## Pandora Forward Looking Cell



### Published by:

Danish Emergency Management Agency Datavej 16 3460 Birkerød

Phone: +45 45 90 60 00 Fax: +45 45 90 60 60 http://brs.dk/eng

June 2016



This is a DEMA concept paper. It serves as a concept summary and a practical guideline for launching a forward looking analytical cell, intended as a self-contained addendum to a crisis management staff. A forward looking analytical cell can be set up and run in any number of ways. Modifications to this suggested approach, or any of its parts, may be warranted in order to best fit the context in which it is deployed.

Feedback on this concept paper is welcome at kri@brs.dk.



### **Pandora**

### Forward Looking Cell

### Introduction

We face unpredictable risks. We know that crises are inevitable, but the nature of the next crisis remains unknown to us right up until the hour when we are faced with the challenge.

Crisis management organisations are usually well-equipped and competent at providing an overview of the current state of affairs (i.e. "situational awareness"). In essence they answer the questions "what has happened?" and "what is being done about it?" – essentials when it comes to addressing the situation as it currently presents itself and to coordinating the crisis response. Still, when reviewing historical cases, it is evident that variations in the specific developments of even well-known incident types often end up blindsiding crisis managers.

Managing a crisis response at any level requires the full attention of the personnel involved. There is rarely time to ponder over much other than the current situation and what is being done to address it. Yet, a concise overview of potential imminent dangers and difficulties would appear to be a valuable asset in the effort to anticipate the development of an unfolding crisis.

To address this issue, DEMA suggests the integration of a forward looking unit into the crisis management organisation as we know it. We refer to this unit as the "Pandora Cell".



Figure 1. Example of a standard crisis management organisation, including a staff and staff support functions – supplemented by a Pandora Cell.



### Aim

The task of the Pandora Cell is to analyse the on-going crisis and identify circumstances that may cause the current situation to deteriorate in the near future. These could be elements of the crisis response effort itself or elements relating to the organisations providing it, just as they could be issues stemming from the general dynamics of a given crisis.

As such, the cell works independently and isolated from the remaining crisis management organisation, but provides the crisis leadership (e.g. chief of staff or a similar function) with regular output from the analyses.

### Output

The Pandora Cell aims to produce a list of 3-5 issues for the crisis leadership to consider. Underlying rationales can be given on request, but the output should be kept short and concise.

Appendix 1 contains an example of one format the output could take. This includes a title and a description of an issue/adverse scenario, a short summary of reasons for including it ("qualification"), as well as indicators that may provide early warning that a given issue is gaining momentum. The output of the Pandora Cell can neither be regarded as predictions nor forecasts. Rather, it provides plausible adverse scenarios for the consideration of the crisis leadership, to enable proactivity and due care in the crisis response. Additionally, it helps to ensure that previous mistakes are not repeated, by duly noting lessons learned from previous incidents that hold relevance to the situation at hand.

### Cell Composition

Depending on available resources, the Pandora Cell may be made up of three or more people, including a cell leader. An analytical mindset and some experience with crisis management are desirable assets, but no other particular skill set is required.

As a group, a set of individuals that are already acquainted (or perhaps even working together on a regular basis) and have heterogeneous educational backgrounds, may provide the most conducive brainstorming environment.

Ideally, the Pandora Cell will be readily able to draw on the scientific advice of experts who constitute a professional or academic authority in a given field. This can happen on an ad hoc basis. Such experts may also be on call, rather than physically embedded in the Pandora Cell.



### Workflow

The workflow described below consists of four phases: (I) Calibration, (II) Sense-making, (III) Sense-breaking, and (IV) Presentation. This process, as summarised in figure 2 below, may be run once or twice a day – depending on the nature of the crisis.

Printing the workflow directly on a tabletop-sized canvas or similar will help track progress throughout the phases. Physically placing note cards in the boxes and moving them as discussions proceed will also help maintain an overview and facilitate the revision of some ideas at a later stage. Alternatively, the workflow chart may be displayed using an AV projector. The sections that follow provide a description and some general guidelines for each of the phases in the workflow.

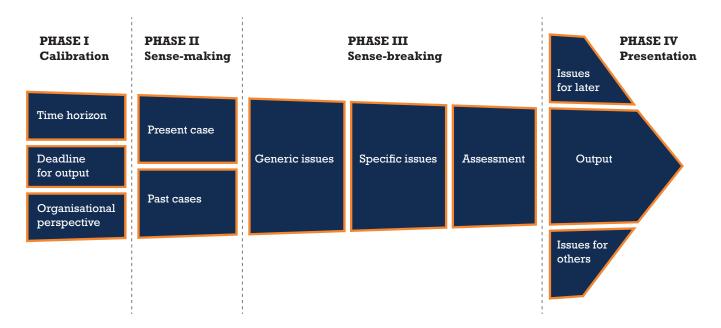


Figure 2. Pandora Cell workflow. Refer to the appendix for a larger image.

### Phase I: Calibration

Before starting the analysis it is vital that the scope is calibrated. This is done by considering three questions:

### · What is the time horizon for this particular analysis?

The default time horizon is 24 hours – meaning that any developments that may indeed cause the situation to deteriorate, but would take longer than 24 hours to materialise, will not initially be considered. Keep in mind that the time horizon must be recalibrated for each iteration of analysis.

Appropriate time horizon depends on the nature of the crisis and may vary with its specifics. Also, crises tend to develop faster in



their initial phases, while the challenge of gaining a full perspective on events is also present. Consequently, as a rule of thumb, 24 hours may be added to the time horizon for every 24 hours that pass since the onset of a crisis.

In this way, the longer a crisis runs, the longer the horizon for future developments will be. As the crisis leadership starts to refocus on recovery efforts, the time horizon for the Pandora analysis may be incrementally extended even further (weeks, months, or even years).

• What is the appropriate deadline for the first (or next) output? Any analysis can take as much time as you are prepared to spend on it. In order for the Pandora Cell analysis to be helpful, however, the cell must at some point deliver an output.

As the crisis leadership may not actively request an output, let alone fix a deadline, it falls on the Pandora Cell itself (or its leader) to set one. Delivering an output too late will render it obsolete, which makes setting the right deadline all the more important.

Several factors will influence the deadline, such as the nature of the crisis, how fast it is developing, and how much information is available.

• From which organisational perspective will we view the current crisis?

A national crisis management staff may take the widest possible view on how a crisis develops. For other crisis management staffs, with a particular remit, the aim will be to identify what could cause the current situation to deteriorate for that particular organisation and for its part in the wider crisis response.

Once all members of the Pandora Cell have been made explicitly aware of the calibration of time horizon and organisational perspective, the process of analysis can begin.

### Phase II: Sense-making

Once a crisis sets in and the Pandora Cell assembles, the primary task is to create an overview. As such, this task is similar to that of other entities during the ensuing "chaos phase". However, while the remaining parts of the crisis management organisation are oriented towards their own immediate place in events ("what has happened?" and "what is being done about it?"), the Pandora Cell starts by scanning historical records for similar cases, or for crises that share significantly similar traits, although not necessarily being directly comparable to the situation at hand.

This research is done in order to quickly map out major issues that have arisen before in a comparable country or context, any lessons learned in the aftermath of previous crises, and the expected trajectory of a crisis similar to the current one. Once the first edition of a consolidated situation picture is available from the crisis management staff, the Pandora Cell has information available on both the present case and past cases.

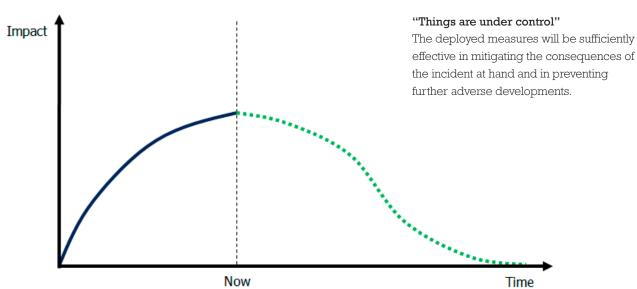


Figure 3. The standard trajectory illustrates frequently anticipated results given the deployment of measures to remedy a given crisis situation.

As the body of validated information on the present case grows, so does its applicability in the Pandora Cell analysis. Through later iterations of the workflow, as the crisis unfolds, emphasis will shift from the initial past-case-information to predominantly present-case-information.

The initial gathering of information may be conducted with one team or individual assigned to each respective type (current case/previous cases) or in conjunction. As time is of the essence, the analysts will work individually or in teams, with a short deadline before a cell plenary.

At the cell plenary, each will present their relevant findings. Due to time constraints, not all material can be researched in detail. The plenary or the cell leader decides which avenues are to be explored further.



### Phase III: Sense-breaking

When managing a crisis we aim to stop a given incident, threat, or hazard from unfolding further and to mitigate its adverse effects. Naturally, we deploy the measures we expect to remedy the situation to the best of our abilities. If this indeed proves to be adequate, the crisis will assume a "standard trajectory".

The Pandora Cell works to challenge the assumption that the crisis will follow this standard trajectory by considering, and elaborating on, possible alternative trajectories. When studying previous crises that have developed adversely after their initial onset, it appears that they take roughly four different forms. Accordingly, the Pandora analysis pursues four generic trajectories:

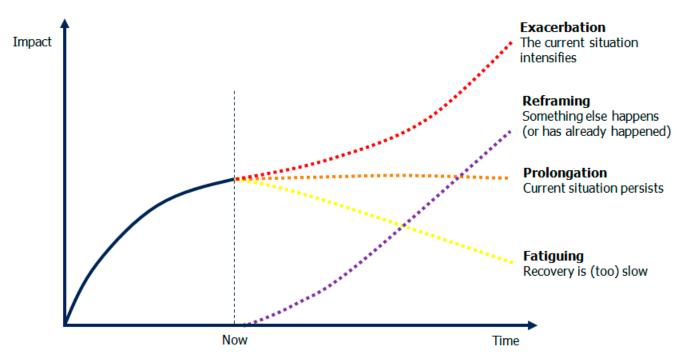


Figure 4. Four trajectories of a crisis alternative to the standard trajectory.

**Exacerbation** The incident itself, or driving factors behind the cascading effects it creates, intensifies beyond the means initially allocated in response to it.

**Prolongation** Response efforts are unable to effectively put an end to the cause and/or effects of the crisis. The incident and its effects continue to cause significant problems and require a continuous elevated state of emergency.

**Fatiguing** The situation improves, but only slowly. Organisations or citizens are unable to resume their daily doings and parts of society continue to lack significant functionality or services.



### Reframing

Our initial understanding of the situation appears to be inadequate or misleading, or an additional and unrelated incident occurs during the on-going response to the initial crisis, thereby shifting the entire process onto a fundamentally different trajectory (e.g. an environmental incident that suddenly becomes a political incident).

The analysis departs from a pre-compiled list of issues that are commonly known to complicate the management of crises. This list, the Issues Inventory, should be adjusted to fit the given crisis management organisation ahead of time and undergo revision in light of evaluations of incidents and other events that may be relevant to its context. Even so, the list should still be considered non-exhaustive.

DEMA's standard Issues Inventory is presented in full in Appendix 1. It lists potential issues categorised in four themes. No single theme takes priority over others, and the categorisation is made solely for the purpose of aiding overview and orientation within the inventory.

Departing from the available information on the present situation and knowledge gathered from comparable cases in the past (cf. figure 2), each item in the Issues Inventory is first checked against the following questions:

- 1. Could this issue be relevant to the current crisis?
- 2. How might this issue express itself in the context of the current crisis? (i.e. with the alternative trajectories of figure 4 serving as inspiration, could this issue spark a situation or an event that would cause a significant deviation from the standard trajectory?)

The shortlisted specific issues may be drawn up directly in the right column of the Issues Inventory (see Appendix 1).

Next, in a plenary session the cell discusses each issue/adverse scenario identified in response to question 2 above. Here it may help to elaborate on each issue using a separate piece of paper. Blank paper or Post-it® notes will suffice, but printable fold-over cards designed for the purpose are also provided in Appendix 1.

The aim of the discussion is to determine which are relatively the more pertinent issues, given what was established in phases I and II. This is done by identifying - for each issue - which drivers (and to a lesser extent, constraints) that exist in the current crisis or its context, and that may prompt this particular issue to build up. A driver is a condition or circumstance that conduces to, but not necessarily in itself causes, a certain situation or development. Drivers could e.g. be of social, political, economic, or psychological nature.

It can be helpful (though not essential) to further consider:



**Driver strength** How do we estimate the current strength of the driver(s)

identified? Is it e.g. widespread across society or rather marginal? Will it have a large impact in itself or does it rely

on other factors?

**Driver momentum** Is this driver currently accelerating, constant, or slow

moving, or does it rather have the potential to intensify over a short period of time and with little

warning?

**Indicators** If a driver is not visible at the moment, but still

considered possible, what signs can we look for that may tell us an issue is starting to build? As a crisis progresses, this will help serve as an early warning of a potential problem becoming an actual one.

The printable fold-over note cards provided in Appendix 1 accommodate for notes on the elements above. If further research into specific issues is necessary the physical notes can be divided between team members, acting as a task reminder. This one-card-per-issue principle also helps to keep discarded ideas at hand, should they later gain relevance.

Issues/adverse scenarios that are estimated as pertinent are moved to one side of the table in a semi-prioritisation exercise, meaning that they are divided in two categories only:

- (a) issues that could realistically cause an urgent deterioration of the crisis within the present time horizon (moved to the workflow charts "assessment" box), and
- (b) issues that could well cause the crisis to deteriorate, but currently lack indication of sufficient strength and momentum in the set time horizon.



### Phase IV: Presentation

From the previous shortlist (a), the cell makes a qualitative assessment of which issues that are most likely to lead to a deterioration of the current situation. Depending on the list size, all or some issues are presented to the crisis leadership.

The output from the Pandora Cell needs to add value to the crisis response. What is ultimately passed on from the cell to the crisis leadership must therefore be kept clear of excess or repetitive background information. It is also important that the Pandora Cell does not duplicate work done elsewhere in the crisis management organisation by interfering e.g. with the Situation Picture Cell or the Operations Cell. The Pandora Cell output is a set of recommended points of attention for the crisis leadership to consider at its own discretion.

As the Pandora Cell by definition has its attention fixed on worse-than-expected scenarios, the message it relays may not always be well received. To ensure a constructive reception of Pandora Cell recommendations, it is necessary for the recipient to have an advance understanding of their purpose. Good interpersonal relations and/or an additional oral briefing on the Pandora Cell output may also help.

Issues that do appear pertinent, but fall short of the time horizon and organisational perspective as set in phase I, belong in the corresponding boxes "Issues for Later" and "Issues for Others". While the first can be run through the process along with new issues in a later iteration, issues that could be important for other organisations should be conveyed to them, if possible.

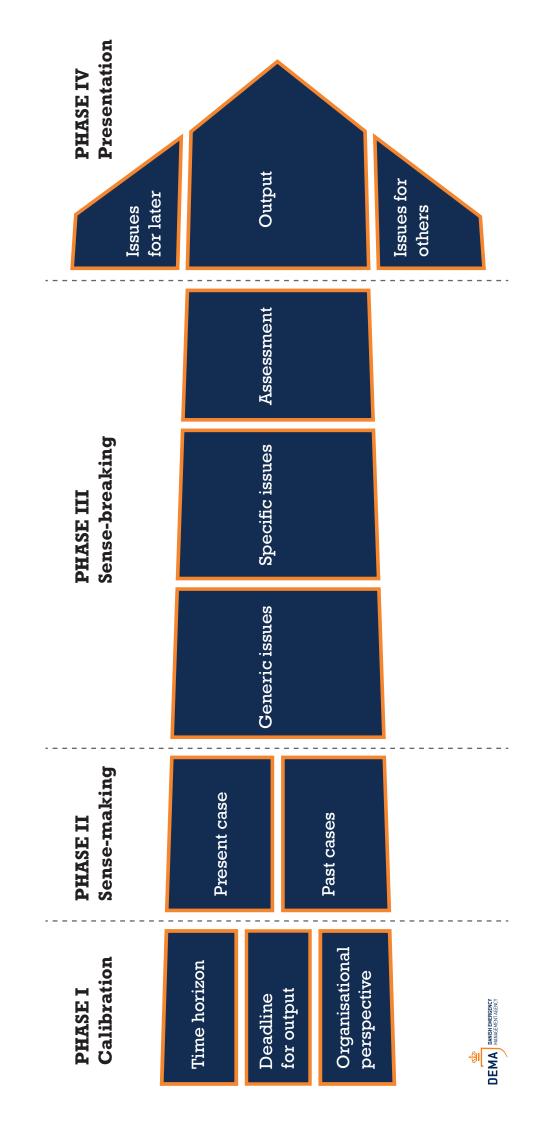


### **Appendix 1: Templates for the Pandora Cell Work Process**

### Contents:

- Workflow Chart (printable)
- Issues Inventory (printable)
- Fold-over Note Card (printable)
- Fold-over Note Card with Explanatory Text
- Pandora Cell Output (printable)
- Pandora Cell Output with Explanatory Text





### **Issues Inventory**

(page 1 of 2)

### Generic Issue

Which issues appear particularly relevant to the situation at hand?

### The Incident Increased intensity ..... Prolonged duration ..... Increased casualty rate and/or material damage ...... Different from what was initially assumed ..... The projection or forecast is misleading ...... [...]..... Loss of Control Breakdown of physical barriers ..... Breakdown of procedures ..... Breakdown of communication systems ..... Inefficient crisis management ..... Insufficient overview Insufficient situational awareness..... Lack of attention to loss and needs of those affected ...... Insufficient focus on recovery ..... Loss of credibility or reputation ..... Loss of political support (local/national/intl.) ...... Rumours/misinformation ..... Anxiety/unrest ..... Undesirable behavioural changes ..... Active resistance towards authorities ..... Riots .....

[...].....

### **Specific Issue**

How might this issue present itself, specifically?



### **Issues Inventory**

(page 2 of 2)

### **Generic Issue**

Which issues appear particularly relevant to the situation at hand?

### Resource Shortages

	3 · · · · · · · · · · · · · · · · · · ·
	Staff shortage
	Transport shortage
	Insufficient facilities, systems or equipment
	Insufficient time
	Exhaustion/fatigue
	Limited redundancy
	Fiscal limitations (short/long term)
	Insufficient leadership/prioritisation/delegation
	Insufficient back-office support
	Insufficient training/experience
	Insufficient technical capabilities
	Insufficient recovery capabilities
	[]
	Spreading
	Breakdown/failure of critical functions
	Critical functions under pressure
	Knock-on effects between sectors
	Geographical extent (local/national/international)
	Social and/or psychological impact
	Pollution/contamination
П	r 1

**Specific Issue**How might this issue present itself, specifically?



	1	Date: Time:	DEMA DANISH EMERGENCY MANAGEMENT AGENCY
	1		
	2	Description:	
	1		
	1		
	1		
	1		
	1		
	1		
	,	Previous/other similar cases:	
	1		
	2nd FOLD		
lst FOLD			
	1		
	1 1		
Indicators:	1		
	1		
	-		
:mujuəmoM	1		
	1		
	1		
	<b>+</b>		
	1		
Strength:	1		Drivers:

Time:

DANISH EMERGENCY

Note cards are intended as a

- help structure the individual tool to thought process
- support group discussion
- shortlist or group together the issues being discussed

Completion is optional and should be done to the extent it is helpful.

Title:

Give a title that summarises the issue as it could present itself given specific circumstances. Use a unique and memorable phrase, if possible.

Description:

Here you can expand on the contents and implications of the issue, e.g.:

What could be the potential geographical extent of this issue?

What possible immediate consequences does this issue entail?

What further repercussions could this issue have? + other relevant dynamics

### Previous/other similar cases:

What other cases do we know of, where this issue has been evident?

Are there any significant caveats to be aware of, as to differences between past cases and the current situation (e.g. era, country, climate, politics)?

1st FOLD

an actual one.) an early warning of a potential problem becoming (As a crisis progresses, this will help serve as prild?

for that may tell us an issue is starting to still considered possible, what signs can we look If a driver is not visible at the moment, but

Indicators:

period of time and with little warning? have the potential to intensify over a short Are drivers constant/slow moving, or do they :muinəmoM

 $\kappa = 1$  on other factors? Will it have a large impact in itself or does it more marginal? Is it widespread across society or presently

For example: Thoughts on the strength of driver(s) identified. ztrength:

FOLD

- Financial context

- Political backdrop

- Public sentiment

- Stakeholders' situation

- Time of year - Weather conditions

rook to e.g.

Drivers:

tasane to build up? the current situation, may help cause this What conditions or circumstances, surrounding issue will emerge in the current situation? What reasons do we have for believing that this

# Pandora Pell Output

Incident title: Time horizon:

Date:

Organisational perpective:

Time:

[ISSUE TITLE]

[Description of possible adverse situation developing and recommended points of attention]

INDICATORS

QUALIFICATION
[Historical lessons learned]
[Assesment of present drivers]

QUALIFICATION
[Historical lessons learned]
[Assesment of present drivers]

2

**[ISSUE TITLE]** [Description of possible adverse situation developing and recommended points of attention]

INDICATORS

ω

[ISSUE TITLE]
[Description of possible adverse situation developing and recommended points of attention]

QUALIFICATION
[Historical lessons learned]
[Assesment of present drivers]

INDICATORS

## andora Cell Output

### Incident title:

Possible outbreak of foot-and-mouth disease (FMD) in Denmark

### Time horizon: 24 hours

### Date:

dd.mm.yyyy

### Time:

Organisational perpective:

hh.mm

## INDICATORS

downplay the challenge or outbreak is contained and unambiguously determined. being rolled back, prior Stakeholders attempt to impression that the to this having been publicly give the

## QUALIFICATION

Conflicting reports from different authorities involved in the crisis response will weaken public confidence in the response at home and abroad. If the crisis response is perceived as unprofessional or inadequate, this will add to the long-term

Conflicting Reports Impedes Public Confidence

consequences for the industry and exports.

DEMA Crisis Management Staff should:

authorities.

• Be wary of declaring the disease as contained. • Ensure that all communication with media is coordinated with other relevant

- · Several previous instances to mismanaged outbreaks consumer confidence due restrictions and low of longterm export are known.
- already actively commented · Several stakeholders have on initial suspicions of

## OUALIFICATION

- · FMD has been known to trans mit via streams and
  - current weather conditions, value chain, and given the rivers in previous cases. disease is not contained. livestock throughout the it is plausible that the With a high mobility of

## INDICATORS

· Additional herds test positive for FMD

### 0

## Staff and Facilities Shortage

Should the disease prove to have spread to several other farms, a higher demand for quarantine facilities and competent staff than DEMA can meet may arise. Such a demand will be acute and could arise in any region of the country.

# DEMA Crisis Management Staff should consider:

• Determining the current maximum capacity.
• Possible ways of procuring supporting staff and facilities.

## QUALIFICATION

Precautionary quarantine and culling measures may seem harsh and can cause dwindling support for the crisis response from stakeholders within or around the industry. Breach of procedures by dissatisfied stakeholders will compromise

Stakeholders turn counterproductive

quarantines and general handling.

DEMA Crisis Management Staff should:
• Keep in mind the value of empathy in dealing with affected parties.

holders, as well as intersolidarity between unions and other affected stake • Previous outbreaks have featured lacking nally,

· Negative remarks about the

INDICATORS

crisis response is given by central individuals,

· Sentiments on social media e.g. a stakeholder spokes

person.

show lack of support or understanding for the cri

sis response and the ex

tent of the task.

between regional branches.



### **Appendix 2: Pandora Cell work process supplements**

Below we present three supplements which may serve as practical guides when launching a Pandora Cell.

### **Contents:**

- Quick Guide (for experienced users)
- Step-By-step Guide (for less experienced users)
- Additional Tools (challenging cognitive path-dependency)



### 1. Quick Guide

### (for experienced users)

The quick guide sums up the suggested Pandora Cell work process once a leader and members have been selected, facilities and equipment prepared, printed templates distributed, etc. Refer to Appendix 1 for printable versions of the 'Work Flow Chart', 'Issues Inventory', 'Fold-over Note Cards' and 'Pandora Cell Output'.

### Actions and suggested time frames for the first iteration of phase I-IV

1. Initial briefing by Cell Leader.	4 min.
2. Choose deadline for first consolidated written output.	l min.
3. Choose time horizon and organisational perspective to determine	
the analytical scope.	10 min.
4. Divide functions and responsibilities (as individuals, in pairs or in	
teams).	5 min.
5. Conduct initial research regarding the present case and past cases.	30 min.
6. Present main findings from the research in plenary.	10 min.
7. Use the "Issues Inventory" (1 copy per person) to arrive at a gross	
list of generic issues.	15 min
8. Choose a net list of specific issues and the order they should un-	
dergo further analysis in.	25 min.
9. Fill in "Fold-over Note Cards" (1 copy per person) for each of the	
selected specific issues.	25 min.
10. Present "Fold-over Note Cards" contents and assess main findings	
from collective analysis.	25 min.
11. Draft, edit and proofread the Pandora Cell Output text in the elec-	
tronic template, and distribute the final version to the Chief of Staff	
along with a cover note.	30 min.
Suggested approximate total time for a first iteration of the Pandora	
analysis.	3 hours



### 2. Step-By-Step Guide

### (for less experienced users)

The action card exemplifies the work process in more detail, taking into account that the work process must be adjusted depending on: 1) Whether the cell is small (3-4 members) or large (5 or more members); and 2) Whether the members are first-time users or experienced in activating and operating Pandora Cells.

### Prior to and immediately following activation

- Advance reading (by first time users) or brief recap of the Pandora Concept Paper if time permits.
- Appointment of a cell Leader and available analysts (persons with no other role in in the crisis management organisation). The analysts should ideally be skilled in disciplines such as risk assessment, scenario-building, sensemaking, strategic foresight, etc. Specialists may be on call if specific needs arise, but DEMA's generic Pandora Cell concept envisages that the presence of generalists is more important than specialists.
- Preparation of a meeting room with table, PCs, projector, whiteboard, and printed copies of the "Issues Inventory" and "Fold-over note cards" (find printable versions in appendix 1).
- Log-on to the relevant e-mail accounts to which SITREPS, common situation pictures, etc. will be distributed, and access your organisation's log systems, news websites, and other media.
- Placement of the Work Flow Chart (Figure 2, p. 6) in the middle of a table (printed on canvas or A0/A1 paper print).

### **Initial briefing following activation**

The Cell Leader briefly sums up:

- Own existing knowledge of, and immediate reaction to, the ongoing situation.
- Any tasking received from the Chief of Staff, to whom the cell will be reporting.
- The work process and, if relevant, any adjustments to it vis-à-vis this action card.



### **Phase I: Calibration**

### Step 1: Choice of analytical scope

- The desired organisational perspective and an appropriate time horizon for the analysis are decided. If there is lack of consensus among cell members, the Cell Leader decides. The choices are written down in the corresponding boxes of the Work Flow Chart on the table.
- During subsequent repetitions of phases I-IV, the organisational perspective and time horizon may be re-calibrated (e.g. from 24 hours to 48 hours, a week or a month).

### Step 2: Choice of deadline

• The deadline or expected timeframe to produce the cell's first written output is chosen.

The Cell Leader may at this point stress, that efficient time-management is crucial, and that the work should gradually gain speed as phases I-IV in the "Work Flow Chart" are repeated. As a rule of thumb, however, a Pandora Cell should prioritise quality of analysis over speed in its support to a crisis management organisation. Unlike a "Situation Picture Cell", which must typically produce written output e.g. every two hours between each staff meeting, a Pandora Cell requires more time for structured brainstorming and in-depth discussion, and should therefore retain the luxury of longer reporting intervals.

### Phase II: Sense-making

### Step 3: Division of tasks

- The Cell Leader asks participants to voice individual core competences and preferences as regards placement in either "Team 1: Present Case" or "Team 2: Past Cases". The teams are then constituted and two team leaders are appointed. The Cell Leader is either part of one team or fluctuates between the two teams.
- Optional: One person can be nominated to constantly monitor electronic information sources (logs, email accounts, news sites, etc.) and brief the entire cell when major developments occur. This person will then have less time available to take part in group discussions etc.
- Optional: A Rapporteur can be nominated to draft the written output in phase IV. Otherwise, the Cell Leader or the team leaders in cooperation carry out this task. In a cell with 3-4 members, no teams are formed. Instead the roles can be: Cell Leader, Present Case Analyst, Past Cases Analyst, and Monitor/Rapporteur.



### Phase III: Sense-breaking

### Step 5: Gross list of generic issues

- Copies of the "Issues Inventory" are distributed (one sheet per person).
- Each person checks 3-5 boxes for the generic issues he/she suspects will matter most.
- If time permits, each person also writes down his/her rationale for choosing the 3-5 issues. These arguments can later be used as "sales pitches" during the selection in plenary.
- In plenary, each person reads own choices out loud in prioritised order.
- On a separate Issues Inventory sheet, the Cell Leader keeps score of which generic issues participants have selected and in what order. The generic issues that have received most "votes"/backing are then selected as potential candidates to be dealt with in the subsequent analysis, i.e. a gross list. If relevant, some of the issues may be clustered together into one.
- The title of issues on the gross list are written on Post-It notes and placed in the corresponding "Generic Issues" box of the Work Flow Chart.

### Step 6: Net list of specific issues

From the gross list, a net list of 2-5 specific issues is now chosen to undergo further analysis, and the corresponding 2-5 Post-It notes are moved to the "Specific Issues" box of the Work Flow Chart. They are placed in a prioritised order, signalling which will be analysed first, second, etc. The Cell Leader selects the specific issues and their order if consensus is lacking or if no pattern can be discerned from the analysts' individual preferences.

### Step 7: Single issue analysis

- Each participant fills in a "Fold-over note card" (one sheet per person). About 1-3 lines of text in bullet point form will usually suffice for each of the categories 1) Title, 2) Description, 3) Previous/other similar cases, and 4) Drivers in the current situation. Filling in the boxes pertaining to the drivers' strength, momentum, and indicators is optional.
- As an alternative to individual analysis, the above may be done in pairs or two teams.
- Finally, the contents of all Fold-over note cards are discussed in plenary with a view to filling out the "Pandora Cell Output" template in phase IV.



### **Phase IV: Presentation**

### Step 8: Written output

- Using the template, the Cell Leader, the two team leaders, or an appointed rapporteur formulate a concise draft of the written output. This should be done electronically rather than on paper, since it is the only output that will be distributed outside the Pandora Cell. The template can be expanded if the first round of analysis dealt with more than 3 issues.
- The Cell Leader edits and proofreads the final version and distributes it via e-mail to the Chief of Staff (and other agreedupon recipients, if relevant).

### Step 9: Follow-up

- The Chief of Staff decides whether to treat the written output as solely for his/her own personal consideration or to distribute it (in full or in part) to other staff members.
- The Chief of Staff may ask to have the text elaborated through a short oral briefing.
- The Chief of Staff may contact the Pandora Cell Leader, if the first written output has generated a wish to task the Pandora cell with analysing additional specific issues in more detail.
- The Pandora Cell Leader can either await or proactively contact the Chief of Staff for feedback and possible further tasking, depending on whether the cell deactivates or continues.

### Continuation and adjustment

- The Pandora analysis process can now be repeated in the following days or resumed when deemed relevant at later stages, as the crisis develops.
- When entering the "second round" of analysis, the Pandora Cell can either:
  - 1. Go through all the steps in phases I-IV again
  - 2. Restart in phase II without a new calibration of time horizon and/or organisational perspective.
  - 3. Restart in phase III with selected specific issues not dealt with during the first round of analysis.
  - 4. Restart in phase IV by concentrating exclusively on formulating new content in the written output, whilst revisiting selected aspects of phases I-III on an ad hoc basis.



### 3. Additional Tools

### (Challenging Cognitive Path-dependency)

The ability to think out-of-the-box is arguably the most important quality that Pandora Cell analysts bring to the table in a crisis management organisation. Whereas a traditional Situation Picture Cell is preoccupied with facts and realistic near-term forecasts, the Pandora Cell is by design tasked with identifying circumstances that may cause situations to deteriorate and with formulating plausible, worse-than-expected scenarios. Out-of-the-box thinking should therefore be encouraged throughout the Pandora Cell's work process and reflected in its written output, especially during later stages of an enduring crisis. To this end, Pandora Cell members may consider some of the following tools, which are aimed at countering path-dependent thinking.

### 1. See things in new or alternative ways

- Move beyond traditional and familiar sources.
- Be comfortable with uncertainty, ambiguity and complexity.
- Have an open, semi-sceptical mindset about what might be important.
- Challenge conventional wisdom and consensus via "outlier perspectives".
- Dispute what is known and what is not, and continually test assumptions.
- Formulate bold propositions and hypotheses and capture them in the form of stories.
- Look for ways to prove the propositions/hypotheses wrong or start formulating new ones.



### 2. See things from different angles

- Look behind (understand the past)
- Look above (take a helicopter view)
- Look below (find the diamond in the rough)
- Look beside (remove blinders to address blind spots)
- Look ahead (think about what is likely to come next)
- Look beyond (question what is past the horizon)
- Look through (make the thinking actionable, by deciding what to do now, find out, and do next)

### 3. See things with different lenses

The Pandora Cell concept does not rely on role play, but feel free to experiment with roles such as:

- The citizen (Protect your valuables; Express your concerns; Demand your rights)
- The journalist (Asses the information; Define the conflicts; Assign the blame)
- The scientist (Look at the facts; Deduct what is known; Refuse to speculate)
- The historian (Research previous cases; Learn from the past; Challenge traditions)
- The politician (Analyse the situation; Defend your position; Play the blame game)
- The activist (Seize the opportunity; Phrase your message; Start a revolution)
- The terrorist (Find the weak spot; Launch your attack; Disappear in the crowd)
- The businessman (Protect your interests; Make money; Invent something new)
- The artist (Paint the bigger picture; Acknowledge feelings; Describe what people fear)
- The foreigner (Gather intelligence; Promote your politics; Defend your country)



### 4. Strive to avoid common biases such as:

- Anchoring, whereby first impressions become disproportionately influential.
- Overconfidence, where correlation between a confidence and accuracy is overstressed.
- Conformity, with the consequences of silencing minority opinions in the group.
- Groupthink, where the members collectively employ "tunnel view".
- Group polarisation, which induces group members to take extremist stances.
- Expert bias, which is frequently the principal cause of strategic surprise.



### 5. Ask questions that may drive crisis decision-making support such as:

- What has happened, what is happening now, and what is being done about it?
- What are the main reasons why we find ourselves in the current situation?
- What are the most important lessons identified from events so far?
- Are there lessons learned from past events or exercises? (known knowns & unknown knowns)?
- What would you most like to know, that you do not already know (known unknowns)?
- What are the major uncertainties that could mean we are wrong and that we set irrelevant scenarios?
- Which critical factors can influence the situation?
- What might be the immediate and wider consequences of events?
- What contingencies could arise and, if realised, what options apply?
- How might the importance of urgent issues vis-à-vis longer term issues change over time?
- What are we trying to achieve: What is the desired end state or the realistic favourable outcome?
- What capabilities are available to us that can help us realise our objectives?
- What options are open and what constraints apply?
- How would you define success and failure in the current situation?
- What do you think can be done, or done differently, to optimise the chances of success?
- Looking forward, what would you see as priority actions which should be carried out soon?
- What do you see as the single most important future decision or action?

