



# THALES ALENIA SPACE CONTRIBUTION TO ESA ALERT SYSTEM WORKSHOP ON FEB 5TH, 2009

**THALES**

Quality & Processes

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**INTERNAL THALES ALENIA SPACE  
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## AGENDA

- LESSONS LEARNT WITH AN ALERT SYSTEM
- SUGGESTIONS AND PERSPECTIVES WITH THE ESA ALERT SYSTEM(EAS)

## FOREWORD

This document presents over the past 8 years :

- the lessons learnt from the THALES ALENIA SPACE own alert system
- the experience gained by THALES ALENIA SPACE with the EAS

## LESSONS LEARNT WITH AN ALERT SYSTEM

- PROCESSING AN ALERT IMPLIES SOME USUAL TASKS :
  - root causes identification,
  - alert perimeter sizing,
  - Suppliers involvement and support,
  - etc..
- BUT THE EXTERNAL TO THALES ALENIA SPACE ALERTS GENERALLY IMPLY SOME ADDITIONAL DIFFICULTIES: :
  - knowledge of the technical facts at the source of the alert,
  - input data: exhaustivity ? quality? freshness?...
  - confidence in the alert applicability ?
  - confidence in the alert perimeter sizing ?
  - adoption/endorsement of the recommendations ?
  - rare updating of the document along the alert processing ( e.g result of the pending actions, updating of the failure statistics,..),
  - risk of abundance/multiplication of data when several alert systems are operating on a same issue

## SUGGESTIONS AND PERSPECTIVES WITH THE ESA ALERT SYSTEM(EAS)

- BASICALLY, INTENSIFICATION OF THE FOLLOWING FUNCTIONS :
  - EAS to provide alerts
  - EAS to assure the alert process application
  - ESA to provide support on technical issues

## EXPECTATIONS FROM THALES ALENIA SPACE(contd)

### ■ EAS TO PROVIDE ALERTS

#### ■ EAS exhaustivity to be improved:

- ESA should be acknowledged as a subscriber of the US agencies alert system ? at least on EEE parts ?
- ESA subscriber of JAXA alert system ?

#### ■ deeper involvement of THALES ALENIA SPACE in the EAS:

- EAS should share with THALES ALENIA SPACE the source technical data of the issue
- EAS should involve THALES ALENIA SPACE in the recommendations and protocol definition

## EXPECTATIONS FROM THALES ALENIA SPACE (contd)

- EAS TO PROVIDE ALERTS (end)
  - Intensification of the coordination with the other agencies (CNES,..) for avoiding the risks of, e.g.:
    - partial coverage
    - some different features (perimeter, protocol,..) for the same issue,
  - the EEE parts , subject of an ESA alert, shall be completely defined in the ESA alert sheet ( in particular the corresponding quality level)

## EXPECTATIONS FROM THALES ALENIA SPACE (contd)

- **EAS TO ASSURE THE ALERT PROCESS APPLICATION**
  - in the ESCC qualified suppliers, intensify the processing of the NCCS in relation with the EAS:
    - e.g.: assure that the ESA relevant NCCS (NC on qualified part) reaches the EAS
  - in the ESA projects, intensify the EAS activation for the EAS relevant issue
  - six months (tbc) after the alert dispatching, intensify the review of the alert contents, e.g.:
    - completion of the pending actions,
    - evidence that the faulty supplier has informed all its customers,
    - assurance that the supplier will not supply anymore a faulty delivery,
    - Updating of the failures statistics

## EXPECTATIONS FROM THALES ALENIA SPACE (end)

- **ESA TO PROVIDE SUPPORT ON TECHNICAL ISSUES**
  - ESA experts could be called for supporting on technical issues even external to ESA contracts
  - ESA alert system should process the "general interest" alerts which could impact the activity of the European Space Industry .