



RINA

TMSA – The RINA experience

Alessia Vergine

Marine Services Development



AGENDA

- **General**
- **RINA activities**
- **Problems and targets**
- **Practical examples**
- **Way forward**



GENERAL

- **TMSA innovative aspects**
- **Benefits**
- **Costs**

TMSA innovative aspects

- Not a certification
- Proactive approach to safety management both on board and ashore, that includes **identification** of **hazards** and **implementation** of **preventative** and **mitigating measures**
- Key Performance Indicator
- Plan – Act – Measure – Improve cycle

BENEFITS

- **Methodology**
- **Guidance, KPI and best practice**
- **Continuous improvement to go along**
- **Risk reduction**
- **Evidence of proactive management**
- **Simple format can be adapted to many situations**
- **Less accidents**
- **Increased awareness of what is happening**
- **Planning for future**

COSTS

- **Human Resources ashore and onboard**
- **Information Technology tools (PMS, RISK, RCA)**

But TMSA is intended to save ship-operators'

money!



RINA ACTIVITIES

- **What RINA does**
- **December 2004: the starting point**
- **September 2006: the present**

RINA ACTIVITIES

- **TRAINING** – Basic and advanced courses on TMSA and **RISK**
- **ASSESSMENT** – verify the actual Company TMSA level
- **GAP ANALYSIS** – what to do for reaching the target level
- **CONTINUOUS IMPROVEMENT MONITORING** – provide support to continuously improve

DECEMBER 2004: The starting point

- 43 Companies invited to TMSA basic courses
- 50% of Companies has attended courses, with 2 person

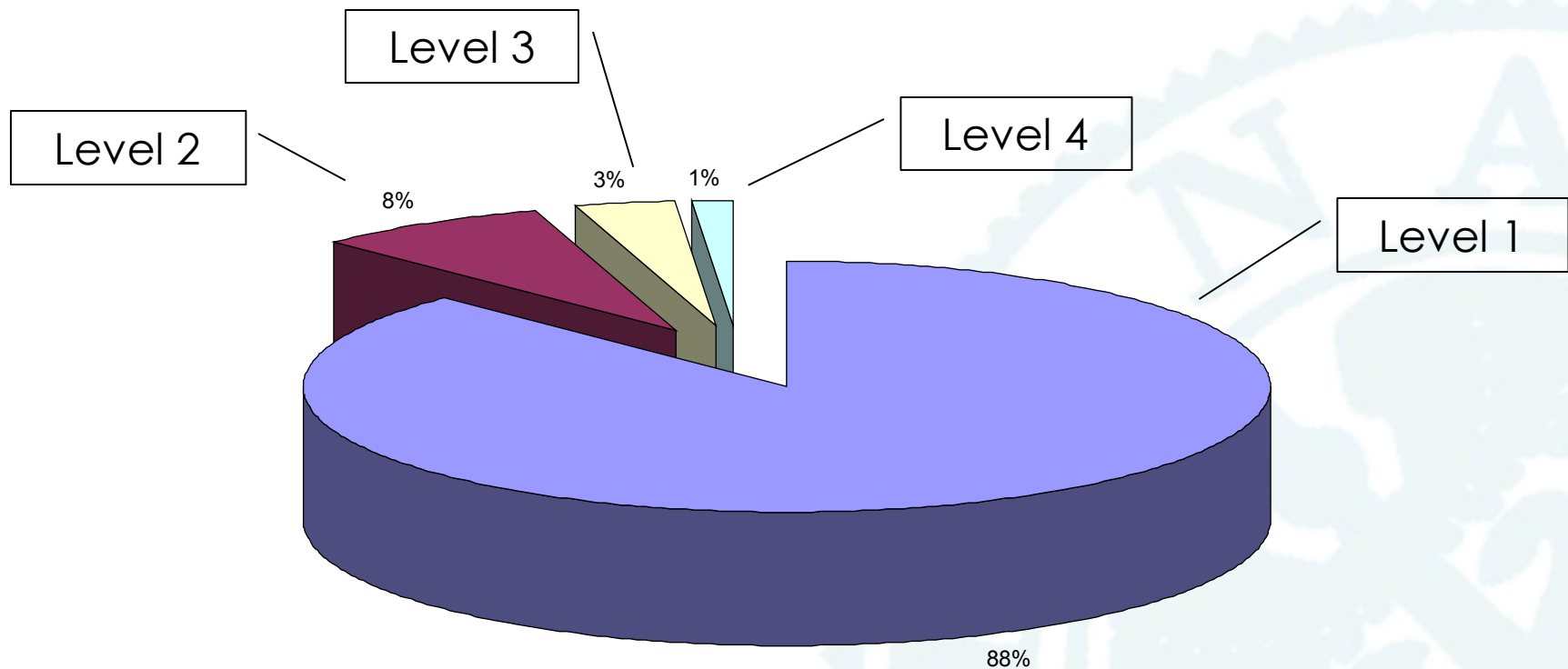
each

- 25% of Companies has worked with RINA team for

ASSESSMENT and GAP ANALYSIS

Assessment results

% of KPI achieved for each level of TMSA



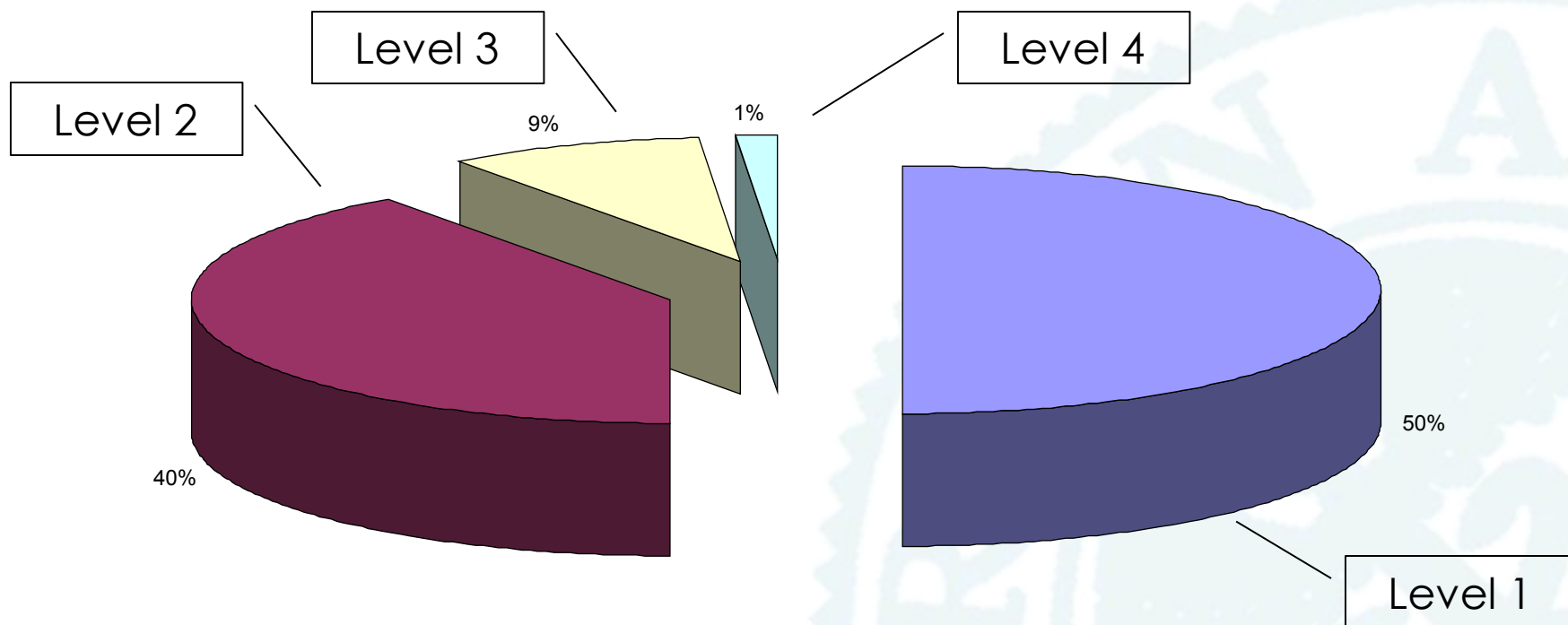
Assessment results

25% Companies:

- requested training on **RISK ASSESSMENT, MANAGEMENT OF CHANGE and INCIDENT INVESTIGATION**
- worked with RINA team on **RISK ASSESSMENT, MANAGEMENT OF CHANGE and INCIDENT INVESTIGATION**

SEPTEMBER 2006: The present

+ 38% of KPI for TMSA levels 2 and 3





PROBLEMS AND TARGETS

- **Compliance culture**
- **Common complaints**
- **Difficulties and challenges**

Compliance culture

- Problem perceived is compliance culture
 - What is the minimum we need to do to comply?
- Compliance reinforces the idea of minimum level
 - We comply with ‘whoever’s’ minimum level so everything must be ok
 - Until it goes wrong!!

Common complaints

- **More paper work – does it have to be?**
 - Electronic format
 - Database of standard assessments
- **Time consuming – Is it?**
 - Common sense
 - Part of the planning procedure

Difficulties and challenges

- Risk Assessment
- Critical equipment
- Incident investigation
- Near misses
- Management of change

Difficulties and challenges

- **KPI identification, measurement and analysis**
- **Top management involvement**
- **Crew management**
- **Environmental management**

PRACTICAL EXAMPLES

- **Critical equipment**
- **Incident investigation and near misses**
- **Management of change**

CRITICAL EQUIPMENT

Understand the TMSA “critical equipment” definition

... identify mechanical, electrical and other items that, in the event of a failure, may result in a hazardous situation. **This is particularly important in relation to critical equipment, for example, the main propulsion systems, steering gear and cargo-handling equipment**

... any ship-based equipment, operating system or alarm that, were it to fail, would result in the crew or the vessel being placed at risk or that could lead to an accident. **Critical equipment or systems should include as a minimum: fire pumps, cargo pump-temperature monitors, pump-room fixed-gas detection systems, fire-detection systems, crankcase oil-mist detectors, steering gear, fire alarms and main engine shutdown alarms**

CRITICAL EQUIPMENT

Dealing with “critical equipment”:

- Documented Risk Assessment for the identification of critical equipment
- Risk Assessment, shore management approved, for routine planned maintenance



INCIDENT INVESTIGATION

Understand the TMSA “near misses” definition

Process and procedures

Trained people on board and ashore

MANAGEMENT OF CHANGE

Understand the TMSA definition of CHANGE

**Risk Assessment to evaluate the impact of any
change**



WAY FORWARD

- Industry to develop more best practices
- Sharing best practices throughout the
Company
- Communication and transparency