



# IRSC 2022

INTERNATIONAL RAILWAY  
SAFETY COUNCIL

SEVILLA, OCTOBER 16-21, 2022



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# LET'S DISCUSS RAILWAY VEHICLE MAINTENANCE



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# INDEX

ARCHITECTURE OF THE RAILWAY SYSTEM

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THE ECM CONCEPT

---

SAFETY CRITICAL COMPONENTS, A WAY TO  
IMPROVE THE COMMUNICATION

---

THE SAFETY ALERTS IT (SAIT) TOOL, ANOTHER  
WAY TO IMPROVE COMMUNICATION

---

CONCLUSIONS

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# ARCHITECTURE OF THE RAILWAY SYSTEM



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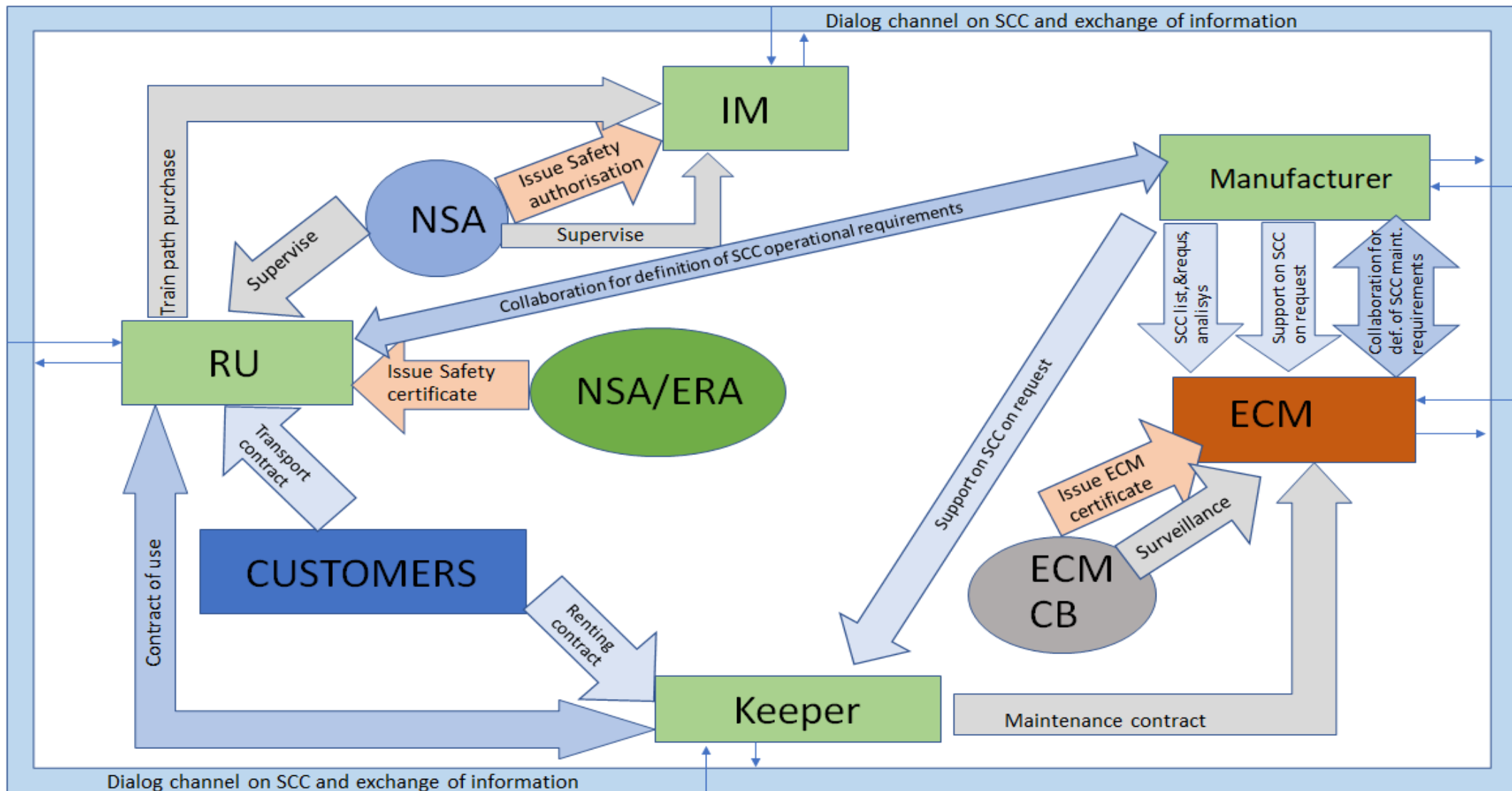


# RAILWAY SYSTEM

## Actors

## Roles

## Links



# THE ECM CONCEPT



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# Maintenance of railway vehicles





# MAINTENANCE OF VEHICLE



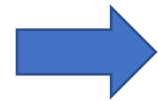
**MAINTENANCE**

- Restore the vehicle in its conditions of use (design operating state)



**DESIGN OPERATING STATE**

- Described in the technical file



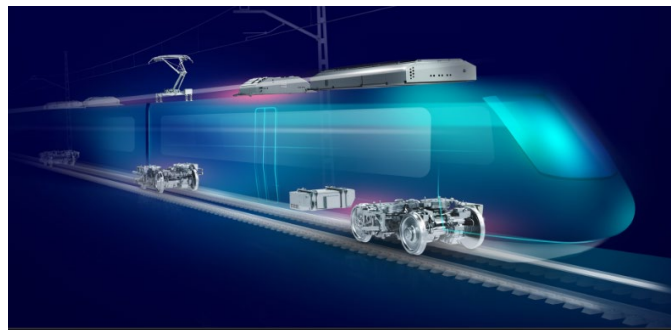
**USE**

- The vehicle is operated



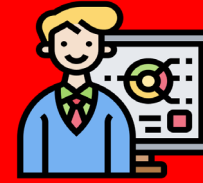
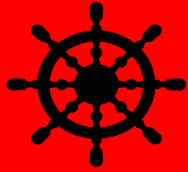
**DEGRADATION OF PERFORMANCE**

- Vehicle no more in a design operating state



E  
C  
M

# Maintenance management



## Maintenance development



## Fleet management



## Maintenance delivery





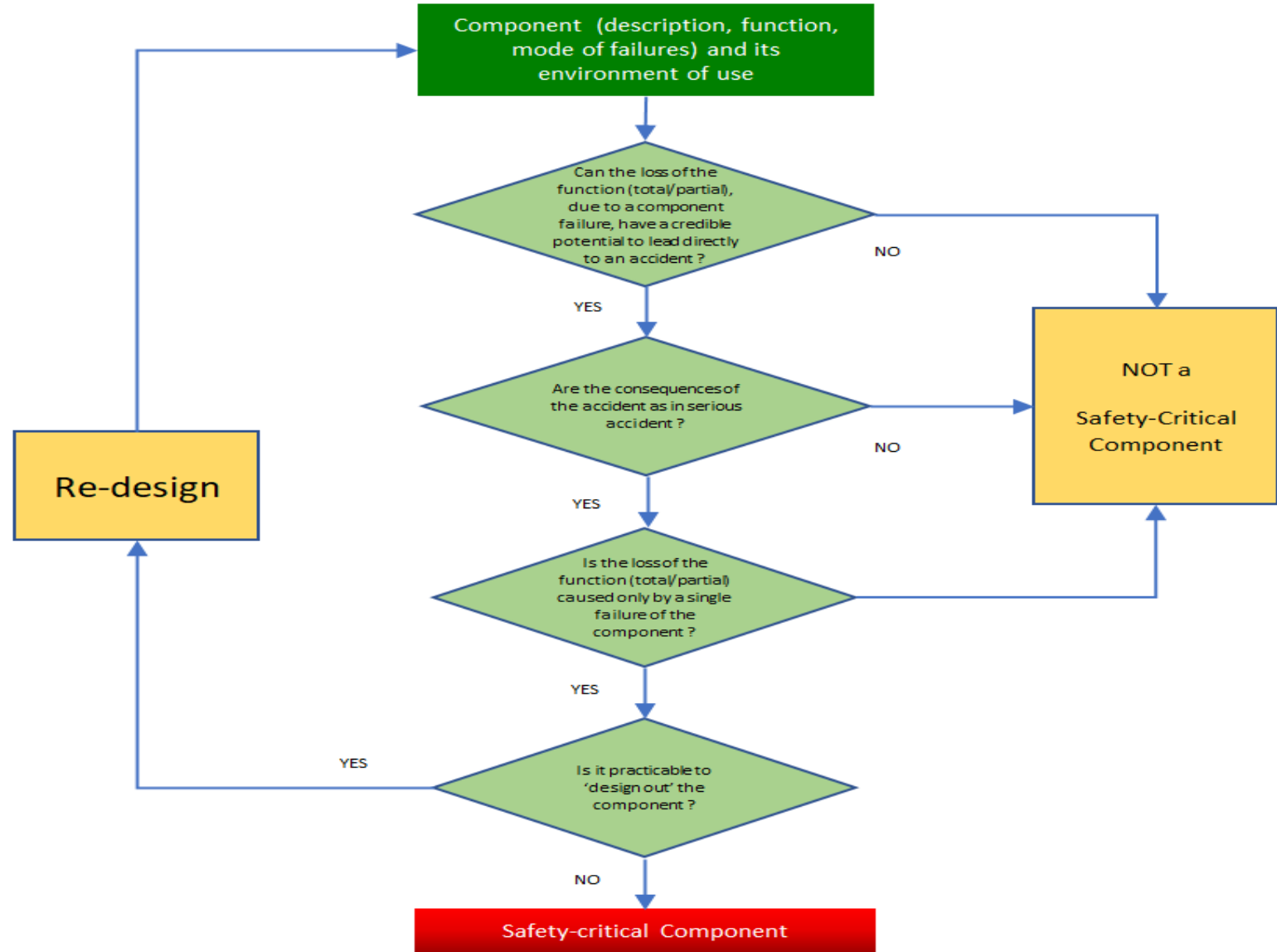
# SAFETY CRITICAL COMPONENTS, A WAY TO IMPROVE THE COMMUNICATION



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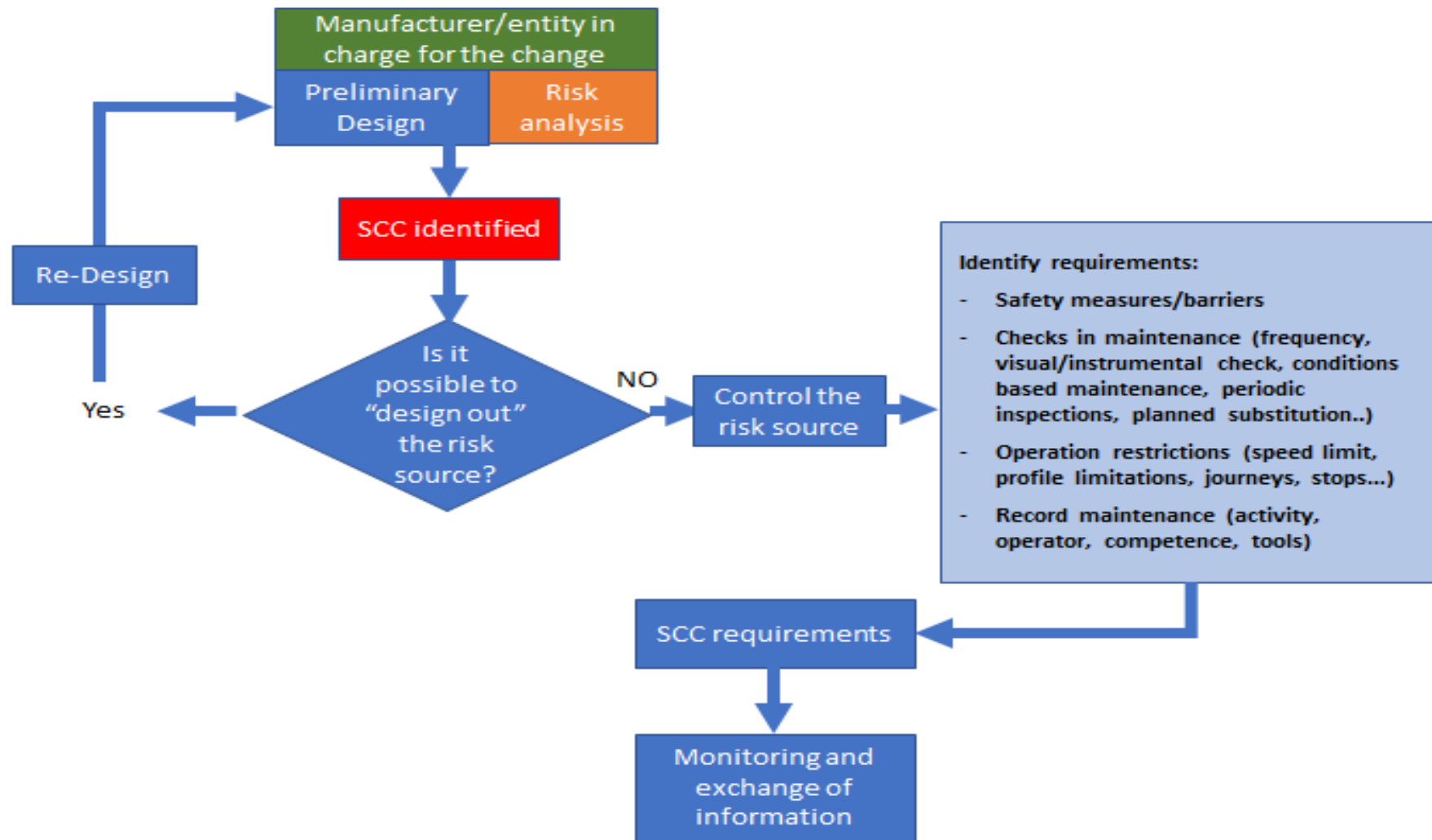


# SCCs Identification process



# SCCs

## Management process



[https://www.era.europa.eu/sites/default/files/activities/docs/guidance-ecm-certification-process\\_en.pdf](https://www.era.europa.eu/sites/default/files/activities/docs/guidance-ecm-certification-process_en.pdf)



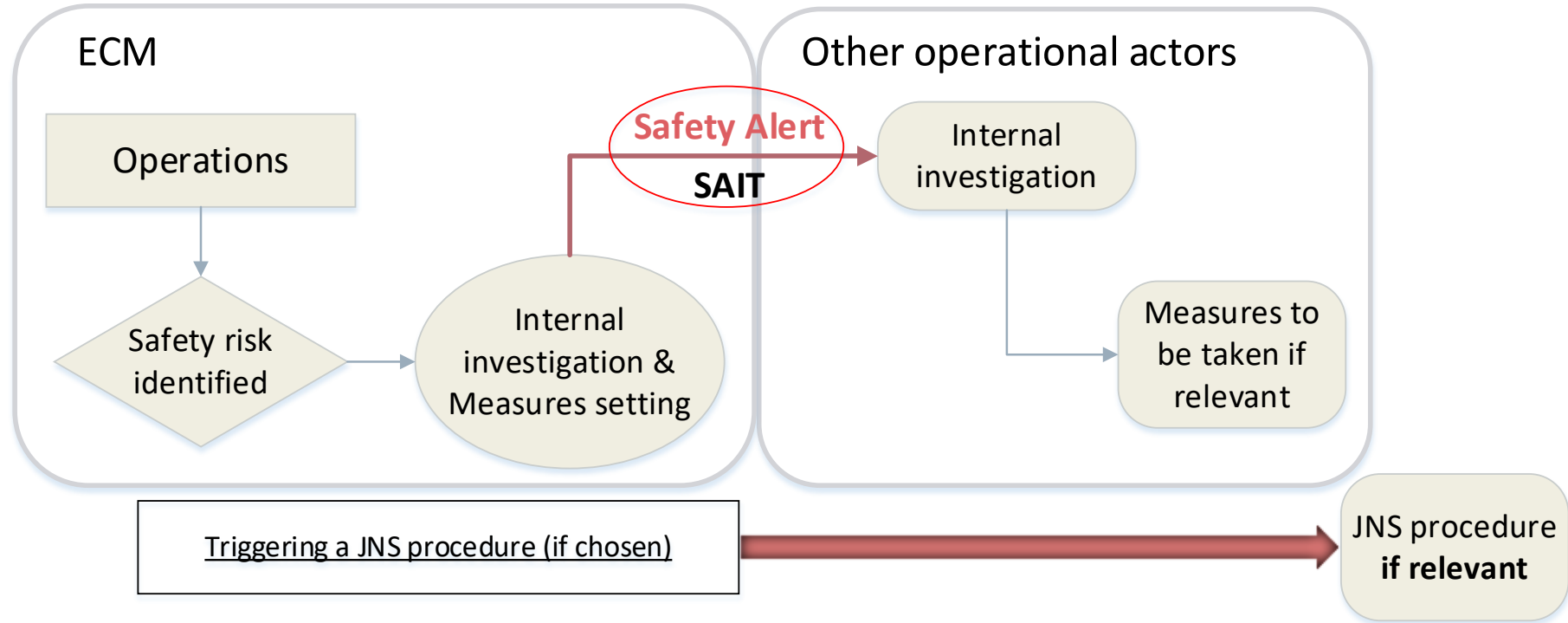
# THE SAFETY ALERTS IT (SAIT) TOOL, ANOTHER WAY TO IMPROVE COMMUNICATION



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# SAIT Process



- Sector
- ERA
- NSA
- NIB

[https://www.era.europa.eu/sites/default/files/activities/docs/guidance-entities-maintenance-sait\\_en.pdf](https://www.era.europa.eu/sites/default/files/activities/docs/guidance-entities-maintenance-sait_en.pdf)

# CONCLUSIONS





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