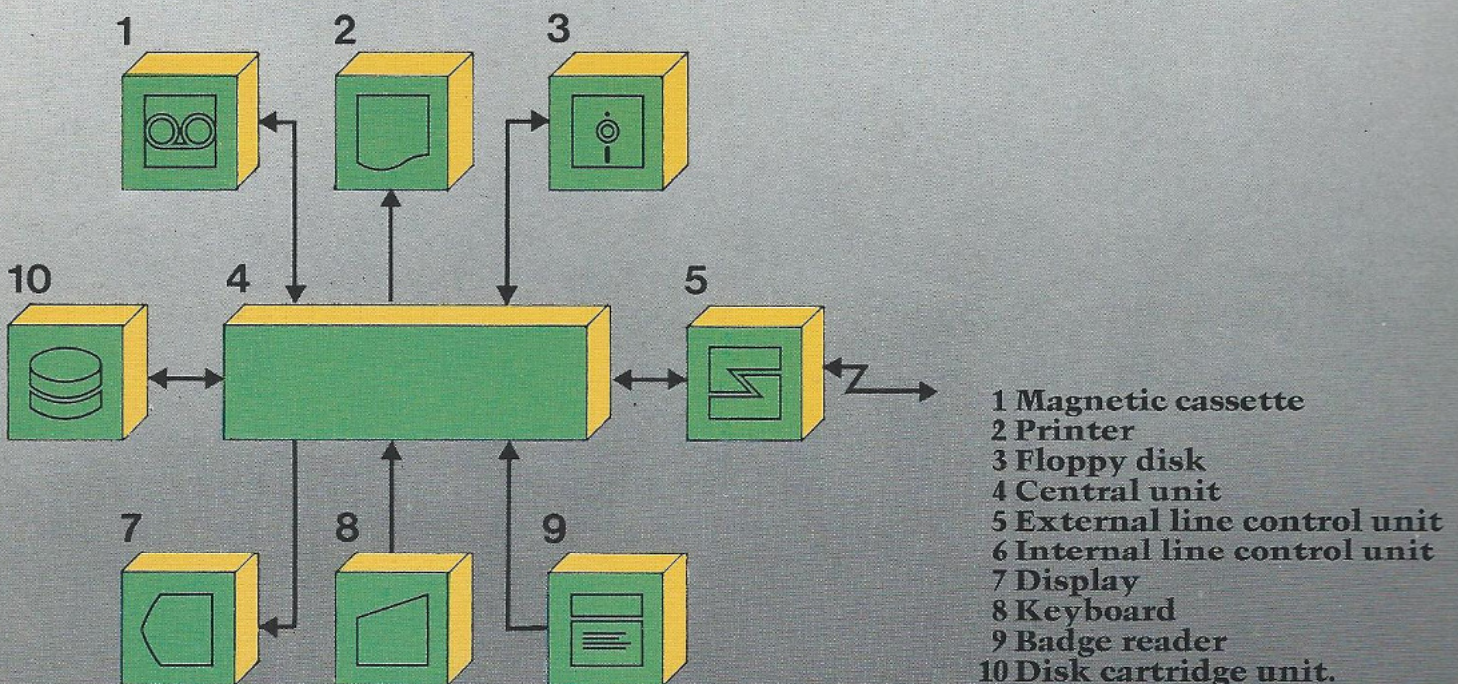
If a network of terminals is distributed over a vast area or in a peripheral point with a number of work stations, it is possible to use the Olivetti SP 600 system, a line concentrator, local processing minicomputer.

The TC 800 system is "intelligent". It is this intelligence that ensures the optimization of processing procedures both at the center and in the periphery.

It is the intelligence that makes the periphery autonomous, not only in an operational sense but also in a systems sense. In fact the recovery procedures provided for enable the service to be continued should any network component break down (central computer, concentrator, external line).

In the stand alone or concentrated configurations a failure in the external transmission line does not interrupt the operations of the peripheral point because one of the incorporated recovery techniques allows passage on to a public telephone line.

STAND ALONE TERMINAL

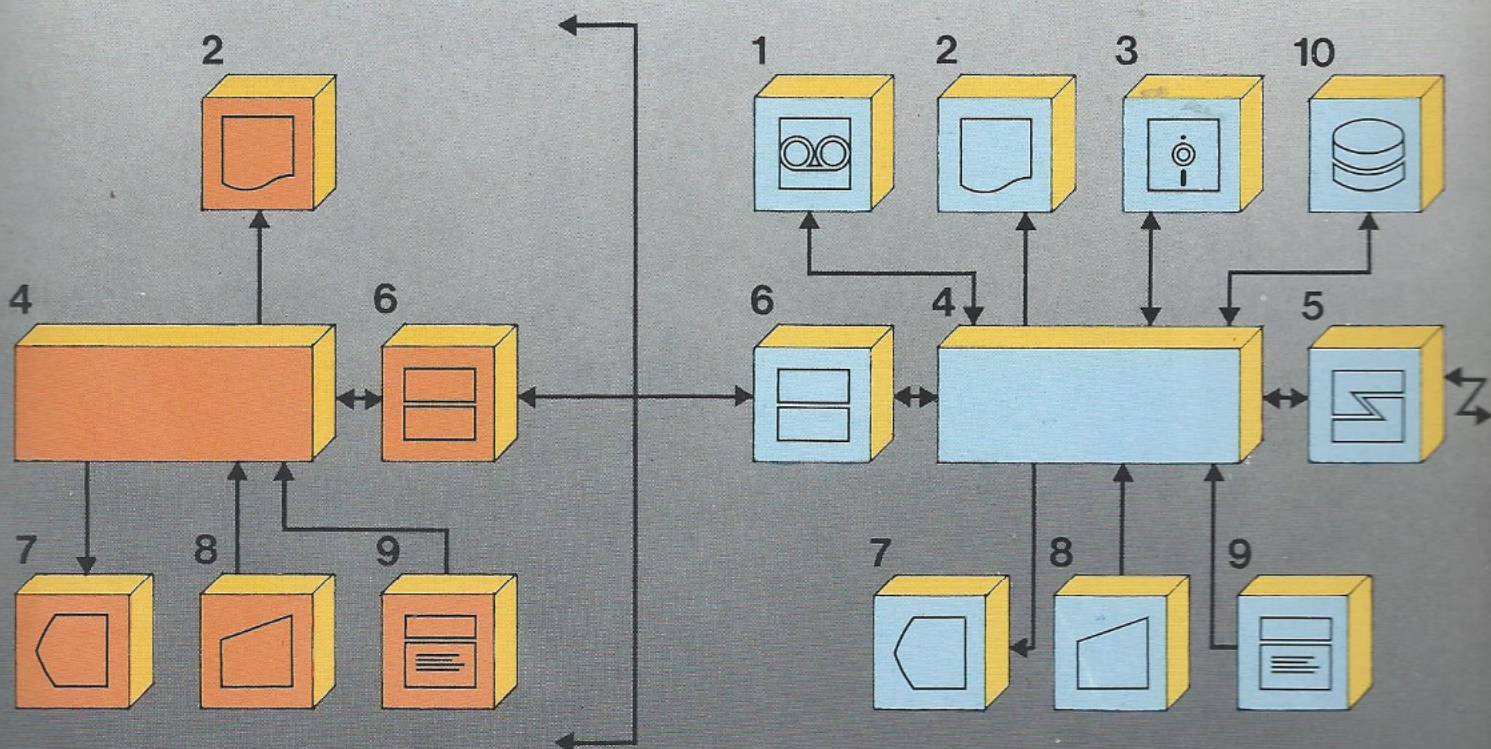


Should the public telephone line be out of use or if there should be a failure in the central computer, all the work stations can continue their automatic data collection operations at the level of the concentrator or the peripheral terminal, or at both levels, thanks to the various magnetic media (cassette, floppy disk). When normal operational conditions come back into being, the memorized information will be batch transmitted to the central computer. In the cluster configuration, failure of the master does not prevent work being carried on in the satellites connected to it, for every work station has its own autonomous application program. A breakdown of the master terminal, however, interrupts communication between the peripheral station and the central computer, but even this emergency can be dealt with by fitting one of the satellite terminals with those system peripheral units (line control unit, magnetic media, possible auxiliary printer) that will enable it to perform all the functions normally carried out by the master.

In the TC 800 system, security and reliability are guaranteed by the inclusion of modules (integrated key or badge unit) which identify the operators and the supervisor, and by automatic diagnostics that constantly check the status of the system and signal any eventual hitch on the console and on the visual display unit. In more general terms, security and reliability are ensured by the use of electronic components that are the fruit of the most advanced technology, and by Olivetti's technical assistance service which is ready and available.

SATELLITE TERMINAL

MASTER STATION



Central Unit

- 32 kbytes Read Only Memory.
- Main memory up to 48 kbytes.
- DMA (Direct Memory Access) for high speed peripheral interchange, up to 650 kbytes/s.
- Multiprogramming.
- 16 input/output channels, operating in multiplexor or selector mode.

Data Communication

- Techniques: synchronous, asynchronous, character and bit-oriented, on fixed or switched lines.
- Connections: external - terminal to computer, point-to-point or multipoint; internal - master to local or remote «satellites», multipoint.
- Speeds: 600 to 9600 bauds.
- Conversational procedures: BSC-1, BSC-2, BSC-3, IBM 2848, Burroughs TC 500, SDLC; any other procedure required.

Keyboards

ANK 8015 - Alphanumeric keyboard
Four sections: alphanumeric (52 typewriter keyboard keys), numeric (10 keys for digits 0 - 9, double and triple zero, decimal point and minus sign), commands (7 start keys, which can also be used for program jumps), programmable functions (8 or 19 keys).

ENK 8117 - Extended numeric keyboard
Three sections: numeric (10 keys for digits 0 - 9, double and triple zero, decimal point and minus sign), commands (7 start keys, which can also be used for program jumps), programmable functions (8 or 19 keys).

RNK 8016 - Reduced numeric keyboard
Three sections: numeric (10 keys for digits 0 - 9, double and triple zero, decimal point and minus sign), commands (7 start keys, which can also be used for program jumps), programmable functions (8 or 19 keys).

Console

- 14 indicator lights: 4 for program monitoring selected according to user specification; 4 communication status (local lines, remote line transmit, remote line receive, recovery); 6 control unit and peripheral lights (processor check, I/O check, printer check, keyboard error, partition attention, keyboard attention).
- 4 push buttons: line load, select partition 2, program inquiry, program run.
- 2 two-position switch keys for service and unattended mode.
- 3 two-position switch keys or, in alternative, integrated badge reader, qualifying operators and supervisor.
- Acoustic warning device.
- General switch.

Display

- CRT type alphanumeric display.
- 7×9 dot matrix character generation.
- Marker control.
- Both light intensity and contrast adjusted by the operator.

- Brighter character intensity by program control.

Two models:

DSY 8040

- 6" CRT screen, 260 characters, on 10 lines with 26 characters per line.

DSY 8060

- 15" CRT screen, 1920 characters on 24 lines with 80 characters per line.

Printer

- Speed: 50 characters/sec.
- Bidirectional addressable tabulation with automatic positioning at the first significant digit in the field.
- Density: 10 or 12 characters per inch.
- 132 or 158 characters per line.
- Printing sets of 64, 96 or 128 characters.
- Vertical spacing of 5 or 6 lines to the inch.
- 13" platen - unified or split with 1/2, 1/3, 2/3 split.
- Independent line spacing of each platen segment.
- 1 original + 6 copies.
- Simultaneous handling of: forms, pinfeed forms, passbooks with or without magnetic track, magnetic badges.
- Manual front feed.
- Automatic front feed.
- Automatic read/write unit for magnetic passbooks and magnetic badges.
- Journal rewinder.
- Sprocket for pinfeed forms.

Magnetic Cassette Unit

- ECMA standard cassette for data and program storage.
- Capacity: 250 kbytes.
- Read/write speed: 1000 bytes/s.
- Automatic cassette feed available.

Floppy Disk Unit

- Random access magnetic memory for data and program storage.
- 1 or 2 interchangeable disks per unit.
- Capacity: 250 or 500 kbytes.
- Average access time of 473 ms.

Disk Cartridge Unit

- Random access mass memory for large capacity files access and processing.
- 2 disks: one fixed and one interchangeable.
- Capacity: 9.8 Megabytes.
- Average access time: 50.5 ms.

IPSO Interface and Peripheral Units

- IPSO interface adaptor to connect IPSO peripheral units, such as:
Auxiliary printers, 100 or 175 characters/s;
300 or 600 lines per minute;
Optical or magnetic character reader;
Punched card reader or punch;
Paper tape reader or punch;
Computer compatible magnetic tape unit.

The "dual keyboard" version stands out prominently: two work stations, complete with keyboard-consoles, video displays and a shared printer can be connected to a single central unit, thus doubling the operative capacity of the system.

"DUAL KEYBOARD" TERMINAL

