Chapter 4

Computerize Control System of Political Process (CCSPP)

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1- Prologue - The automatic control of Political processes is fundamental to the successful operation of modern policy. Modern Political processing systems are heavily dependent on automatic control system. The benefits of automatic control of Political processes include more consistent operation, greater safety for process and operating personnel and reduced operating costs due to improved utilization and reduction in polit-personnel requirements.

The reducing cost and increased performance of digital computers has had a significant impact on the way political control systems are designed and implemented. powerful mini- and microcomputers with super graphics capabilities are readily available for designing and simulating Political-control systems.

Controlling activities include direction, regulation, and coordination of political system, machines, or apparatus. Controlling includes regulating activities plus directing and coordinating activities. The directing activities include planning activities such as establishing goals and procedures, forecasting activities such as observing the present environment and condition of a system and correlating this with past data, and activities that show or point out what is to be done or what should be done.
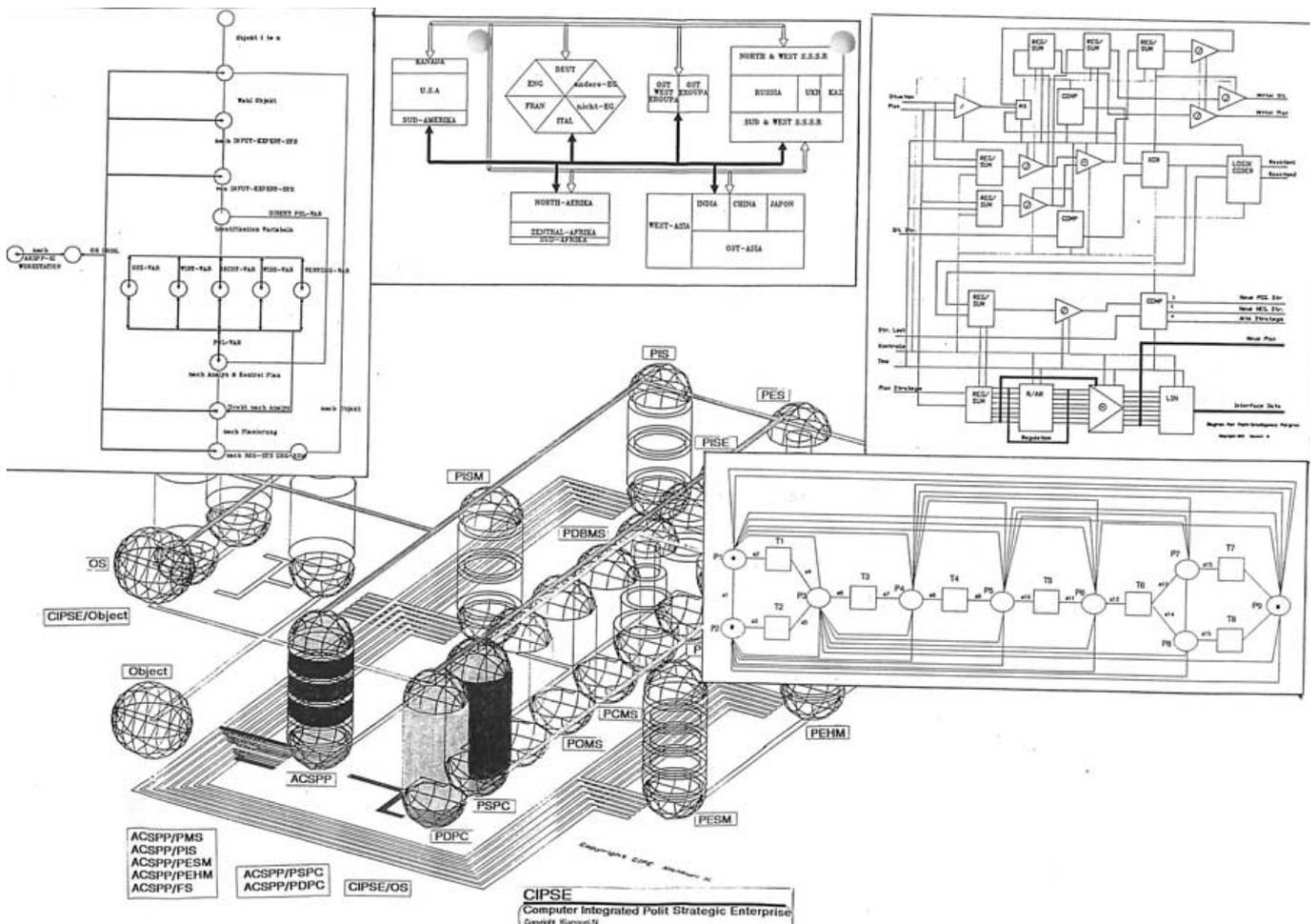
FIG.4.1. IS A REPRESENTATION OF INTEGRATION OF CCSPP STATION AND INTERFACES BETWEEN CIPSE STATIONS. THE HOST COMPONENTS FOR CCSPP INTEGRATION ARE:

1- CCSPP STATION (SYSTEM DEFINATION WITH HELP OF PETRI NET, MENU, INTERFACING WITH DIRECT AND INDIRECT STATIONS OF CCSPP).
2- STATISTICAL STATION (MENU, BASIC AND COMPLEX STATISTICALAL PROCEDURES, POSSIBILITY TO SHOW STATISTICAL MODEL, STATISTICAL HIERARCHY, GRAPHICAL REPRESENTATION OF STATISTICALAL ANALYSIS AND PROCESS AND ETC).
3- DYNAMIC STATION (MENU, INTERFACE WITH STATISTICAL PROCESS AND PROGRAMM AND MACRO, DYNAMIC MODEL AND DEMONSTRATION OF FUNCTIONS FOR EXAMPLE FEEDBACK AND REGULATION VALUE, CONTROL VALUE AND GRAPHICAL REPRESENTATION OF DYNAMIC SYSTEM, AND ETC).

2- List of functions of Computerize Control System of Political Processes (CCSPP):
- Definition of Political-system and -subsystems and –functions
- Definition of relation and boarders of Political-systems
- Definition of political control system
- Definition political control strategies.

3- Basic Definition of Computerize Control System of Political Processes (CCSPP):

Political-System - A Political-system is combination of Political components that act together and perform a certain objective.

Political System Input - Any change, disturbance, perturbation, input, or other external stimulus that exists or is produced within the system's external environment and is or can be applied to or imposed on the system.

Political System Output - Any change, disturbance, perturbation, output, or response that is produced by or a consequence of the system's action on its inputs and is perceived and measurable in the external environment of the system.

Political-Subsystem, Political-System Environment - If a Political-system is one of the components of a larger Political-system, it is called a Political subsystem, and the larger polit-system is environment. Also, a system is separated from its environment and other systems by its system boundary.
A system is composed of subsystems, and may in turn be part of a larger system. This nesting of systems within systems forms a hierarchy. The precise definition of which subsystems are members of a given system and which are not is subjective, and depends on the context in which the system is being defined. It is clearly possible for a system to be a member of more than one larger system.

Political-process - The Political-process transforms inputs to outputs, and may be a machine, a human, a computer, tasks performed by members of an organization, etc.
Political process is actual political occurrence or -events. Pieces' of information presented as having objective reality. Data structures that give information about actual data values obtained. We can define as a low-level activity that starts and stops, and is executed repeatedly. The execution of the process produces a specific kind of effect on entities or information about entities of a specified type.
A process which is designed by humans and is fully understood in detail is of en termed a clear box. If the inputs and outputs are fully defined but the process is not the process is termed a black box. The process of one system may be a black box from the point of view of another system.

Political-System Interfaces - Several political systems may share the same environment. Some of these systems may be connected to one another by means of a shared boundary, or interface. The interconnections and interactions between subsystems are called interfaces. These occur at the boundaries between two systems, when part or all of the output of one subsystem becomes part or all of the input to another subsystem.

Political-structure - Political-structure is a concept even less well defined than the concept of a Political-system. In reference to a Political system the term Political-structure is used to refer different aspects of a Political-system, such as the following:
- "interconnectedness", i.e., the existence of interconnections between the parts;
- The type of functional relationship mapping inputs into output, e.g., linear structure;
- The internal functioning of the Political-system as it 'processes the inputs into output, e. g., the input-output structure or the goal-seeking Political-structure.

Political-System Function - The Political-system must have a function. At the most abstract level, it must affect the external environment through a process of change. This concept ties in with the concept of control, i.e. the control of continual change towards a state of equilibrium. A mathematical entity whose value, that is, the value of the dependent variable, depends in a specified manner on the values of one or more independent variables, not more than one or more independent variables corresponding to each permissible combination of values from the respective ranges of the independent variables.

Political-System Relationship - The relationships which exist between individual political-systems, - subsystems or entities. The result of entities existing in an ordered relationship is usually referred to as hierarchical structure.

Political-System Boundaries - The imposition of boundaries around systems in such a way that the resulting system, i.e. that which lies within the 'artificial barrier', is largely impervious to external influences.
The Political-system is that which lies inside the boundary and the environment of the Political-system is that which lies outside the boundary.

Political-Complex System We shall simply identify a Political-complex system as a "meta-system", i.e., as a system of systems. In other words, while a "mere" system is a relation (of function) on polit-objects, a complex system is a system of systems; i.e., a relation among the polit-systems themselves.
Complex goal-seeking systems are often arranged in a hierarchical fashion under hierarchy we understand the following: The goal seeking subsystems are partitioned into groups, referred to as levels. A ordering relation between these groups, i. e., levels, exists so that the groups can be recognized as being on higher or lower level.
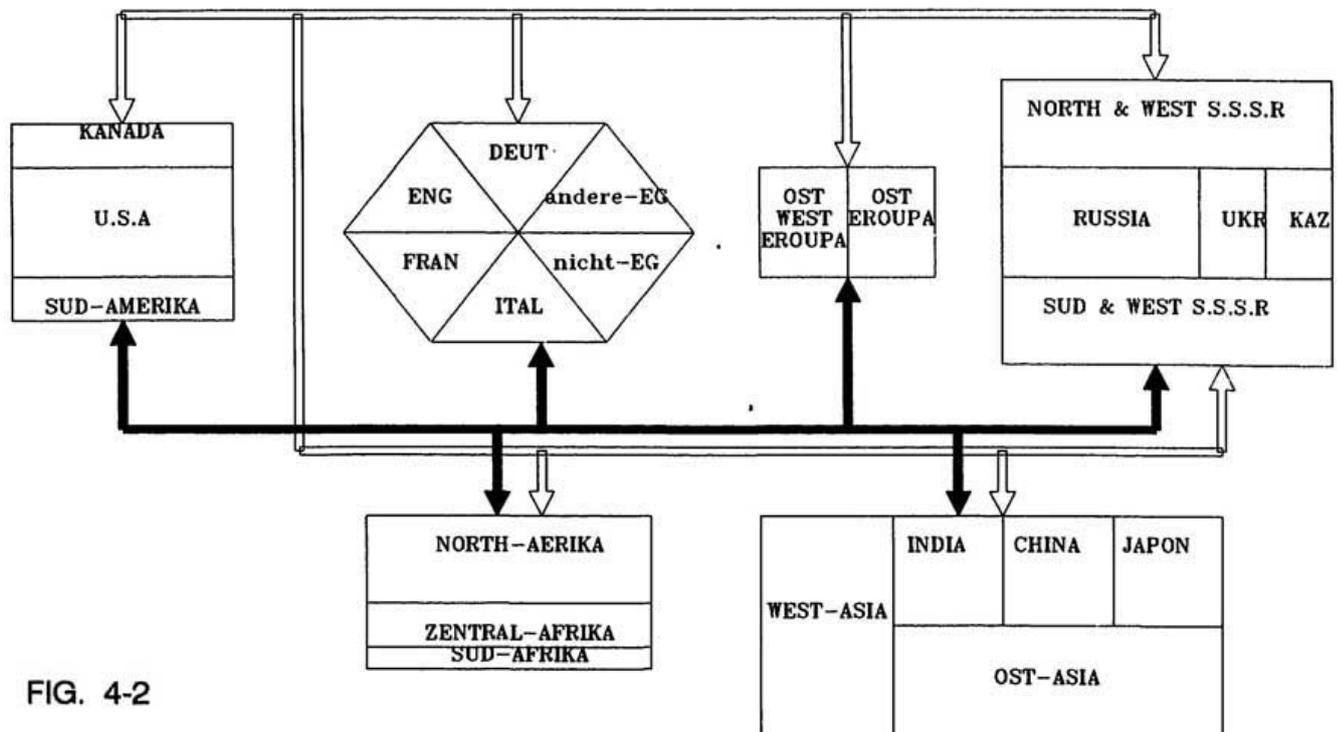
FIG. 4-2

FIG.4.2. IS A POLITICAL SYSTEM AND CONSIST OF DIFFERENT SUBSYSTEMS. INTERNATION POLITICAL SYSTEM CONSISTS OF 24 SUBSYSTEMS. SUBSYSTEM HERE DEFINE AS A MAJOR POLITICAL-BLOCK, -UNION, -FEDERATION, -REGION.

Political-Control Political Control consists of all of the methods, policies, and organizational procedures that ensure the safety of the Political-organization's assets, the accuracy and reliability of its accounting records, and operational adherence to polit-management standards. Computer systems are controlled by a combination of general controls and application controls. To ensure that a system's actions and performance are consistence with its goals requires regulation and control. Thus, any goal-directed system its goals, requires regulation and control. Thus, any goal-directed system must be associated with a control system, which monitors its behaviour and modifies its processor structure to correct any deviations from the desired performance.

Political-Computerize - Political-Computerize, in its strictest sense, implies the use of any technique to

make a polit-system or -process more automatic - i.e., more self acting and self regulating and, hence, less ,dependent on human intervention for proper operation.

Political-object - Object is real or conceptual entities that have attributes and constitute part or all the subject matter of an investigation or science. Political-Object is anything real or mental, of which a Politician is cognitively aware. An object is Statistical if it describes the generic relationship of a group of attributes and their possible values. An object is dynamic if precise values are associated with a specific example or form of the object.

Political-Fact - Actual Political-occurrences or -events. Pieces of information presented as having objective reality. Data structures that give Political-information about actual data values obtained.

Political-Entity –
1- A person, place, thing or concept that has characteristics of interest to the polit-enterprise.
2- A polit-entity is something about which we store data. For each entity type we have at least one record type. Sometimes more than one record type is used to store the data about the entity type. An entity type has one data item type or a group of data item types which uniquely identifies it.

Political-Activity - Something which is carried out in order to achieve a stated purpose. A Political-activity may be a Political-function, process, -procedure, or -program module.

4.5- Cybernetics as Fundament for Political Science - Cybernetics is the study of control, regulation, and communication systems, both in hardware and theory. The basic question it attempts to answer is "could machines be made to think?
The term cybernetics itself was first suggested by Wiener (1948) as the name for the new science of control and communication in animals, humans and machines. It involves a study of the problems common to control and communication, which had their original background in many sciences but for our present purpose it could be nearly identified with the general system approach.
Cybernetics concepts cluster around three related component concepts: systems, communication between systems, and regulation or self-regulation of systems. Cybernetics is the science of regulation and control - purposive regulation for adaptive system survival. The application of cybernetics leads directly into artificial intelligence and Computerize.

Political-Data; a mass of undigested Political-facts. Data are facts or are believed to be or are said to be facts which results from the observation of physical phenomena. Polit-data are objective measurement of the attributes (the characteristics) of entities (such as people, places, things, and events). These measurements are usually represented by symbols such as numbers and words, or by codes composed of a mixture of numerical, alphabetical, and other characters. However, data commonly takes a variety of forms, including numeric data, voice, and images.

Political-Information; Polit-facts which are digested, analyzed, and summarized so as to be useful to decision makers. Political-information is data which is used in decision-making. Polit-information is a relative quantity, relative to the situation, to the time at which a decision is made, and to the decision-maker and the decision maker's background and history. The terms 'information' and 'data' are sometimes used synonymously with 'information' supplanting Idata' in contexts where the emphasis is on the broad, grand, or useful aspects;
Political-information is a basic resource that Political-individuals and organizations must have to survive and succeed in today's Politic.

Political-Information Processing; A term sometimes used in place of 'data processing', particularly as applied to a large interactive system with a database. A term also sometimes applied to those functions of a computer system relating to the storage and internal manipulation of data as contrasted to interfacing or network management. We can define data or information processing as the processing of data to make it more usable and meaningful, thus transforming it into information.
An information processing paradigm has dominated much of cognitive psychology. It emphasises the individual's limited capacity for the in take and storage of information. Within this Paradigm attempts are made to determine what happens to information taken in form the senses. Flow diagrams are often used

to chart the processing of information, and much of the research effort is directed towards establishing the temporal characteristics of the psychological processes involved.

Political-System - The word "system" has become very popular in recent years. It is used not only in engineering but also in science, economics, sociology, and Politics.
Polit-system is a set of interrelated polit-objects. A more accurate definition of a Political-system would then be a relation among attributes of Political-object.
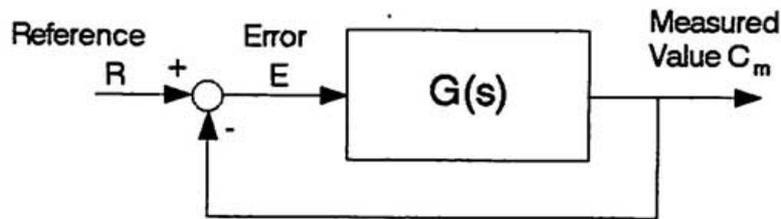
FIG. 4-3

FIG.4.3. IS A GRAPHIC DEMONSTRATION OF A POLITICAL-SYSTEM.

An interrelated Political-component that is viewed as a whole. A little more philosophically, a polit-system can be understand as a conceptually isolated part of the social, nature and abstract idea which is remarkable for intelligent people. Such a system has three basic interacting computers or functions.
     - Input; involves capturing and assembling elements that enter the system to be processed.
     - Processing; in next paragraph.
     - Output; Involves transferring elements that have been solves by the transformation process to their ultimate destination.

A polit-system can be viewed in one of the two ways: either as a mapping of input(s) into output(s) via a specified (fixed) transformation; or as containing a goal seeking (decision making) activity which, on each occasion determines the response of the system to the external stimuli. In the first case, we talk about an input/output (representation of a) system; in the second case, we talk about the cybernetic or goal-seeking (representation of a) system. The category of goal-seeking in terms of which the system is described determines its cybernetic structure; for example, adaptive, learning, multi-level, etc.
Every system interacts with its environment through two groups of variables. The variables in the first group originate the system and are not directly dependent on what happens in the system. These variables are called input variables or simply inputs. The other groups involve variables generated by the system as it interacts with its environment. Those dependent in this group that are of primary interest to us are called output variables or simply outputs.

Political-subsystem; if a system is one of the components of a larger system, it is called a subsystem, and the larger system is its environment. Also, a system is separated from its environment and other system by its system boundary.

Political-environment; a policy is an open, adaptive system that shares inputs and outputs with other system in its environment.

Political-interface; Several Political-systems may share the same environment. Some of these systems may be connected to one another by means of a shared boundary, or interface.

Political-open system; which is a Political-system that interacts with other systems in its environment.
Political-Adaptive system; If a Political-system has the ability to change itself or its environment in order to survive; it is known as an adaptive system.

4.6- Political-Control System - A polit-control system consists of a Political controller and a Political object. We use the general term Political object to describe the process which is being controlled. The

Political controller can be a person, in which case we have a manual control system. Alternatively, in an automatic Political-control system the controller is a computer, dialog monitor, etc.
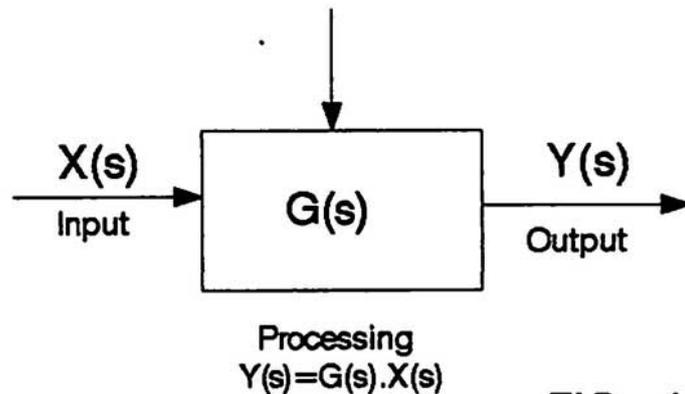
FIG. 4-4

The interface between the political object and the controller requires control elements to provide the control action. In addition operators and agents are needed to provide information about the Political-object status to the controller. The information passing between the controller and the object is in the form of events. This information can be very diverse, for example sentences or predicates or in Statistical form.

Modern Political-automatic control is based upon a unified body of Political-knowledge called Political-feedback control theory, which can be used to analyze and control the performance of complex devices and Political-processes.

Three major types of controls must be developed to assure the quality and security of information systems. These control categories are:

4.6.1- Information System Control - are methods and devices that attempt to ensure the accuracy, validity, and propriety of Political information system activities. Control must be developed to ensure proper data entry, processing techniques, storage methods, and information output. Thus, Political-information system controls are designed to monitor and maintain the quality and security of the input, processing, output, and storage activities of any Political information system.

4.6.2- Procedural Controls - are methods that specify how the Political information services organization should be operated for maximum security. They help an organization maintain the accuracy and integrity of operations and systems development activities.

4.6.3- General Controls - Are those that control the design, security, and use of computer programs and the security of data files in general throughout the polit-organization. On the whole, general controls apply to all computerized applications and consist of a combination of system software and manual procedures that create an overall control environment.

General controls are overall controls that ensure the effective operation of programmed procedures. They apply to all application areas.

4.6.4- Application Control - Are specific controls unique to each computerized application, order processing. They consist of both controls applied from the user functional area of a particular system and programmed procedures. Application controls can be classified as:

Input control - Check data for accuracy and completeness when they enter the system. There are

specific input controls for input authorization, data conversion, data editing, and error handling.

Output Controls - Output control ensures that the results of computer processing are accurate, complete, and properly distributed.

Those inputs and outputs associated with the response of a system that can be rationally perceived, interpreted, and satisfactorily measured by the common human senses (e.g., sight, hearing, touch, smell, taste, heat, cold), the rational communication mediums (e.g., language, mathematics, music, art), or other acceptable, logical, or value judgments.

Processing control - Establish that data are complete and accurate during updating. The major processing controls are run control totals, computer matching, and programmed edit checks.

4.7- Control System of Political Process (Political-process Control System) - Process control deals with the control of equipment and object in the Political-processes.

A Political-process control engineer must understand the processes and equipment involved in his region to great depth. The process control engineer will be familiar with different types of Political systems and their associated costs and performance characteristics.

An political computerize regulating system in which the output is a variable such as Political-conflict, - election, and investment is called a process control system. A remote system created so that the user is not human but instead dialog device for input or dialog device for output- and with a polit-process or sub process as object for controlling.

Typical requirements which are placed on process control systems include:
- High availability and reliability
- High accuracy
- Fast response
- Large number of variables and I/O interfaces
- Backup safety controls.

The benefits of using process control systems can be significant, particularly with complex processes. In some cases, it would be possible to produce large quantities of functional, high quantity Political-solution without a sophisticated computer control system. Additional benefits typically include.
- Increased solution throughput (by optimizing the process)
- Improved quality
- Reduced indirect labour
- Lower energy costs
- Reduced materials costs.

The basic objectives of most process control techniques is to detect variations in the process and respond to them with adjustments which will keep the process within prescribed control limits. This requires that several fundamental conditions be satisfied:
- It is essential to identify process variables that are critical to the enterprise ability of the solution.
- Control limits must be established for each of these variables to specify nominal values and allowable deviations that will assure the enterprising of the solution.
- A system must be put in place to monitor, measure, and collect data on these process variables.
- A technique must be adopted to take the observed data and generate corrections in the process when any of the variables exceed their control limits.

4.8- Computerize Control System of Political Process - Defined as the implementation of political processes by automatic means, the conversion of a procedure, a process, or equipment to automatic operation, the theory, art, or technique of making a polit-process more automatic, the investigation, design, development, and application of methods of rendering processes automatic, self-moving, or self-controlling.

4.9- Design of a Control System - In a hierarchical structure each level of the system is responsible for performing a different type of control. This is similar to the structure of an organization in which each level of management deals with a different scope and level of policy decisions deals with a different scope and level of policy decisions.

The design of a control system for a enterprising operation should consider such factors as:
- The nature of the process
- The number of individual operations under computer based process control techniques
- The effect of the control of each operation on other process steps
- The amount of data involved in the process control tasks
- The response times required for the control political behaviours.

These factors will influence the architecture of the control system as well as the choice of hardware and software to be used. The system must tie all the elements of the control process together: operator, data from communication, Organization data, and the control hardware and software. Advanced computer technologies, such as microprocessors, minicomputers, and distributed processing, have made hierarchical control systems practical. The modern approach to controlling the process of a complex enterprising is based on:
- Decentralizing the control process
- Distributing the acquisition of data
- Distributing the data processing.

Most process control systems run in real time and are event driven. They must respond immediately to unscheduled events that change the state of the process-for example, a variation in one of the process parameters or a malfunction of the equipment.

4.10- CCSPP Interfaces with other CIPSE Stations:

4.10.1- CCSPP / SCPP (Use of Statistical in CCSPP) - The most effective way to enterprising any Political solution is to get it right first time.

Achievement of this objective minimises cost and, assuming the specification is correct, maximises quality.

A SCPP package gives the user powerful facilities for filing out the following Statisticalal testes in addition to cross-tabulation, histograms, and descriptive Statistical.

4.10.2- CCSPP / DCPP (Political-Feedback Control System Real-time control or Political Regulation) a system with feedback and control components is sometimes called a "cybernetic" system, which is a self monitoring, self-regulating system.

Control is a major system function that monitors and evaluates feedback to determine whether the system is moving toward the achievement of its goal. It then makes any necessary adjustments to the input and processing components of the system to ensure that proper output is produced.

Automatic control of a Political-process, in which a computer system is used to regulate usually continuous Political-operations or processes.

A basic requirement for any control system is an evaluation of current activities-that is, feedback. Because many information systems are large and complex, several control subsystems have evolved to provide formal feedback from the system. Most feedback control systems, when isolated, are found to contain four elements:
- A function or process to evaluate,
- A set of standards or control total,
- A sensor to defect and measure items for evaluation,
- A control device to report and correct variances from standards.

the close loop feedback system is a feedback system of the first order, since the system is monitored against a single external goal and there is no choice available to the system other than to correct the deviation from that goal, irrespective of changes in the environment.

If a system can initiate alternative courses of action in response to changed external conditions, and can choose the best alternative for a given set of conditions, it is said to be a feedback system of the second

order. The system must be able to make choice, in a given set of environmental conditions, whether to reduce the difference between the current goal, or change the goal, which implies having a goal of a higher order and being capable of monitoring, in an additional feedback loop, the progress towards this higher order goal, and making decision.

If a system is capable of changing its goals by reflecting on past experiences, it is called a feedback system of the third order. This implies ability to redesign the types of feedback it receives according to their success in guiding the system towards higher order goals~ and therefore represents a learning ability.
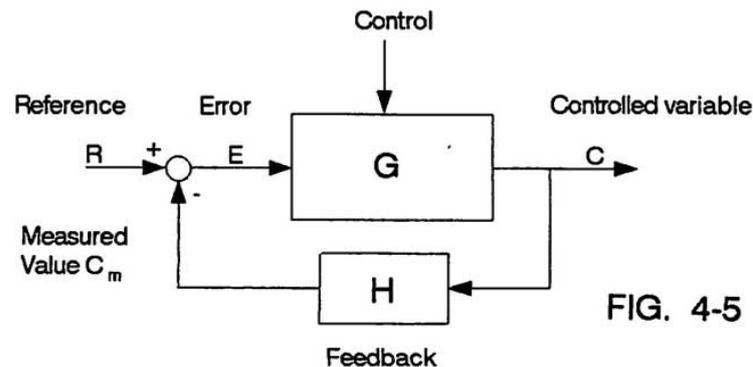
FIG. 4-5

FIG.4.5. PRESENTED A POLITICAL SYSTEM WITH FEEDBACK VALUE

Second and third order feedback are associated with systems that are capable of proactive as well as reactive making. Such systems can plan alternative methods of reaching their goals, by simulating various sequences of actions, and choosing the most appropriate. Any form of enterprising planning and control system involves notions of second and third order feedback.

4.10.3- CCSPP / PISE (Analysis and Design of Political System for Computerize Control with help of Petri nets) - Petri nets are very good tools for representing, analyzing, and simulating political systems because they have the following features:
- They provide a graphical way of visually representing a enterprising system.
- They capture precedence relations and structural couplings among concurrent or asynchronous unpredictable discrete events.
- They can easily model existing deadlocks, conflicts, and storage sizes.

Petri nets have been and are being used in many areas of data processing for the modelling of political systems, *in* the initial phase of system design.

The key questions asked in this text derive from the "logic" of political system design and its prerequisites:
- How is it possible to clarify system design questions in a non-formal and yet precise manner?
- How can an informally or incompletely described real system be broken down in a meaningful manner and its components individually analyzed?
- How can we move from informal system representations to descriptions that can be used as a basis for formalization?
- How do we handle systems that are hierarchically structured or are made up of several components that are relatively of one another?
- How can we separate different views and relate them to one another at different levels of abstraction?
- How can we model the (dynamic) behaviour of a system alongside its (stat ic) structure at the highest possible level?
- How do we represent individual and interrelated processes in (distributed) systems?

The field of software engineering emerged in response to the much-discussed "software crisis". Using life-cycle models, this system processes procedures that systematize the route from the formulation of

the problem to a viable program. The initial phases of such procedures are devoted to the assessment and formulation of system requirements. This is referred to as "requirements engineering". A number of methods already exist for requirements engineering, most of them integrated in tools. Petri nets have similarity with those methods. However, there are major differences.

The most obvious difference between Petri nets and other methods is the fact that nets give the same treatment to active and passive components and, above all, they provide the possibility of progressing, at a high level and with any degree of precision, from the description of Statistical components to the representation of dynamic behaviour.
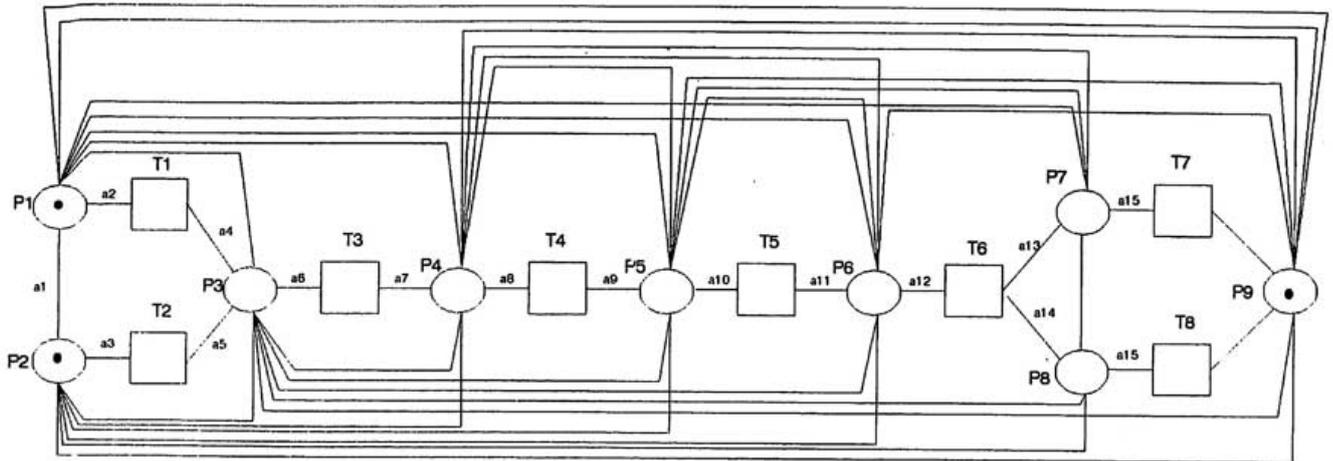
P1- Crisis in economic system
P2- Crisis in scientific system
P3- Crisis in social system
P4- Crisis in information, communication and public relation system
P5- Crisis in political system
P6- Crisis in legal and Justice system
P7- Crisis in politgeographic system
P8- Crisis in defence and militar system
P9- End of processes.

FIG. 4-6

FIG.4.6. IS AN EXAMPLE FOR USING OF PETRI NET IN POLITICAL SYSTEM STEP AND PROCESS DEFINATION

There exist several extended PN models (colored PNs, stochastic PNs, fuzzy PNs, etc.) that cover a large variety of enterprising situations and problems.

Petri nets theory aims at an understanding of systems whose structure and behaviour are determined by the distributed ness and combinatorial nature of their states and changes. It studies such systems at different conceptual levels, in various degrees of detail, and in many areas of application. One important branch of research in net theory is concerned with the conceptual and mathematical foundation of an update notion of dynamic system and its different ways of presentation (its model). The basic proposed by Petri as the common reference model of net theory. Other models are considered theoretical in a strict sense if they are derived from or, can be translated into the basic model.

If a dynamic system has an adequate representation in a net theoretical model, we call it a Petri system. In this paper we give an example of introducing a net theoretical system model which is called predicate/transition nets (Petri-nets).

A Petri net is a bipartite directed graph with two types of nodes: the places (represented by circles) and the transitions (represented by bars). These are joined by directed arcs. These arcs can be weighted. In the following, we assume that every arc has a weight equal to 1. The two ends of a given arc are different types. In this example, transitions are denoted by (Tl, T2, …, T9) and places by (Pl, P2, ... , Pn). Further, P1, PS, and P9 contain one tokens, and other places are empty.

Let P and T respectively the set of places and the set of transactions. A marking of a Petri net is a function M: P {O, 1, 2 …} which assigns a non-negative number to each place. Such a number represents the number of token in the place. A transaction T is enabled by a marking M if and only if each of its input places contains at least one token (assuming that the weight of each arc is equal to 1).

It is possible to assign a time to each transaction. In that case, the Petri net is called timed Petri net. Such time represents the time taken by the related transaction to fire.

An event graph is a Petri net such that each place has exactly one input transition and one output transition and such that every arc is 1-weighted.

Software systems have now been developed that permit the user to represent Petri nets graphically, store them, edit them, check them and revise them.

4.10.4- CCSPP / PDBMS and CCSPP / PCMS (Managing Database and Communication System for CCSPP) the high level of performs supervisory control functions over the solution operations. It generates solution schedules and tracks enterprising performance. It is also usually the source of operational data that is needed by the lower level systems.

At the highest level, the control functions are focused more on planning than on the operational aspects of enterprising. This includes forecasts, resources plans, and overall measurements. Central data processing functions may also be performed at this level, such as database management and data communications control. It also serves as the source for major common databases, such as engineering design information and solution plans.

4.10.5- CCSPP / PPMS (Managing project of CCSPP) – the purpose of control is to ensure that events conform to plan. Controlling involves locating or identifying deviations from plan and taking appropriate action to ensure desired results. Furthermore, control is concerned with the present and involves regulation of what is happening now. In a large measure we are concerned with regulating present activities in order to influence future outcomes.

For a project manager, the importance and the need to control are quite clear. The project manager is the one individual totally responsible for accomplishing project objectives on time and within budget. However, to be able to control, the project manager must have some frame of reference to measure against and he must have some way of determining when he deviates from this reference. This brings us to the essential elements of control.

There are four essential elements involved in control, and these provide the framework for any good project control system. These elements of control are:
- Setting objectives
- Reporting
- Evaluating
- Taking corrective action.

It is important to address the information system and the control system as two separate but highly dependent components of a total integrated computer-based project management system. In the design of the information system, storing, and processing data to produce information concerning project plans, schedules, cost, and performance parameters. In the control system the goal is the development of procedures and routines for evaluating plans against actual to define the deviations or variances in plans, schedules, cost, and performance; the assessment of the acceptability of these variances; and the systematic development and implementation of action plans by the appropriate organizational units to produce decisions and/or directions which attempt to correct the project's deviations from plan.

"The use of historical data, typical relationships, Statistical correlations, and practical "rules of thumb" can greatly add to the effectiveness of a project control program. Such information can provide guidance, in:
- Developing/evaluating schedules
- Assessing manpower requirements
- Determining appropriate productivity levels
- Improving cost/schedule assumptions
- Carrying out trend analysis
- Establishing the Cost of the project
- Evaluating the status and performance of the work

- Recognizing the scope of work, at all times.

4.10.6- CCSPP / POMS (Management Organization of CCSPP) - CCSPP team can:
- Define the Political-systems, -subsystems, -boarders, and -relations.
- Choose tools for CCSPP problem solving.
- Managing functions of CCSPP station and interfaces.

4.10.7- CCSPP / PIS (Intelligent CCSPP) - an intelligent control system can collect thousands of real-time process measurements and can use a knowledge base of rules and expert operator experience to advice or alert human operators. Such systems will make it easier for operators to control a process and in some cases may even make a very complex and sensitive process practical.
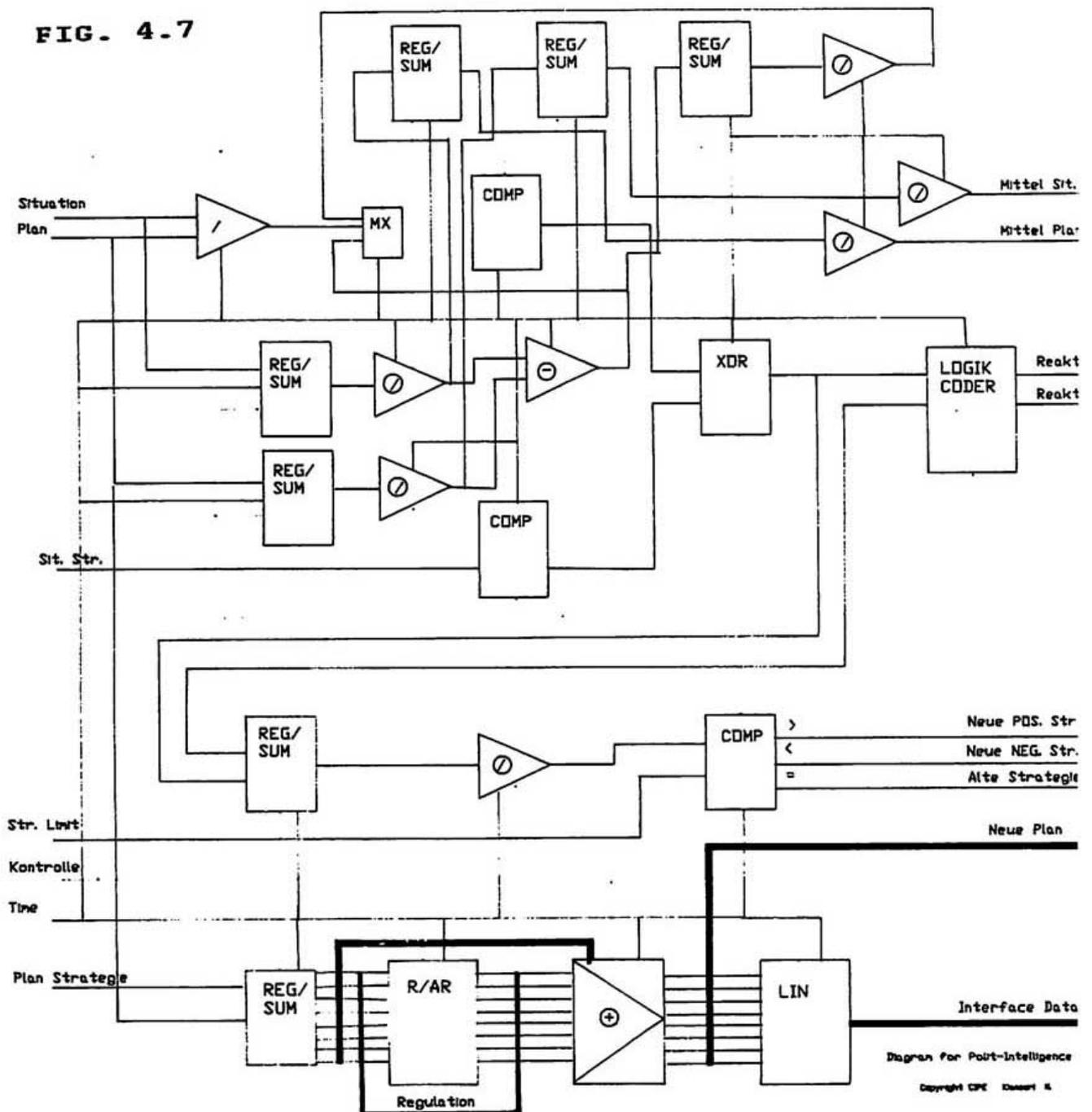
FIG.4.7. PRESENTS AN INTELLIGENT METHOD FOR DESIGNING COMPUTERIZES CONTROL SYSTEM OF POLITICAL

4.10.8- CCSPP / PES (Expert CCSPP) - The integration of expert system technology with automated process control systems can occur at two levels:
- The first level of integration would involve the use of an expert system to monitor the process and provide advice to the human supervisor.
- The second level of integration would involve the use of the expert process control system to monitor the process, provide advice, and act on the advice.

4.10.9- CCSPP / PESH (Managing Enterprise Software for CCSPP) - The software for process control systems often has to provide a number of special functions, such as:
- On-line, real-time task execution
- Interrupt logic
- Shared communication channels
- Management of the central processing unit (CPU) and memory resources for multiple tasks
- Maintenance of a system database
- Multiple or parallel processing
- Multiple I/O interfaces
- Fault tolerance.

The typical structure of a process control program includes
- several basic functions:
- A set of control limits or goals for the system
- A model of the process and control parameters
- An input from information resources (communication) to the model
- An output to generate commands to communication and organization.

Documentation - Computerized systems are a complex collection of data gathering processes, multiple users, output peculiarities, and technical equipment.
From polit-management's view, documentation provides employees with a clear understanding of political system objectives and concepts, and ensures adherence to enterprise policies. Because of its important role in Political-information systems, the three major categories of documentation are examined in detail, with references to the preventive characteristics of each.

1- System documentation; Since the system must be known to many people in a Political-organization, it is necessary to have sound documentation of the system itself. Specific systems documentation should include the following:
- Description of Political-system
- Political system flowcharts
- Necessary inputs and source documents
- Necessary outputs
- General file and record descriptions
- Control procedures, defined and explained
- Backup procedures.

2- Program Documentation; Program documentation relates primarily to computerized systems, although manual systems must also have written details of ledgers, journals, and procedures. For a proper program documentation file, the following should be included:
- General narrative descriptions of each system
- Flowcharts with input, output, data flow, subroutines, and operating sequence
- Testing procedures
- Implemented controls
- Sample printouts of outputs
- Input formats
- Operating instructions
- Authorization list for all changes

- List of all source programs and documents
- Interface program
- Description of file structures
- File retention procedures
- Error detection and correction procedures.

3- Operating Documents; Operating documentation relates to the daily conduct of activities within a Political-organization, and should include document flowcharts, input requirements, output distribution, operating procedures and instructions, and information interpretation.

4.10.11- CCSPP / PEHH (Managing Enterprise Hardware for CCSPP) - The lowest level controls the operation of machines. This involves tool and process control functions as well as data collection.
The next other of controls is a group of machines. This may be a enterprising cell or line. The control functions include information communication, data loading, and monitoring the status of the Political information's operation.
Now complex model models analytical and numerical skills to analyze system models. Now even complex models composed of many inputs and outputs and highly coupled nonlinear kernels can usually be analyzed with existing computer software.

4.11- Preventive Controls - Feedback control systems are concepts that are tailored to the functional elements of a Political organization. We can define control also as plan of Political organization and all the coordinate methods and procedures adopted within a policy to safeguard its assets, Check the accuracy and reliability of its polit-data, promote operational efficiency, and encourage adherence to prescribed managerial policies.
Preventive controls are more general in nature and are applied on a piecemeal basis whenever needed in the organization. It is Necessary for the systems function in the polit-organization. Many types of preventive controls are needed in accounting, and the following discussions of individual preventive control tools and techniques relate to Political-information systems.

4.12- CIPSE-CCSPP Project - In our system main emphasis has been put on the Dialogue Control component. An analysis of notations commonly used to describe the man-machine dialogue has been carried out. In literature several notation can be found: Transition Networks, Context-free grammar, Event model. Dialogue model can be graphically represented. This notation is based on the concept of user interface state and consists of a set of states and transactions from one state to another, where:
- State is a Statistical situation in the dialogue between the end-user and the application package;
- Transaction describes how the dialogue moves from one state to another;
- In order to give a complete dialogue description a set of specific information has been associated to each elements of the Automatic Petri Net notation. The information associated to the state is:
- State name (unambiguous identifier),
- Screen layout, set of objects defining the graphical appearance of the user interface corresponding to the state.
- Information associated to a transaction refers to the corresponding rules action performed at user and application level; these actions represent links towards Presentation Techniques and Application Interface components. These information are:
- Transaction name (unambiguous identifier).
- Event rule: 3-tuple of value which identifies the
- expected event (action at user level), the logical identifier associated to the graphical object on which must occur the event, and the name of interface routine corresponding to specific application routine (action at application level),
- Conditional function is a function attached to each transition which determines if the transaction can be performed; this allows definition of context sensitive dialogues.
- Output rule, couple of values which identifies the logical identifier associated to the object where the output data will be displayed, and the function to display output data.