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PRINCIPLES AND CHECK LIST
FOR HANDLING POST-ACCIDENT CRISES

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INTRODUCTION

What should be done when facing with a technological failure? Officials have, of course, the overriding duty to bring aid to the victims, to reduce the hazards, and to limit the human consequences of the accident as much as possible - and also to think about prevention of further accidents. But the examination of recent crises shows that this basic action is far from being sufficient. Failures generate deep turbulence that we must know how to deal with: sometimes colossal human costs are associated with them (indeed, immediate help may itself prove to be of limited effectiveness if it takes place in an inadequate framework; economic losses and breakdowns in legitimacy can also be of far reaching scope. And if the crisis requires significant re-directions of policy or strategy, the inability to face up to this can prove still more penalising for all those involved. Knowing how to handle crises is an absolute necessity.

But how should we proceed? How should the post accident response be conducted, while the question far exceeds the activation of any emergency plan to become one of handling hyper-complex systems that are vulnerable and often severely perturbed (or becoming so)? How to cope with these situations which are often very different in nature: the "simple" problem of representation (an affair of the "Seveso drums" type), a very serious accident (of the type of the Mexico gas explosion in 1984: between 800 and 2000 dead), or much more powerful disturbances (as in Bhopal or Chernobyl)?

This was the topic of our last book: "States of Emergency"¹. In it, we explore the extraordinarily variegated universe of post accident crises, initially stressing that the objective is the development of proficiencies to face up, with full responsibility, to a challenge that is new in its extent and acuteness. A crisis that is not properly handled brings a disproportionate socio-economic and human cost; and the additional problems are such that they no longer even leave room for the basic questions to be asked that can be raised by the event itself. We should again stress here that we are obviously not aiming at the simple "surface repainting", or the development of small "manipulation manuals". The issue requires a more serious approach. The prospect is one of clearing channels so as to escape from the incapability which often marks the responses the crisis situations, for the greater ill of each of those involved - including the victims; and if there is to be a conflict, that it can at least develop around the true issues, between enlightened partners.

A leitmotif of this book is that there are no recipes for dealing with a highly disrupted situation. Tactical difficulties, strategic problems and fundamental options are constantly involved in feeding the crisis dynamic. Something that can be of an obvious necessity in one case will be "the" mistake not to make in another context. Something that will be an unpardonable under-reaction in one case will in other cases be an irresponsible overreaction (to the extent that one can indeed suitably circumscribe these delicate concepts). Something that has proved satisfactory in a particular situation will be counterproductive in another apparently similar one. Whence our intentionally meticulous study of a wide variety of situations; it attempts to outline the many facets of a crisis dynamic - which always occurs like a kaleidoscope that is ready to change the whole of the reference framework at the slightest intervention - or lack of it.

Another fundamental lesson is that the capacity to handle a crisis is directly dependent on everything that has been done and set up before the crisis: the quality of accident prevention, the strength and flexibility of the systems, organisational culture, the operational nature of the assessment, the treatment of simple incidents (genuine attention paid, or shelving by oversight) - naturally without omitting the training specific to crisis periods.

We thus know how no circumstantial short cut can enable the crisis to be blocked off. Sleight of hand cannot be substituted for thorough work. But, once this effort has been properly undertaken, it is

¹ *Etats d'urgence - Défaillances technologiques et déstabilisation sociale*, Editions du Seuil, Collection Science Ouverte, Paris, March 1988.

indeed possible to attempt a condensed outline picture of the lessons learned. To bring an initial response to the expectations of numerous officials looking for operational guides. And no doubt also to begin to supply a reference framework providing each of the players, not of course with their own responses, but a base of common "grammar"; this is because, in general, each person has the most need for having partners who know the way through the labyrinth of the crisis.

In other words, we are talking here about the importance of constructing reference know-how for this special crisis time. The prospect may surprise, so used are we to the idea that the break-up situation cannot constitute a field for scientific analysis, a place still calling for organised action. We must however realise that it is high time to invest in these subjects, if we wish, during our technological failures, to avoid large scale wastage, coupled with tension situations that generate more blockage than progress. Naturally, a crisis will always remain a great moment of confusion and uncertainty, in which a number of mistakes will be made. But without a minimum capacity to analyse and a framework for action that is known and recognised, we strongly risk arriving at scenarios of continued aggravation that soon result in a worst-case policy played with determination by all the partners.

Here, we are undertaking this exercise in a condensed outline and proposing an identification of the major principles to be chosen for responding to the post accident situation; we have also tried to extend this overall framework as far as a list of actions that are not to be forgotten – the conjunction of strategic thinking and the immediate tactical capability does seem to us to be a requirement to be met. The approach in the form of a checklist may be a useful backing for those who have taken the time to determine elsewhere the multiple facets of emergency situations; it can help them in avoiding overlooking certain important considerations when the rush of events is thoroughly piling on its pressure.

We offer this tool in its current state, clearly knowing that it requires substantial improvements. It is aimed first and foremost at those in the centre of handling crisis situations, but many others involved can find a backing; and as we have just stressed, it more generally aims at laying down the first basis of common know-how necessary for collective action in times of breakdown. Naturally, the development of still deeper, operational thinking on these matters will require considerable collaboration; we are still only at the beginning of the approach¹.

The form of this contribution, which aims at producing response structures, is intentionally thorough; illustrations are given in the footnotes which, unless mentioned otherwise, refer to our book: "States of Emergency".

¹ A first version of this text was drafted as part of a study for the International Metropolis Commission on Major Hazards. It has been helped by the remarks and suggestions of Dr. Lucien Abenheim and Dr. William Dab (Laboratoire Gestion- Science-Technologie en Santé Publique, Unit 88, National Institute for Medical Research, France), of Alain Le Saux (International Metropolis Committee on Major Hazards), Dr. Rolf Kaiser (OECD), and Claude Gilbert (National Centre for Scientific Research, France) whom we would like to thank here. Any responsibility is of course our own.

I - REFLEX REACTIONS

Reflex actions that mean implementing emergency plans and alerting headquarters are naturally the basic responses; a number of "salvage" actions must be started without delay.

But, faced with a true crisis process, action is not an assured key: we do not know exactly what must be done faced with what is seen to be devoid of meaning, which may well generate as a response a simple operation that fuels the crisis dynamic still further while sucking in, as pure losses, the resources deployed. The major problem will be to understand the situation and its forces.

This however cannot be instantaneous. We therefore need to immediately set up the conditions that will enable this "intelligence" about the crisis to be acquired, while preparing the means for a general response and without losing the confidence of the players involved - three major types of effort which are to be pursued as soon as there is an event that has a high destabilizing potential. They have a common point: questioning. Whereas everything concurs to stop up the gaps as quickly as possible, it is necessary to ask questions and open up networks and information processes. This point may appear obvious; it is far less so in the actual situation: asking questions requires a gigantic effort in a crisis period.

This questioning process should indeed be maintained throughout the crisis; it will go alongside the inverse effort at reduction which also requires decision- making.

1. Strategic interpretation of the problem raised

The first point is the perception of the very existence of a problem: sounding the crisis signal. This does not raise any difficulty in the event of a spectacular accident, but may be trickier for non- visible, slowly developing hazards that have more important secondary effects than their immediate effects, etc. As a result of lack of information, of "psychological" awareness of such eventualities and often of "being on the outside" (when there is too much involvement it is often difficult to decipher the setting up of the conditions of an external crisis), there is a great risk of only mobilising at a late stage - when the crisis has already acquired a powerful dynamic.

Another reflex reaction in a complex affair, that is strongly marked by uncertainty: it is essential to perform an initial mental "triage" that can avoid several traps or at least to write them clearly on the instrument panel :

- Under-estimation or under reacting: a frequent attitude in the past, and still a serious danger.
- Over-estimation or over-reacting: a present day risk because of the sensitivity of opinion to hazard problems and officials' fear of being "caught short" by underreacting.¹

¹ After many failures due to under reaction and the denunciation of this attitude, the question of overreacting is beginning to be considered. It does not give rise to an open debate since it appears so tricky to handle - those who would denounce disproportion in response could then be accused of "backtracking". We can try here to situate a few input points in the discussion:

- Some people consider overreacting as being a lesser evil, but to a certain extent inevitable: "thinking big has a reassuring effect"; the costs in terms of credibility and image would be infinitely higher if things were left to ride.
- Others, with great disquiet, see officials moving along the road of exaggeration, that is dangerous for the immediate costs that it induces, the unserious image that it can give of the authorities in the longer term, the dead end that it prepares for the handling of subsequent crises, and the clearance that it offers chiefly for inadequate prevention, for a lack of capacity to analyse confidently the risks involved and for the delusion that it maintains as to the claimed disappearance of the cost factor as soon as there is a crisis (attempts are then made to guarantee the "zero risk", whereas it would be better to lay stress on the principle of transient standards that would be without genuine consequence if they were applied over the short period).
- In reply, the former still stress that "overreaction" is often denounced after the event, on the basis of data that the decision-maker did not have available in the middle of the crisis; in addition, what may appear as over-treatment with respect to the single criterion of the objective risk, may be analysed as necessary with respect to the also essential criterion of confidence. As may again be replied to these counter arguments, let us say that the question is open and worth thinking about. Several recent crises encouraged the malaise.

The key point here is to trigger off a questioning process to move away from "obvious things" and certainties that are too hastily accepted and put forward as such¹; notably, to escape from the confines of past experience (often not thoroughly analysed and thus misleading).

There is an immediate question to be asked as to the potential destabilisation factors. In particular on what can hinder the establishment of a clear diagnosis, of an assured prognosis. And quite clearly on the major crystal clear outcomes that may occur at high speed or on the irresistible degradations that can arise as soon as there is an announcement or a rumour of an accident that is very present in society's fears and representational thinking.

In other words, we must avoid the classical reflex of the "closed" reading of an "open" phenomenon (of course knowing that we should avoid, as a counter reflex, complicating a situation that is simple and creating a crisis out of nothing).

2. Putting a network response device on standby

Capabilities must be quickly set up for the conduct of a complex situation. The beginnings of a crisis cell will be of course set up, comprising in particular a general responsible official, experts and a spokesman, but we must think of putting broad networks on standby in the light of the technical, organisational and socio-political complexity of the matter:

- Information gathering network (multiplication of channels, both formal and informal)
- Expertise network (and not "one" expert).
- Decision-making network (beware of the myth of a single decision-maker for a true crisis).
- Network for the dissemination of information (internally, externally; the spokesman is only the visible part of the edifice to be built).

It must be quite understood and clearly demonstrated that a crisis necessitates the mobilisation of these networks, broadened to the scope of the complexity to be dealt with. Many internal and external partners must be made to work together, and they generally do not know each other.

A crisis results in a multi-pole organisational operation: remaining with a single pole model (an organisation that directs, a chief, the remainder being considered to follow on) is a guarantee for failure. We must therefore quickly build a functioning system in relationship with this difficulty that is specific to the crisis situation; in other words: open up networks.

Adjustment of the handling methods must correspond to this broadening:

- It is not merely a question of giving orders, but of being capable of impacting on and guiding action, of making the systems that are to be mobilised work coherently.
- There is no question of taking on the roles of others, but of ensuring that each one is clearly in a position to play one's own.

The first reflex is thus to weave the general canvas from which it will be possible to deal with the matter (in particular, it must be ensured that each one is and will be within reach). The prospect is thus, right from the outset, to construct a capability of inter-player response (whereas the natural tendency, because of insufficient knowledge of the nature of crisis, is setting up blocks which then very quickly self develop).

Anticipation and initiative are the essential parameters here. The key handicap to be overcome is the reticence that the players feel in establishing relationships with the outside during the critical period. Without a suitable internal culture, without thorough preparation for crisis situations, this handicap cannot be overcome. Particularly since the outside world often means "adversary" at least within a traditional view of the inter-player relations.²

¹ "One thing one should never be is to make assumptions. For example in Mississauga, if I had assumed that what I was told about the chlorine tanker not being in the derailed portion of the train was true, it could have caused a real disaster. When you arrive on the scene, never make the assumption that what you are being told is accurate. Always check the facts as much as possibly can, and then make your own decisions". D.K. Burrows (Chief of Police, Mississauga) p. 108.

² "Go beyond the fortress mentality. This new prospect is no doubt not easy to understand for a generation of managers (imagine suggesting to your president that he should meet activists because they want to "ask him the whys and wherefores"; the whole world is crumbling!). But if this cultural evolution does not take place, I find it difficult to see

3. Taking over communications

Information – to ones own employees, partners, the media, and the public that is most directly concerned and especially the victims (immediate, potential or supposed) – has become a dimension of crisis management to be taken on without delay.

Under shock, one should remind oneself and remind one's teams of a certain number of essential points:

- The "natural" reflex is to put aside considerations of information because of the pressure of events and the fear, here again, of dealing with the outside world. In fact, any information gap will quickly be filled by any information whatever - which will quite undoubtedly have serious repercussions.
- Virtually instantaneously, a "prism" is established through which everything that is said and done by the organisation will then be perceived¹. Any initial inadequacy will prove to be a serious and dramatic handicap if, at a given moment, the crisis management comes to depend solely on the confidence factor (because of extreme uncertainties).
- Three rules laid down by J. Scanlon are of capital importance:
 - "An emergency, among other things, is an information crisis and must be treated as such".²
 - "To a considerable extent, whoever contro access to information, whoever is the source of information, becomes the centre of operations and control".³
 - "Communications are so important in the aftermath of disaster that the centres of communication may well be the centres of operational control as well".⁴

It is therefore important to define a communication strategy without waiting, within the framework of fundamental principles laid down in advance - keeping clear of outmoded dissimulation reflexes (but without in any way only seeing communication in terms of the idea of absolute "transparency" in real time, which is undoubtedly more attractive than realistic).

The essential thing is to not immediately lose any possibility of action as a result of poorly undertaken communication⁵. To avoid this type of block, which is very difficult to remove afterwards, an initial reflex must be to reassure its credentials right from the outset by clearly displaying the responsibilities and major rules that will be observed as regards information (both internal and external).⁶

how one could think of developing social consensus which is so vital for the company, and a fortiori to master a crisis situation: if a manager approaches a crisis as the head of a fortress, he is lost". E. Fasel (Sandoz) p. 133.

"My conviction is that we should also, in similar cases, develop our relation with our so called adversaries, who manifest serious misgivings about the future of the western world. Even if there is a divergence of opinion, we must take it seriously. And particularly, we must understand that communication is not firstly a matter of technique and professionalism, but rather a question of culture." P.J. Hargitay (Bhopal), p. 124.

¹ "The company must say what it knows as quickly as possible. Do not wait to hand out bad news: indeed, at the limit, the faster one is in the trough of the wave, the less painful is the process; because hope can then be handed out again, instead of always blackening the picture, which little by little kills the capacities for reaction. Other rules: to say all that one knows, to only say what one knows, but to specify clearly: "we do not know everything; wait to receive other information". Indicate the possible trends in the situation, with their probability. One certainty: the pattern is laid down in the first hours, the first 48 hours; it is within this pattern that the following weeks and months will take place: it will be virtually impossible to modify it". E. Fasel (Sandoz) p. 131-132.

² J. Scanlon : The Miramichi Earthquakes : The media respond to an invisible emergency, Emergency Communication Unit, ECRU field report 82/1, School of Journalism, Carleton University, Ottawa (p. 31).

³ J. Scanlon : Crisis communications : The ever present gremlins, Emergency Communication Unit, Reference to COMCON'82, Arnprior, Ontario, 26 May 1982 (p. 17).

⁴ J. Scanlon : "Crisis communications in Canada", in B.D. SINGES, ed. Communications in Canadian Society, Toronto, 1975 (p. 429).

⁵ It must be known that the path is narrow today. "The citizen is generally suspicious a priori; he develops a resolute suspicion at the first signs of incoherence, a radical rejection at the slightest trace of dissimulation: a difficulty or a fault in communication rapidly leading to the process of all- round intentions, a genuine gangrene for all post accident situations". P. Lagadec, p. 32.

⁶ "The first measure towards the outside was to send a telex to some 800 European media in order to inform them that we were at their disposal, that doors were open, but that we could not however always give answers to their questions, though we were hoping to meet their requests for information. For internal communication, and although we still at that point had no details about the accident, our first concern was to regularly inform the Union Carbide workers. The

Here again, it is certain that only open thinking (a culture which cannot be improvised), maintained by communications practices that are solidly established before the event (on bases that are not only institutional but personal), permit any hope of avoiding rapid failure (often instantaneous).

Here we have the whole spirit of this reflex phase: not permitting the problem to turn into a net to catch those responsible and very quickly all of the players. This trap is menacing these days for several reasons:

- Those who are in charge of handling the crisis generally have not been trained in such complexity.
- The necessary networks hardly exist.
- The basis of credibility and legitimacy of the various people involved, starting with that of those responsible has become brittle¹.

Caution

- Always keep a critical distance with respect to information received, action and mechanisms launched; the big risk is not to be caught on the wrong foot in reading the basis of the problem raised and the general strategy deployed.

- Beware of the reflex decision that is to "freeze" systems involved.² Always question the effective pertinence of the shut down, the capacity to keep this shut down over a long period, the reasons that would allow for a return to service (on what criteria? with what argument?). Involving the symbolic and exaggeration may be tempting, but caution should be exercised against the serious risk of falling into simply gesticulating and thus losing even the recognition of any technical competence whatever.³

- Beware, for an operator, of the reflex reaction which is to hide behind the public authority. The operator should rather more explain that he himself is taking his responsibilities, which does of course not exclude a close link with the authorities (from whom he will naturally comply with any possible freezing decision).

- As regards communications, do not immediately think in terms of information "not to be given": during crises, the authorities are often informed after the press, by the press. Operating with a defensive pattern is to expose oneself to terrible inconveniences when, on the event, the rules of the present media society are discovered. Similarly, with numerous other players, who may turn out to have unsuspected power; not to think in terms of networks but only of "in house" operation will often be suicidal.

lesson is capital: the priority must not be the press, but the employees; if not, one simply runs the risk of implosion." P.J. Hargitay (Bhopal) p. 115-116.

¹ "Citizens do not grant any extreme credibility to officials; they look twice before recognising in somebody - for a period and a limited field - any legitimacy whatever. What is granted is only by a contract, on the basis of past performance, and in renewable stages, on the basis of comparative results. The contract is cancelled on the spot if there is the least suspicion of incompetence (failure being itself an initial reason chosen), abuse of power (and the technical options that involve major hazards are not far from being perceived by some people as effectively amounting to an abuse of power) or a refusal to communicate (an intention now assigned a priori) P. Lagadec, in pp. 35-36.

² See the case of the halting of flights of DC-10s throughout the whole world in 1979, Cl. Frantzen and L. du Boullay, pp. 175-209.

³ See Ph. Vesseron, F. Ailleret, pp. 154; 296.

II - GAINING INTELLIGENCE OF THE CRISIS AND OF ITS DYNAMIC

This screening task is indubitably one of the most difficult in crisis management. It consists in permanently identifying what is really involved, what is growing out of it, what could occur... over and above the appearances and initial perceptions – knowing that at any moment the problems connected with the failure itself interact with the much more general social brittleness which here find material for expression, crystallisation and aggravation.

One essential thing is to avoid the constant lag between facts and reading them, the systematic lateness of the dynamics of the event, the blindness to the fundamental issues. Such handicaps generate renewed strategic faults, ill timed actions, inopportune declarations or even here again, frankly suicidal ones.

In the same way, the continuous identification of the major errors not to be made or already made is an essential basic task. This point is highly tricky, to the extent that the judgement criteria may be highly varied and sometimes contradictory; for instance, the respective position to be given, depending on the time, context and event, to the "purely rational" actions on one hand, and to the processes that arise more from symbolic treatment on the other (but without sombering in the irrational which would be eminently dangerous).

To successfully complete such a task, it would be necessary to set up small teams of top level officials highly experienced in questioning on these topics, and used to reviewing together the questions raised by the strategies followed in a wide variety of crises. These teams should be immediately mobilised in the event of potential crises so as to possibly bring their support to the decision-making bodies. In addition to being highly conversant with the elusive world of crisis, they have a certain advantage of being external that is useful for analysis; they would thus constitute an extraordinarily important factor giving a feeling of security to officials suddenly placed in the front line (and often left without support).

Experience has shown that the factor of "being outside" (previously identified as being useful for having the necessary objectivity) should be taken into account in the composition of these teams, which should not remain "in house" groups.¹

1. Making a diagnosis, developing intelligence as to the major fault lines created or revived by the affair

This is firstly a matter of being able to characterise the situation and its risks, based on pertinent parameters adequate for crisis dynamic; the log appears to be somewhat overburdened, but the number of parameters to be followed is in fact fairly high:

- * Effects, whether or not circumscribed in space or, in time (immediate/deferred effect).
- * Risks for individuals or risks for grouped populations (social visibility).
- * Whether or not impact on sensitive populations (children, pregnant women, etc.).
- * Accident forming part of a series or not; whether or not immediate responses are possible.
- * Spectacular accident or not; visible or invisible hazards.
- * Hazards that are well known or totally foreign to the field of conscience at the time; easy to explain or supposing in-depth scientific knowledge to be understood.
- * High symbolic loading ("dioxin", "nuclear", "genetic", etc.).
- * Whether or not possibility of counting on scientific expertise, within a period and within uncertainty limits compatible with the decision-making demands.
- * Existence of identifiable "guilty parties" or intangible responsibility.
- * Existence of clearly identified officials as being in charge of the response to the accident or a vacuum in roles and handling.
- * General climate in which the event takes place: quality of relationships between partners at time zero (within the organisation and outside); capital of credibility, legitimacy of all parties.

¹ See Ph. Dessaint, p. 242-244 (PCB affairs); P.J. Hargitay, p. 118-119 (Bhopal); R.L. Dilenschneider, p. 283-284.

- * In a general way, the "heritage" in the field: statements made previously, information given, experience with failure...
- * etc.

These examinations must be extended into the following strategic question: What is the fundamental engine driving the process which emerges and could expand?

2. Critical study of the responses formulated

A crisis produces a break in the organisation of day to day life as well as in symbolic representations. It will be wished to respond immediately on a common sense basis, which is especially attractive since it has simplicity and is well received by the media.

This applies to the diagnosis of the problem raised. Many "certainties" may be hastily bandied about¹; many results of analysis may be read without sufficient consideration as to their limits of validity (and there always remains the risk of trivial errors made by several teams²).

The same applies for the responses proposed: doing what is always done, or the contrary of what has proved to be damaging beforehand, will immediately come to mind. In a general way, there must be an outlawing of "false solutions": a number of "solutions" are only dangerous conjuring tricks.³

We must also be attentive to the major positioning errors:

- * Guarantee absolute security.
- * Make it believed that science has a response to everything.
- * Respond by overreacting.
- * Allow oneself to be fascinated by the media scene.
- * Loose its sense of balance because of the margins of freedom of action that open up and that are particularly great since the conventional mechanisms disappear or break down.
- * Slide off into the catastrophe mind set, or the reverse, into a hasty negation of the seriousness of the situation.
- * Be paralysed by the fear of "panic" (that the specialists say is above all a myth) when it would be better to plan for a judicious use of the capabilities of populations.⁴
- * Reinforce, by acts or the simple absence of initiatives, the cleavage between "those in the know" and "those who undergo".
- * etc.

Thus, a systematic and continuous critical follow up of the interpretations made, the solutions proposed by those involved and by observers. In a general way, excessively rigid frameworks of thought must be broken up, as regularly being hindrances in crisis management. Once again, the sorting out of the serious facts to be taken in account without delay and the wild imaginings to be eliminated immediately will be much facilitated by the intervention, as a back up, of teams experienced in working in a crisis universe.

3. Setting the position of assessment in the decision-making process

We must firstly clarify what the decision-maker will ask the experts: to make a diagnosis? to prescribe solutions? to produce follow up?

Intelligence on the possibilities and limits of the assessment (scientific limits, limits due to the "culture" specific to the body of experts consulted, etc.) is essential (which here again presupposes prior practice).

¹ See the question of the "bolt" in the DC 10 affair, Cl. Frantzen, L. du Boullay, p. 178-179.

² See the Cathode Ray Tube (CRT) affair, L. Abenheim, p. 263.

³ See the German decision to break up discharges with bulldozers in the Seveso barrel affair, Ph. Vesseron, p. 153.

⁴ See the observations of E. Quarantelli (Disaster Research Centre, USA) and G. Esteva (Mexico earthquake), pp. 312-314; 328-329.

The question must then quickly be asked as to the position that the assessment could take in the dynamics of the decision-making.¹ In the event of over-long time periods or uncertainties, work must be set up on broad spectrum scenarios.

Particular attention must be paid to the major implicit bias that may arise to hinder the passageway between assessment and decision-making.²

4. Scenarios for the development of the affair; follow up of the general reaction to the event; study of possible initiatives

Along what lines (possibly contradictory ones) can the material facts, the implied networks, the taking of stands and the symbolic gaps evolve? "No win" situations especially will be identified, in which any option, along with its converse, comprises major drawbacks.³

There will be permanent follow up of:

* Information flows generated by the situation:

- declarations of spokespeople;
- dissemination of information by the many "contact points" that exist between the responsible departments and their environment;
- information given by the media;
- rumours, etc.

* The field of conflicts. Here again, care should be taken not to remain enclosed in a frozen view of the situation: major reversals of roles and alliances must be envisaged (current or possible).

A highly open anticipation effort - not ruling out contradictions - is indispensable. There should be no hesitation in asking questions about the major themes of the debate that have not yet appeared, and the possible collapse of images.

Continuous study will be made of the possible initiatives, that could or might be taken by the partners: initiatives that could unblock a situation, consolidate a position or detract from the basis of the structure on which the whole response strategy is organised, etc.⁴

5. Post crisis prospects

A prospect as to the way out or possible ways out of the crisis is essential for being able to think of a conduct of the crisis that is guided by major objectives. In the same line of thought, consideration must be given to the fact that the present crisis will probably not be the last: coherence over a long period is necessary. Management of the present crisis should not be done in such a way that it will ruin any possibility of managing a subsequent crisis.⁵

Two pitfalls should naturally be avoided: taking a passing flare up as a sign of a fundamental upheaval; on the contrary aiming at a simple return to normal if there are effectively major questions.

Caution

Care should be taken that this intelligence work is carried out effectively: questions kept open, errors to be avoided constantly updated, caution in the face of the temptation of avoiding these queries and making them disappear under a heap of technical decisions, etc. They should even be entered into a log retaining a written trace of the analysis and reasoning, which are the basis of all action developed to stem the crisis: this memorandum can be used both during the crisis in the event of an impasse and after the crisis for analysis and training purposes.

¹ See the CRT affair, L. Abenhaim, p. 257-263.

² Thus, in the slow-motion crisis constituted by the spread of AIDS, the fact that the population originally affected was the homosexual group weighed enormously on the decisions taken for public health in the United States: initial non-intervention would no doubt not have occurred if the disease had first affected another group (see the book by Randy Shilts: *And the band played on. Politics, people and the AIDS epidemic*, St. Martin's Press, New York, 1987).

³ See the case of Union Carbide for Bhopal, pp. 58-59.

⁴ See for instance a possible overreaction for image reasons, P. Lagadec, pp. 35-36.

⁵ See Ph. Vesseron, p. 156.

III - STRATEGIC CONDUCTING OF THE CRISIS

We now know that, when faced with a crisis, a crisis organisation diagram, a crisis team, etc. must be set up and activated quickly. But we must take care not to stay with "mythology": "having convened a crisis team" does not mean "having solved the problem". The system still has to be managed.

The essential part of the task of this management, in a degraded system, is to permanently construct:

- Margins for manoeuvre, by opening up options, networks, time periods, etc.
- Stabilisation, by the interplay of interventions judiciously combined over time
- Coherence and rationality, when everything may explode and turn into fantasies
- Credibility and confidence, the collapse of which would ruin any possibility of stabilisation.

1. Set up a decision-making pole

Being clearly displayed as such, it is up to this "pole" to take over giving impulse, direction, coherence and credit to all of the actions undertaken. Its authority will come above all from the proficiency that it will be able to demonstrate in handling the situation (and not its position in the paper plans).

It will have to combine at the same time:

- Management capacity.^{1,2}
- Aptitude in understanding the fundamental difficulties of contemporary crises and in handling the intervention of any networks in a destructured universe, marked by contradictions and uncertainty.³

This central decision-making pole should be able to establish links with other involved decision-makers as quickly as possible. As previously indicated, setting up a support group experienced in crisis management could be of capital assistance to officials in the front line.

2. Make the response system operate

The response activity itself comprises a large number of aspects, and in particular:

- Managing the emergency, making as much use as possible of existing systems and planned rules, without giving way to the temptation of creating an entirely artificial ad hoc system.
- Mobilising other networks, according to their usefulness, and integrating them in the general action (without forgetting the legal system and the trade unions). One should keep in mind that the extent of the matter requires having available protagonists of a sufficiently high hierarchical level (avoid being limited to the public relations services). Expect lots of non- reaction, non- willingness on the part of key people in the situation who do not understand that there can be a hurry and a crisis.
- Manage time, ie.: duration, time periods, dimensions that are often forgotten by the many people involved:
 - * quickly recall that crises often last longer than forecast;
 - * ask: what state will the system be in this evening, tomorrow, next week, etc.?

¹ "We must have people who are not content with reassuring and seeing things coming, but who know how to make decisions. And this, even if they don't always take the right ones". D.K. Burrows, Mississauga, p.105.

² "The incapacity of senior officials to master this type of problem is the cause for the amplification of many crises. Generally, most people try to find out how they are going to be able to hide. They do not want to be blamed. Strong people in a crisis are those who dare to speak out and say clearly: "I'm taking the situation in hand". There are not many people who do this. Most of them will try to get out of any responsibility: they know that their career could be compromised and their reputation put in the balance" R. Dilenschneider, p. 282.

³ "Asking proper questions turns out to be more important here than pretending to pull ready-made responses or completely finished settlements out of a hat ". Ph. Vesseron, p. 148.

- Manage anticipation, initiative:
 - * identify what must be triggered off straight away so that the system can respond tomorrow, so that the context can be handled the day after tomorrow, etc;
 - * not remain with the mere rules of operation provided for non-crisis situations; know how to work with poorly defined, "variable- geometry" rules and responsibilities.
- Manage conflicts, both internal and external, that are always present in a difficult situation:
 - * in particular: be prepared for the psychological shock that the sudden emergence of subsequent conflicts within a structure may represent.
- Watch the support to be given to the most exposed groups and individuals:
 - * never leave them alone: providing security (for officials) is a requirement which is often poorly perceived and yet essential;
 - * remind one and all what the current and specific difficulties are in this crisis situation: fuzziness, uncertainty, conflict, contradictions, tendency to fly off into the imaginary and fantasy, etc.;
 - * warn them about the frequent errors in this type of circumstance; for instance, the risk, for the decision-maker, of expedient behaviour (of the type "I've got to do something").
- Faced with "black holes":
 - * review the intelligence that is available about the crisis;
 - * respecify the prospects that there are on the outcome or possible outcomes of the crisis;
 - * make clear the major logic of action: this means defining a few fundamental guiding principles, in particular the essential purposes and means that are sought for, or that are refused. This is to situate the action undertaken within a framework and avoid the constant adjustment to the last occurrence that happened;
 - * reclarify roles and responsibilities;
 - * pursue the study by scenario, to get away from what appears evident at the time.
- On a lesser scale: identify a series of intermediate objectives, which will enable the progress made to be shown to everybody, as well as maintaining morale which is subject to serious attack.
- Manage information gathering, which may appear difficult because of inadequacy of data, or because of too much of it (a new problem in the computer age).
- Manage communications:
 - * open up communications channels very quickly.¹
 - * give some consistency to communications: written information; direct contact with experts, who will have been chosen for their technical proficiency, their aptitude for communications, and their knowledge of crisis situations.²

¹ "The public must be fully informed frequently and accurately through the media from the outset. This must be done by one or two highly credible senior spokesmen who understand the situation and can explain it calmly and clearly in lay language. The first 24 hours of a crisis are critical.

- If this is not done, a public information vacuum probably will develop rapidly quickly – and will be filled by rumors and alarms far worse than the real situation.

- Silence, in the midst of a crisis implies guilt, whether justified or not.

- It is not enough merely to assure the public that everything is OK and that there is no reason for alarm. To be credible, we must provide details of how that conclusion is drawn.

- It is vital to realise that reporters face deadlines dead have hour-by-hour. Information must always be correct, consistent and current, even if all answers aren't immediately available." Donald R. Stephenson, Are you making the most of your crises, Emergency Planning Digest, Emergency Planning Canada, Oct-Dec. 1984, pp. 2-5.

² "Harold Denton arrived at the plant that afternoon. A three-way hotline was installed there to connect him with me and with the President. Later that night Harold and I met for the first time and spent an hour-and-a-half reviewing the situation. It was quite clear that his slow and relaxed North Carolina drawl, his way of smiling naturally as he spoke, his ease and apparent candor with the press, his ability to speak plain English as well as nuclear jargon – all of these factors soon were to make him the world's most believable expert on the technical situation at TMI.

Harold Denton joined me for a press conference that night, put facts in perspective, lowered the level of concern and earned his spurs with the press – and with me. As Day Three wound down, I felt we finally were equipped to handle misstatements, second guessing and false alarms that were certain to continue" R. Thornburgh, The Three Mile Island Experience : Ten Lessons in Emergency Management, An address to the International Conference on Industrial Crisis Management, New York University, Sep.5, 1986, p. 12-13.

- * Have as a prime objective not to "reassure" but to inform (it is only possible to effectively reassure a laudable objective if the situation is effectively less serious than it is perceived, by a demonstration of competence in analysis and intervention, coupled with a clear information policy).
 - * Clearly remember that the conventional model of the single spokesman must be repositioned within a more complex framework: systems involved permanently generate verbal and non-verbal information flows which weigh as much if not more than the declarations made by the planned channels.
 - * Do not forget either that information is to be given to many different publics: do not remain with the media alone. There is thus no single communications model.
 - * Take care about the coherence and continuity of messages over long periods.
 - * Naturally show proof of organisation and technical proficiency in the relations to be established with the press (media command post, regular press conferences, etc.)
 - * Do not think of communication in terms bereft of any humanity.¹
- Do not omit to reposition the crisis in its context:
- * What is not affected by the problem must continue to live.
 - * View must not be lost of the post-crisis situation: the system must find a viable balance over the duration, beyond the exceptional period of the crisis.

3. Have mastery of the question of assessment

Setting up a tough assessment device and defending the image of it are important preoccupations.

- Very quickly build up a network of experts based on nodes that must have been built up and trained in advance for collaboration in an exceptional situation. Make sure that there is never just one specialist, particularly if he does not have his own network, if he has never undergone such demands or if he risks not to benefit from wide public confidence.
- By playing on the serious nature, clarity, recognition of divergences, assist the experts in escaping from the rut of expansion; build consensus or at least closeness on:
 - * methods;
 - * criteria and standards (general, transitory; for workers, for populations);
 - * results;
 - * their presentation.
- In the same line, attempt to avoid experts quickly losing credibility, which is a threat to them as well.
- Do not push the experts too far; to where they can no longer work quietly, to where they are forced to work precipitously. There is a difficult contradiction to manage here: the more the situation is disquieting, the more there will be a tendency to exert pressure on the experts ... who must be able to work with appropriately more calmness.² In general, it is essential to separate the assessment function from the decision-making function.
- Request a validity range for the results obtained.
- For all risks raising problems of health, attention should be paid to having available, in addition to expert chemist for instance, experts in public health capable of "taking a stand", in spite of the existing serious uncertainties, on the risk-taking strategies that are open to the decision-maker.³

¹ "If you communicate like a technocrat in today's world, you will be lost; if you are too emotional, you will push yourself into ideological speeches. A way must be found between the two, which simply means being human. And what is true in human relations is just as much so of the internal climate: a company that has no consideration for its staff will get through a crisis situation very badly". P.J. Hargitay, p. 122.

² See B. Favez, pp. 160-174.

³ See L. Abenheim, pp. 270.

- Prepare for the idea that it may be necessary to decide without the results of the assessment - too much uncertainty, or contradictory or lengthy to obtain.¹

As regards the experts, they will attempt to identify, for each major option, the risks associated with it. Any solution involves risks (alongside the direct effects, we should not forget the perverse effects). We must thus move from a "problem/solution" model to a "risk comparison" model.²

We must also know that the most "conservative" choices that are perhaps essential (not necessarily) will most certainly be the most costly financially... and that cost is not a guarantee of pertinence. The "symbolic" cost itself is still more difficult to assess, both as to its extent and its usefulness.

Often, the process will lead to thinking about the most tolerable option involving risk, after examination of a number of parameters that are indeed difficult to isolate one from the other: public health, environment, economy, social acceptability, etc.

As with the media, the decision-makers will make sure not to be operating in the wake of the experts. They will ask themselves continuously as to what the assessment can bring them and within what time period. There are decisions that they will have to take before receiving the results of the analysis: there is then no need to wait. There are others which can be clarified by the assessment; still others could easily be decided upon after a quick assessment, etc. In other terms, a strategic approach to the use of assessment is essential.

4. Handling the system until termination of the crisis

The overhasty suspension of the crisis devices is a common error which should be guarded against; the system must be accompanied until a new equilibrium situation has been fully recovered.

Take care not to consider forgetting in haste to be a good settlement of the crisis. If, as is in general the case, the crisis is a manifestation of the existence of fundamental problems, the management of the crisis cannot be considered to be terminated if the necessary reexaminations are not put underway.

Caution

Special care should be taken to avoid the most frequent dead ends:

- Do not immediately close any margin for manoeuvre, but try to expand those that exist.
- Do not lose because of the communications, but do not base everything on communications alone.
- Do not forget the essential position of the media, but do not stop with this player alone, nor leave them hanging.
- As always in a crisis situation, keep a critical distance with respect to events and the action deployed.
- Follow up the quality of relationships between actors, the capital in terms of credibility and legitimacy that is available, the possibilities of major strategic errors.
- Lastly, find a good balance between the necessity for this critical distance that is necessary and that of firm and recognised leadership.

¹ See L. Abenhaim, pp. 261-263.

² See the discussion of evacuation from the epidemiological angle, L. Abenhaim, p. 265.

IV - ORGANISATION

Faced with the Brownian movement that crises represents, we must immediately respond with organisation rules aiming at guaranteeing coherence, including in detail.

1. Activation

- As soon as the problem is perceived, get the planned networks to work (with the necessary extensions):
 - * Check that the assignments to be assumed are properly attributed: handling and general coordination, technical follow up and communications, management of current affairs not concerned with the crisis.
 - * Specify or respecify the attributions and responsibilities at all levels.
 - * Identify the gaps in taking over problems.
- Set down in writing the initial items of information.

2. Follow up

- Information gathering :
 - * Note in writing any information, mentioning the date, time and source.¹
 - * Establish the context of any information: first hand, second hand, under what collection conditions, etc.
 - * Diversify the sources of information and cross reference the various data - do not hesitate to check;
 - * Draw up a list of those involved, their addresses (telephone, fax), their preoccupations (including those for journalists)
 - * Follow the information in the media; follow the development of interpretations, germs of conflicts and rumours.
 - * Attempt to obtain analysis and opinions that are different from those circulating both in official circles and in the media.
 - * Assemble information on the technical subject involved, past deficiencies, etc.
- Contact with the media: understand how to shift from individual contact with journalists to a large scale media response (numerous press teams). This requires: strong presence, rules of the game (responsible official, regular press appointments), organisation (access facilitated and defined for the press, well organised systems of passes).
- Contact with the population concerned: here again, the rule is not to let wide "no man's lands" develop that can only produce rumours, incomprehension, anxiety and rejection. The key factor here is respect for the victims, the recognition of the dignity of their position (manifested by concrete initiatives). A basic principle must be that the populations have an active role to be played in the post accident phase, contrary to the commonly accepted idea that victims are thrown into hysteria and become totally dependent on institutions.²

¹ "The events that take paroxysmic turns often develop over time. If one does not force oneself to write down the facts, the information and decisions, the means of reassessing situations is very quickly lost when it appears the crisis is extending: even though one must be in a position to return to the real facts behind the interpretation that may have been made at a given moment. But nobody spontaneously bothers to draw up, right from the outset, this verifiable memorandum of events.", Ph. Vesseron, p. 146.

² "The episode constituted a spectacular demonstration of the aptitude and the organisational capacity of citizens. It suggests that the authorities should conceive their policy so as to consolidate people's activity: the idea is that of complementarity not substitution. A second lesson somewhat detracts from the first: left to themselves, people find no way out. In a difficult situation, marked by a number of post-accident aggressions, people need outside allies. But such outside intervention must respect their autonomy and at the same time back up their initiatives." G. Esteva, pp. 310-322.

3. Operation of crisis teams

- Location: the principle of managing the accident from the site is often stressed (on-site command post, off-site fixed command post); however, allowance should be made for the fact that a crisis may not have one focal point (generalised or non-localised threat), or have a number (indeed, we must not necessarily superpose the location of the accident and the location(s) of the crisis).
- Make sure to comply with certain separations:
 - * Separate the information reception and processing location on the one hand and the decision-making location on the other (it will indeed be pertinent to introduce the concept of this "information filtering centre" that is capable of presenting decision-makers with analysed and organised information with a view to the choice between the options built up).
 - * Separate "technicians-experts" and strategic decision-makers (the second must be taught to respect the operating autonomy of the former¹, that could be "protected" by giving them a "technical leader" capable of getting their voices heard).
 - * Provide, alongside the decision-making room, small rooms for the operation of "liaison teams" (linking officials with their departments, by direct lines and faxes).
 - * Separate clearly the place where political personnel can be received (fixed command post) and the "hottest" operational locations (advanced command post), to be protected firmly from untimely visits.
- Limit the number of participants.² Clearly display who is in charge of the situation (this will also facilitate the circulation of information within the organisation).
- Manage the crisis team over the duration (incoming, shifts). Do not forget to pay attention to the fatigue of those involved (learn how to go away to eat and sleep).³
- Immediately lay down a number of clear principles in the crisis room⁴ :
 - * Display the major rules of management (eg.: "no contradiction between spokesmen"; "respect for all questions"⁵; "follow up of all requests: no person intervening will be left aside").
 - * Keep a log: information received, questions raised; information given; rumours; standpoints, statements; unsatisfied requests for information (who should call back); decisions taken: which, when, by whom?
- Visualise the status of the situation:
 - * Display the facts.
 - * Display the decisions taken.
- Pay attention that all the partners, at least internally, are working on the same information and update it (network of facsimile copying, even internal television system, etc.).
- Have adequate resources. Exercises will reveal here the inadequacies that are easy to rectify but very penalising in crisis situations; we need to have available:
 - * specific communication lines that enable the problem of the immediate saturation of telephone switchboards to be got around;
 - * direct lines between key points in the system;
 - * telephone sets with loudspeakers (very frequent shortcoming)
 - * premises that are acceptable and equipment that is usable at nights and weekends;

¹ "We can isolate the operators and leave them to do their work. I think it would be dangerous to go and stir up people. To get the best out of everyone, each person must have the conviction that there is confidence in him, that he is going to have to express all his competence." B. Favez, pp. 168-169.

² "If there was one thing that we have learned from this, it was that on such a large scale operation, you must separate those with responsibility and expertise and those who have neither one nor the other. Everyone wants to be in the think-tank sessions, but you simply cannot do it, because it slows down the decision process. You do not want people converging on the scene just to get their names in the papers" D.K. Burrows, pp. 102-103.

³ "In the case of crisis, people must be told that they are rendering a poor service to their organisation if they remain around the clock in the office for five days. Certainly, some of them are capable of withstanding this better, but everybody finishes by cracking up." E. Fasel, p. 132.

⁴ See P.J. Hargitay, pp. 113-125.

⁵ "There are no stupid questions there are only stupid answers". P.J. Hargitay, pp. 115-116.

- * key experts who can be mobilised at any time, etc.

In matters of cost, it will be noted that the idea is not to permanently freeze immense resources, but to provide for devices that can be pinned onto lightweight systems that are in constant operation.

Caution

As has been said previously, the crisis cells are tools, not magic means. They can only be truly useful if they have been tested beforehand, the risk being that they soon function in a closed circuit and constitute, for the departments that participate, not a gear-down tool, but a cutting off of their means of analysis and management. Whereas everything is naturally leading to isolation, attempts must be made to always construct open networks, to take care of the problems of communication and information. Thus, it must be expected that there are not only experts from the authority but experts connected with the press, firms, victims, journalists, foreigners, etc. This pattern does but reinforce the necessity for setting up extended networks where it is possible to talk together.

V - ANALYSIS AND TRAINING

The crisis that is being tackled is no doubt not the last one that will have to be faced. It is therefore important to think of setting up, immediately, analysis methods of what is taking place for use for learning. A continuous data recording function must be explicitly recognised and taken over.

In the post-accident analysis phase, which must begin immediately after the toughest period (reality is rebuilt very quickly after the testing time), the essential will be to gather evidence targeted on points that are most useful in the apprenticeship. Three questions could have pride of place:

- How has one been plunged into this affair?
- What were the most difficult moments in the crisis?
- What lessons have the witnesses learned for the management of high turbulence situations?

These analyses must then be taken up in the in-depth training work - to be developed as three main principles¹ :

- The "culture" of men and organisations: the problem of fear, of action in a destructured universe, opening up to one's environments - which supposes abandoning the fortress spirit.²
- Technical knowledge of the crisis systems and an aptitude to make use of them.
- Aptitude to handle intra- and inter-organisational problems in a crisis situation.

This training will first of all be aimed at all those who may have to handle similar disturbances: Ministerial officials, police chiefs, chairmen and general managers of companies, advisers, etc. But also quickly for the attention of other major players: mayors of large cities, experts, journalists, those responsible for associations, etc. And naturally in the major postgraduate schools and universities. This will take place particularly in the form of simulation seminars.

To nurture this thinking, a systematic follow up of any significant post accident crisis occurring in the world is essential. Teams whose creation has been suggested at the beginning of this text would naturally have a central role to play in the effort of collecting and analysing information, as well as in the training task.

As a backing to this, research work - which remains very widely to be developed - appears necessary on points such as the following:

- Basic problems: assessment, uncertainty and emergency; powers and legitimacy in crisis situations.
- Knowledge acquired in other fields (eg., in international crises).
- Follow up of crisis cases.

¹ "I think that there are different strata. In depth, and particularly for questions concerning communication with the public, there are problems linked with the habits and culture of organisations (even if the word is a little worn out). This should lead to thinking about the crisis of others and asking with humility how one would have done oneself, to reaching a better knowledge of the trends in our society and the expectations of our compatriots in normal situations as well as in crisis situations; this is a long term problem; trends will necessarily be slow.

But at the other extreme, I am convinced that there are problems of know how and operation which are perhaps not very difficult to settle: the idea of a crisis team with a distribution of roles, the coordination to be made, etc. All this is somewhat technical and this can come relatively quickly. Training sessions can be developed and this type of preoccupation stressed whenever someone newly takes on a job ("you are responsible for this and that, think about your organisation in the event of a crisis"). One can also use the channel of a posteriori analysis of crisis situations, even relatively limited crises: even a rapid analysis shows the existence of problems of logistics, permanent teams, and understanding... all factors that can easily be improved.

And then, there are somewhat intermediate questions: the in depth organisation, the mastery of time periods, problems of confusion between the various powers, etc. Here again, it is probably by thinking, by trying to have instructions, by having exercises from time to time, that progress can be made.

There are accordingly many channels for action. But it is certain that the overall trends are slow: it is probable that if a really difficult and deep crisis were to occur now, it would perhaps not be treated very differently from five years ago." F. Ailleret, pp. 296- 297.

² See E. Fasel, pp. 133.

- Methods for the implementation of simulation for which both theoretical and practical know-how is widely lacking.

All these efforts, targeted on the development of capacities for handling crisis, should also be envisaged with the aim of prevention – the first objective being naturally to avoid accidents.