Basic structures when using Excel spreadsheets to store incidents

Designing the ideal structure to store security incident information on an Excel spreadsheet is a very challenging task. The broad range of different events that should be considered for strategic decision-making around the security context and the detailed information required on some aspects make it impossible to have a simple structure that fits all situations. The challenge is to find the right balance between keeping it simple and workable yet storing the key information that is required, with enough detail to make the information meaningful for policy recommendations.

This guidance handbook provides two different format examples of how incident information can be stored on an Excel spreadsheet. Organisations designing their own spreadsheet are encouraged to look at both shared examples and mix and match the elements most suited to their own priorities. Please consult other tools for suggested definitions of the various fields.

The two example Excel spreadsheets for storing incidents can be accessed and downloaded from the RedR project page. Please on the below elements:

- SiND Event Categories spreadsheet
- Incident Log Template

Below are key principles to bear in mind when designing an Excel spreadsheet for security incident information.

Units of analysis
Each row on an Excel spreadsheet stores one key unit of information. In most cases, this will be the event. Each row is a unique event. The columns are used to provide details about the event.

To store other units of information, such as treating staff members as individual units (rather than a number associated with an event), or recording details on the material lost or tracking a response, can be done in the following ways:

- Create a second/third/fourth sheet on the Excel workbook for ‘staff’ or ‘material’ or ‘response’. On these new spreadsheets, each row stores the individual information about each person, each item damaged or lost, or each response, etc. Each spreadsheet thus counts a different unit. If four
staff members would be affected in one event, the event spreadsheet would have one row (one unit) for the event but four rows (four units) on staff (see examples below). If two cars were damaged in the event, the ‘material sheet’ would have two rows, one for each car. Each staff member and car thus becomes a unit of its own. These sheets can be used to store details that are useful to have in the overall analysis.

• The advantage of such a system is that it becomes easier to provide detailed analysis beyond the event description. It is also possible to use dropdowns of multiple exclusive categories that are chosen for each individual. The sheet contains more information in a more condensed form. The disadvantage is that the data becomes more complex.

• If additional spreadsheets are opened, it is vital to use unique event ID numbers in the first column to ensure it is possible to link the information back to the event.

• Integrate a different unit (such as staff, material) into the sheet where the unit of analysis is the event. This can be done by creating a series of additional columns each time the counting unit is changed from event to staff, material or response. Different colours can be used to indicate this.

• For example, the columns could include the number of staff affected by the event by as many additional columns as are needed to classify all staff by additional information, which then needs to be split up into multiple options columns (see the Aid Worker Security Database spreadsheet as an example of how detailed information about staff can be recorded next to each other).

Some differences in information by single or multiple Excel sheets

The examples below show the same information about four people affected in a single event stored by unit of analysis ‘event’ and unit of analysis ‘staff’. Storing the information on staff on a spreadsheet where the unit of analysis is the event requires more columns to store less detail. It is also not possible to store details about individuals (it would be very challenging to add the additional information on the job or whether the insurance covered the post-incident counselling). If staff are made the unit of analysis, it is easy to record more detailed information. This additional detail could help to spot trends or identify specific recommendations for action, for example related to insurance cover.

Single sheet for event units:

<table>
<thead>
<tr>
<th>UNIT OF ANALYSIS</th>
<th>NUMBER OF STAFF AFFECTED</th>
<th>FEMALE</th>
<th>MALE</th>
<th>INTERNATIONAL STAFF MEMBER</th>
<th>NATIONAL STAFF MEMBER</th>
<th>OTHER</th>
<th>DEATHS</th>
<th>INJURIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event 1</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>
Multiple sheets for different units (e.g. staff, material or response):

<table>
<thead>
<tr>
<th>UNIT OF ANALYSIS</th>
<th>UNIQUE EVENT ID</th>
<th>GENDER</th>
<th>STATUS</th>
<th>JOB</th>
<th>IMPACT</th>
<th>COUNSELLING INSURANCE COVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff 1</td>
<td>Event 1</td>
<td>Female</td>
<td>International staff member</td>
<td>Professional staff</td>
<td>Injury</td>
<td>Covered</td>
</tr>
<tr>
<td>Staff 2</td>
<td>Event 1</td>
<td>Male</td>
<td>National staff member</td>
<td>Driver</td>
<td>Death</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Staff 3</td>
<td>Event 1</td>
<td>Male</td>
<td>National staff member</td>
<td>Professional staff</td>
<td>Injury</td>
<td>Not covered</td>
</tr>
<tr>
<td>Staff 4</td>
<td>Event 1</td>
<td>Male</td>
<td>Volunteer</td>
<td>Volunteer</td>
<td>Injury</td>
<td>Not covered</td>
</tr>
</tbody>
</table>

Multiple or mutually-exclusive options
Information can be recorded as multiple options (more than one description applies) or as mutually-exclusive options (only one option can apply).

- **Multiple options** are presented in columns next to each other. Each column represents a particular characteristic and the spreadsheet is used to indicate that the specific option applies to the event. This can be done by choosing ‘yes’, a number (e.g. ‘1’) or an option from a dropdown list. Options that do not apply are either left blank (less work in coding) or are identified as not applying by choosing ‘not applicable’ or ‘0’ (this makes it easier to verify that total numbers are correct and to spot mistakes).
- **Mutually-exclusive options** are presented in the form of dropdown list options that can be chosen when filling in information in a particular column. Dropdown lists allow you to record additional information and ensure consistency in spelling. However, they should only be used if only one option can apply. See SiND Event Categories spreadsheet for dropdown examples.
- **Multiple and mutually-exclusive options** can be combined in data management. A well-designed spreadsheet can contain a series of columns presenting multiple options (e.g. all or some of the options may apply for each event and columns are filled in as required). These options have an associated list of mutually-exclusive dropdown list options (e.g. every time one of the options is chosen the system not only indicates ‘yes’ or a number but specifies the subcategory under the option). For an example of such a system see the SiND Event Categories spreadsheet.