

EMCIP

The following notes will provide some explanation on the content of the European marine casualty database of the European Marine Casualty Information Platform - EMCIP.

The communication structure of the database will be in general terms according to figure 1.

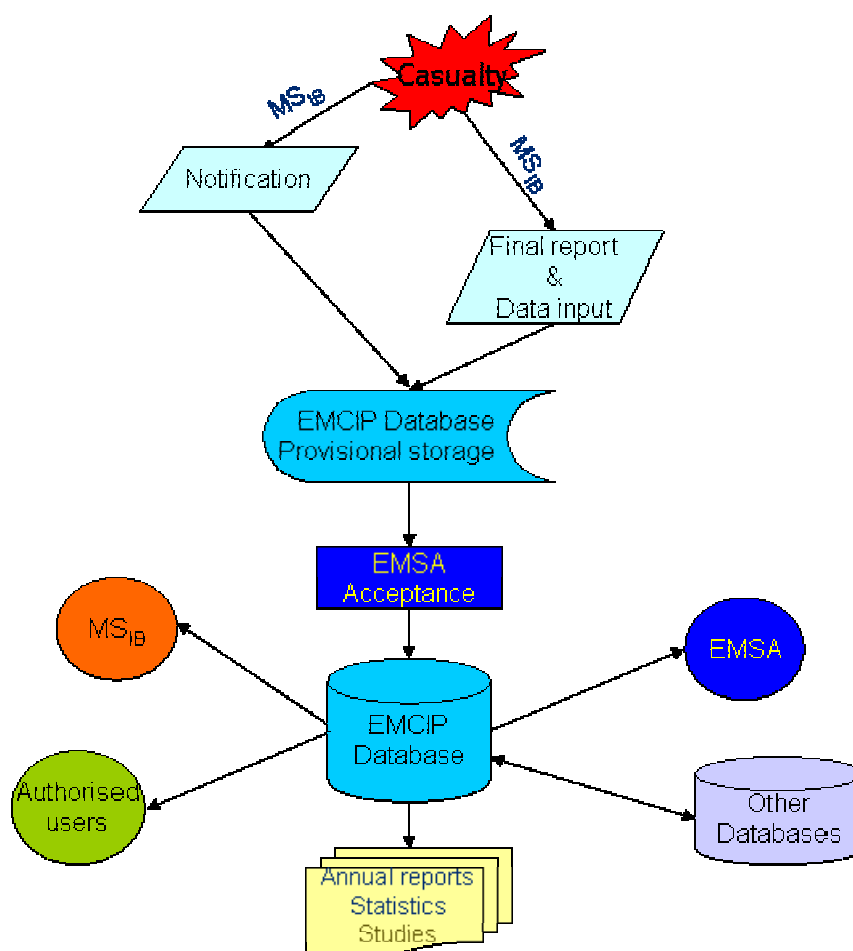
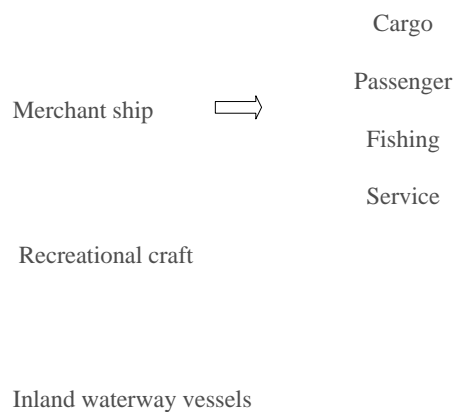


Figure 1

1. The EU central database for marine casualties will be able to store information about the following events:

Casualties involving ships:



Occupational accidents

The database will collect information related to the marine casualty/accident occurrence: notification data for occurrence; investigation data, for the occurrences that are going to be investigated; investigation report, and any other information, such as, studies that the provider might want to attach to the occurrence record. See figure 2.

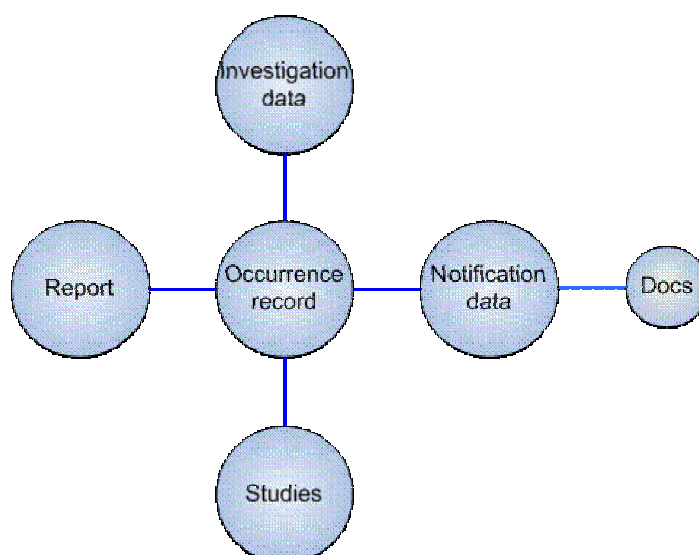


Figure 2

2. The severity of a casualty will include very serious, serious and less serious casualties, and marine incidents (casualties without consequences). IMO definitions will be followed.

3. Related to the occurrence the database will collect basic data and casualty analysis data, see figure 3 and 4.

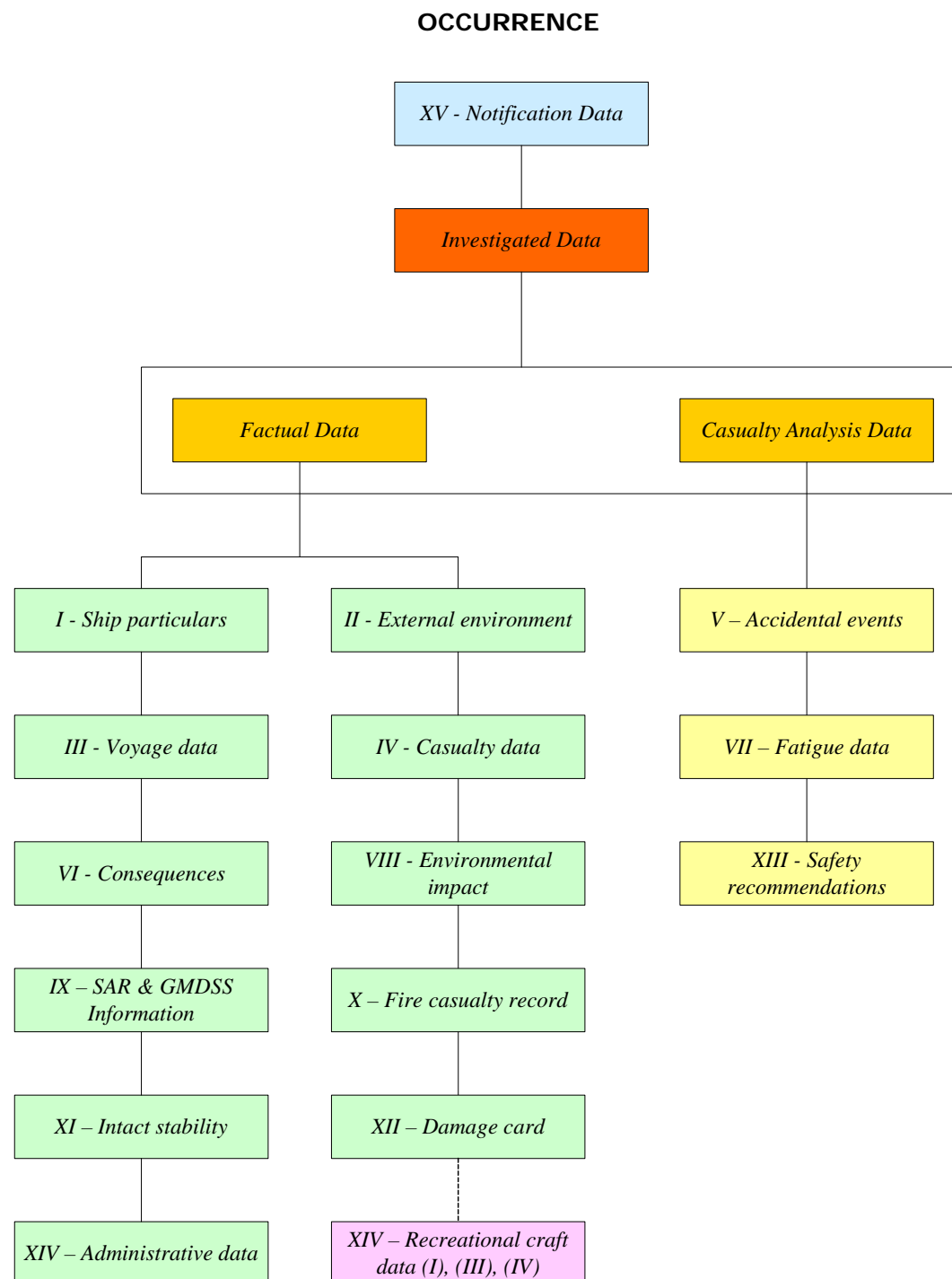


Figure 3

OCCURRENCE

Casualty and Accidental Events

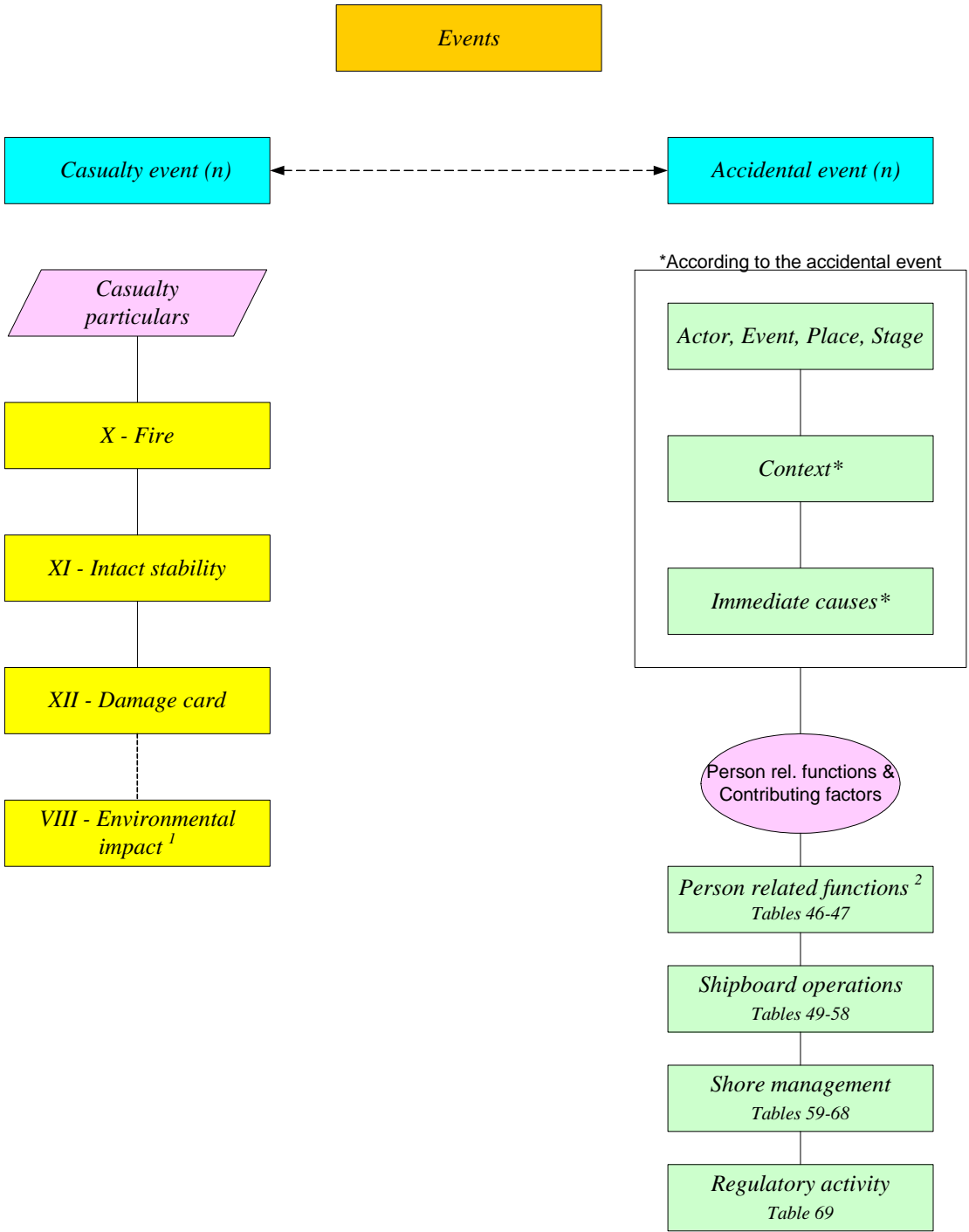


Figure 4

3. The accidental event identification and reconstruction phase will be compiled through the identification of the accidental events, the actors involved (individual people, team, equipment, structural elements, weather conditions, other agents or ships, etc.) and their interaction.

Figure 5 shows the casualty representation of CASMET approach:

- Casualty events
- Accidental events
- Shipboard operations
- Shore management.

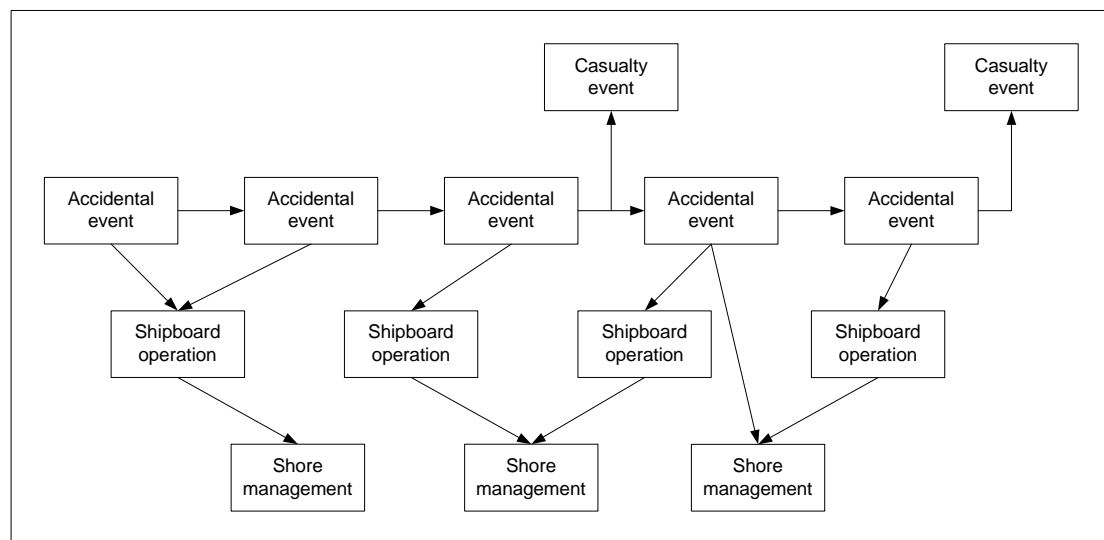


Figure 5

4. Accidental Events are classified as follows:

Classification of Accidental Events

Environmental effect (EN)

Factors like wind, waves and current may have a significant effect on the behaviour of the vessel. These factors may not necessarily show extreme strength in order to feature in the casualty or accident sequence.

Equipment failure (EF)

A system module (subsystem) or component that does not function as intended due to some sort of breakdown. Loss of function may also be the result of operating outside the specified performance criteria (eg. overload, overcapacity).

Hazardous material (HZ)

Critical events associated with the presence of explosive, flammable or toxic material, where the main sources are cargo and fuel.

Human error (HE)

Operator performs in conflict with intended procedures or in a less than adequate way. Main forms are omission, commission, wrong timing or wrong sequence.

External agent or ship (EA)

This group should apply to external influences; for example, lack of, or inadequate, support from other ships, agents or infrastructure.

5. The **Casualty Event** is normally associated with the major initiating or terminal event. These events express some kind of energy release or conversion, such as: a collision, capsizing or fire. Table 22 shows casualty events and their subcategories. Some Casualty Events, such as, collision, grounding, capsizing, etc, have modules to describe their particularities; these follow the annexes of the MSC Circ./953.

6. **Shipboard operations:** conditions on board relating to individual behaviour, manning, equipment and work place, etc.

7. **Shore management:** conditions relating to the organisational culture, management style, the acquisition of vessels and other hardware, and recruitment and training of personnel.

8. **Regulatory activities** will be included in the shore management group however we could consider as another level and the lowest one.

9. The definition of the context of the accidental events will take into account their nature:

HE – Human attributes, cognitive factors, person related functions (temporary and permanent), latter from CREAM*.

HZ – Hazard material attributes

EF – Equipment attributes

EN – Environmental effect attributes

AE –External agent attributes.

10. The external and internal environments will be quantified and qualified so as to enable on analysing of their possible influence in the accidental events.

* Cognitive Reliability and Error Analysis Method.