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eTOKAI – Tool Kit for ATM Occurrence Investigation on web platform

Larnaca 21-22 May 2015 – InterFAB Workshop on Safety Tools

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Head of Safety Unit /DNM/NOM

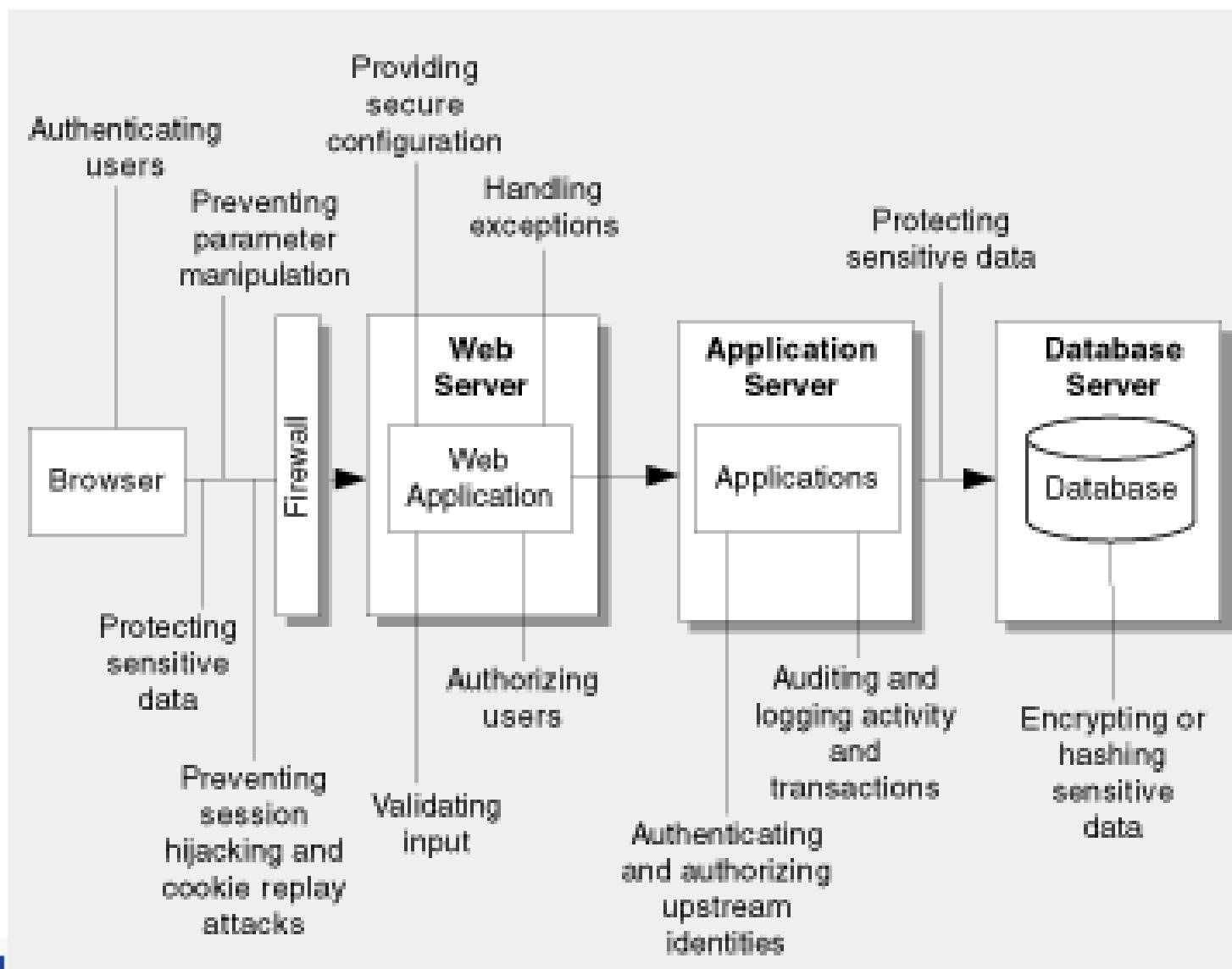
And

JLG Consulting

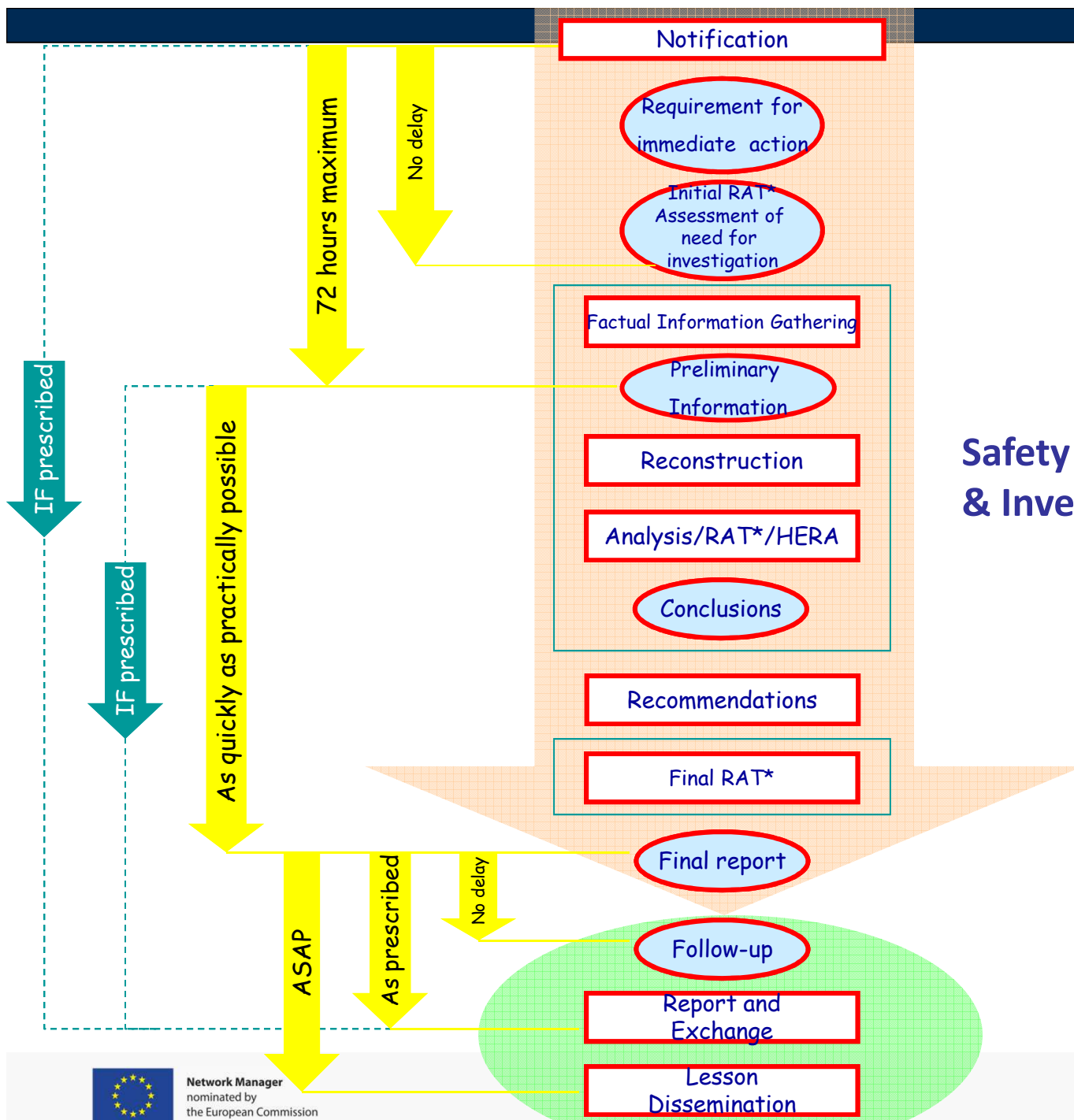
eTOKAI flight plan of today

- Architecture and Security aspects
- Tools available in eTOKAI and in production
- Taxonomy
- Corporate application
- Feed-back from users
- Demonstrations

TOKAI Architecture and secure web design

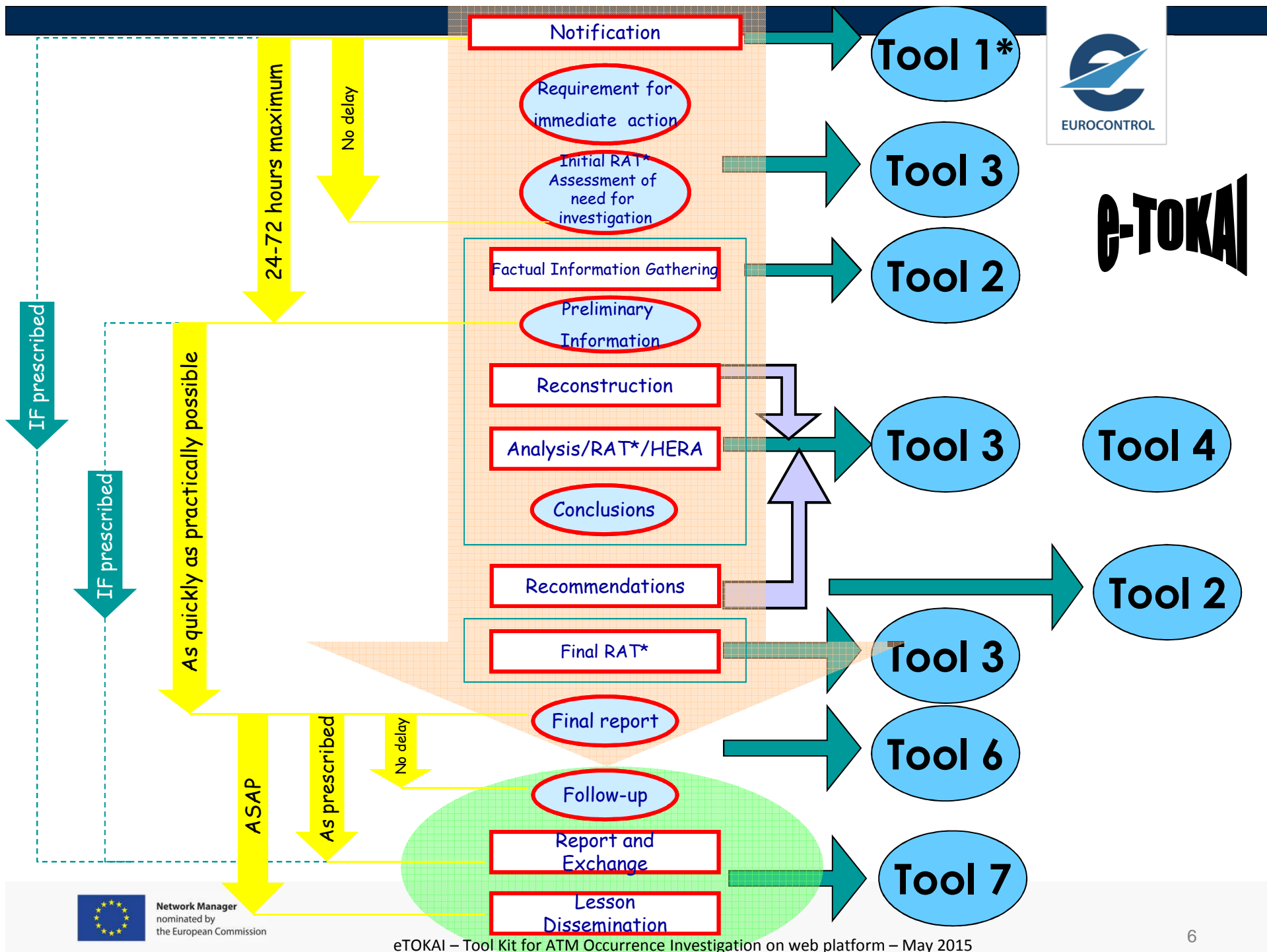


Safety Occurrence Notification & Investigation Process



e-TOKAI tools and capabilities





eTOKAI capabilities



- Organisation Management - Units configurations, users, investigators, email distribution lists
 - Users, Units, Regions, Organisation
 - Distribution lists
- Occurrences Notification Forms, flows etc
 - Building Form
 - Import/Export of Forms
 - Flows
- Data Gathering
 - Forms, flows etc
 - Import from Notification and linkage
 - Building Forms
 - Walk through Taxonomy
 - Data Gathering Forms Import/Export
 - Attachments (of any kind)



What do we have today cont'd

- Risk Analysis Tool (RAT) integration
- Integration with other tools (e.g. bi-directional with Data Gathering)
- HERA (Human Error in ATM) tool
 - At the level of Working Position
 - Integrated with other tools (bi-directional with Data Gathering and RAT)
- Safety Recommendations
- Statistical Analysis
 - Combination of stats with RAT statistical analysis
 - Transferring data to Excel
 - Transfer file templates
- Annual Summary Template (AST)
- ECCAIRS converter (in production)
- Report Builder
 - building Corporate personalised reports (any kind of reports)

e-TOKAI feed-back from users



TOKAI



ATS Notification



Data Gathering



RAT



Statistics



Admin



0



EVAIR
Organization Administrator



TLT ▼



Hello, Tony! Welcome to your dashboard!

2

ATS Reports

13

Occurrences

0

Risk Analyses

2

Queries

4

ATS Notification
Templates

4

Data Gathering
Templates

EVAIR

Working Unit

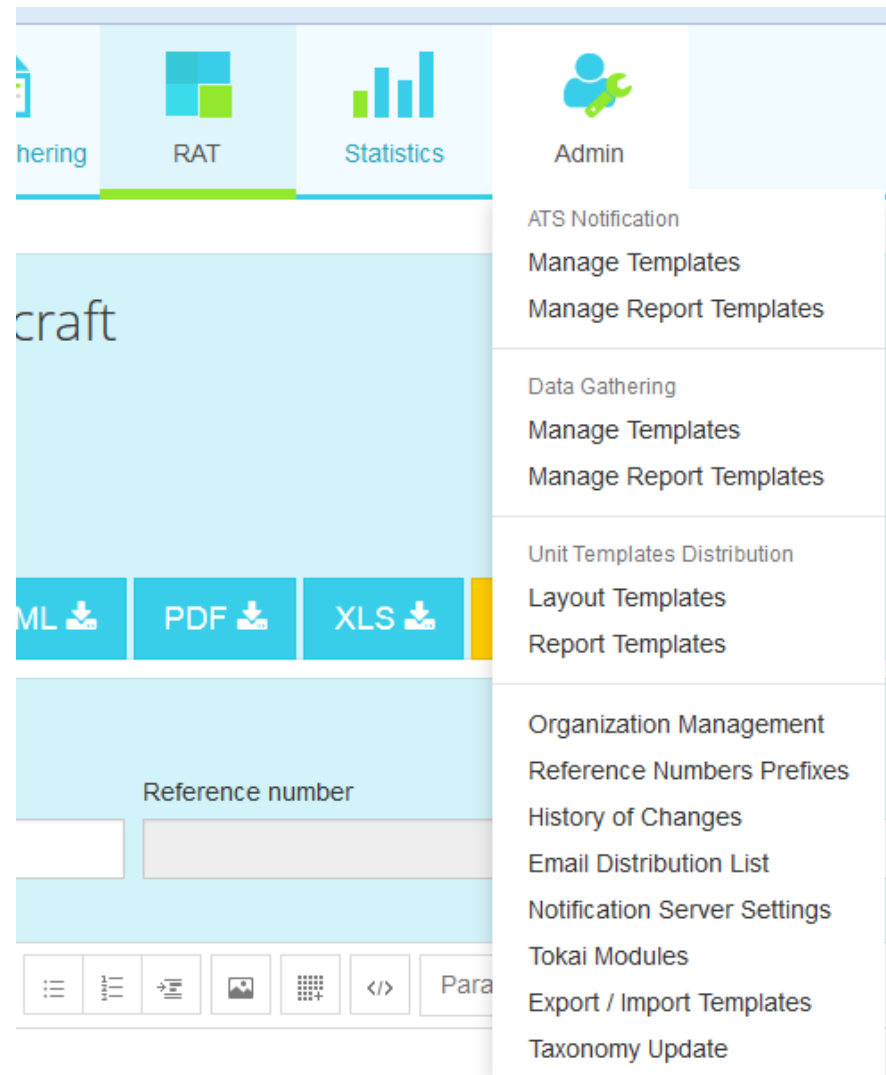
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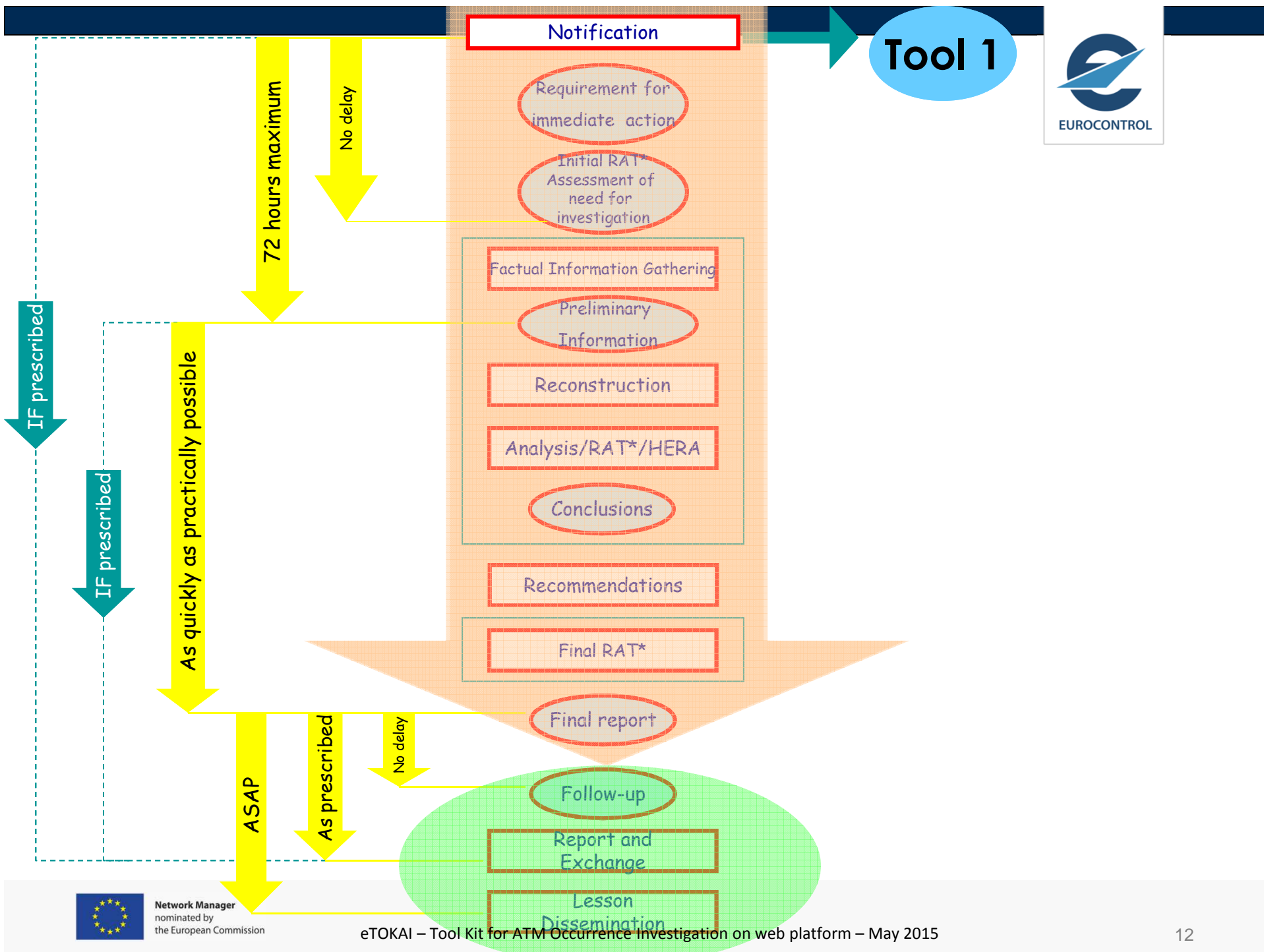
Drafts



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eTOKAI Administration





Tool 1

Notification Module (Forms) Forms Builder + Usage of the Forms



Select a Report Template



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Tool 1

Notification Module (Forms) Forms Builder + Usage of the Forms



TOKAI ATS Notification Data Gathering RAT Statistics Admin

EVAIR Organization Administrator TLT

TLT / EVAIR

EVAIR APDSG

File name: KICN/kcnal Search...

Save Submit Preview

Separation

Minimum horizontal separation estimated

Minimum horizontal separation estimated

Unit: Select...

Minimum vertical separation estimated

Minimum vertical separation estimated

Unit: Select...

Side Tree

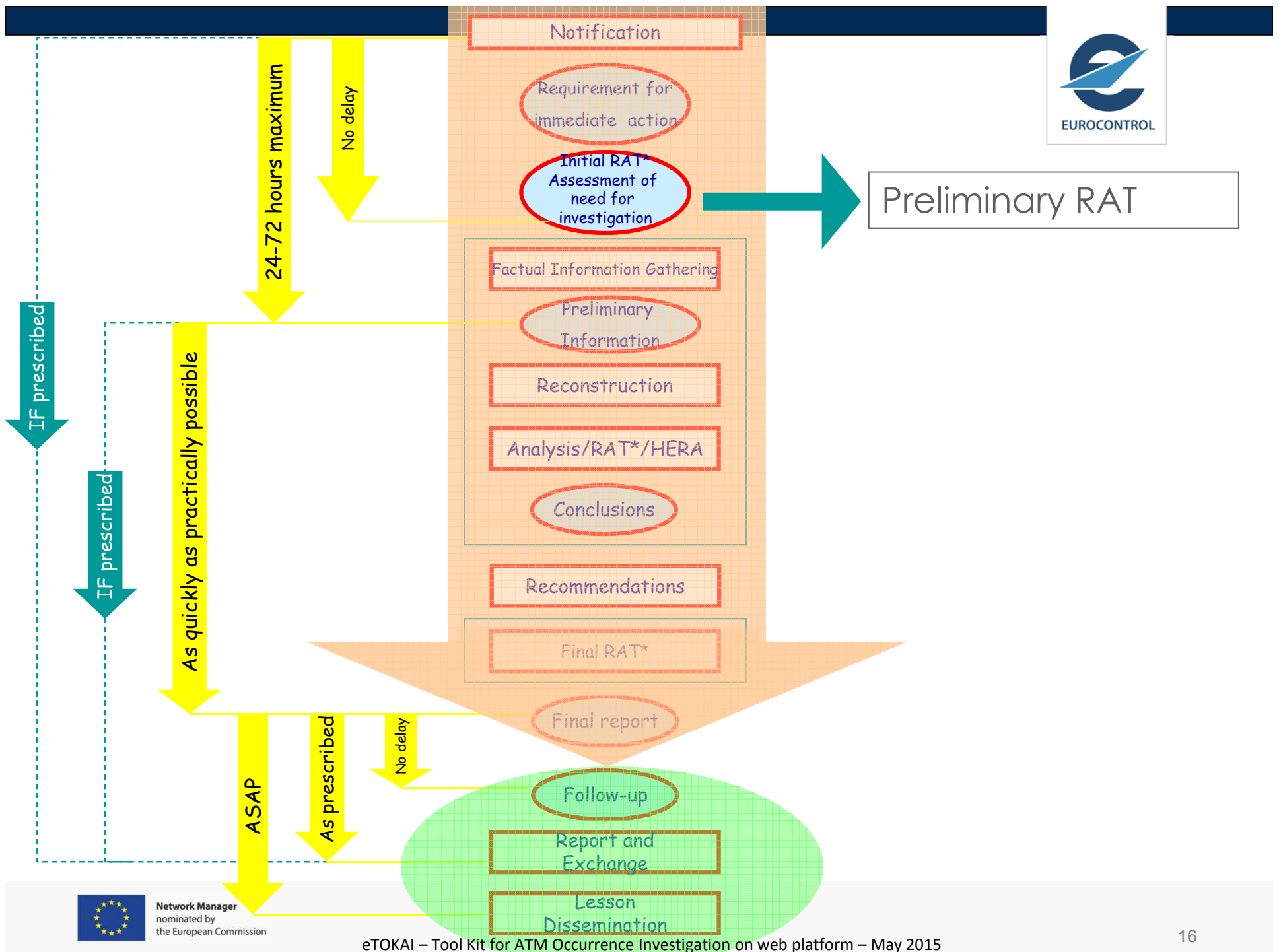
search...

- General
 - Type of Occurrence
 - Airport Data
 - Aircraft
 - Pair Of Conflicting Aircraft 1
 - Pair Of Conflicting Aircraft 2
 - Unit 1
 - Sector 1
 - Working Position 1

demonstration



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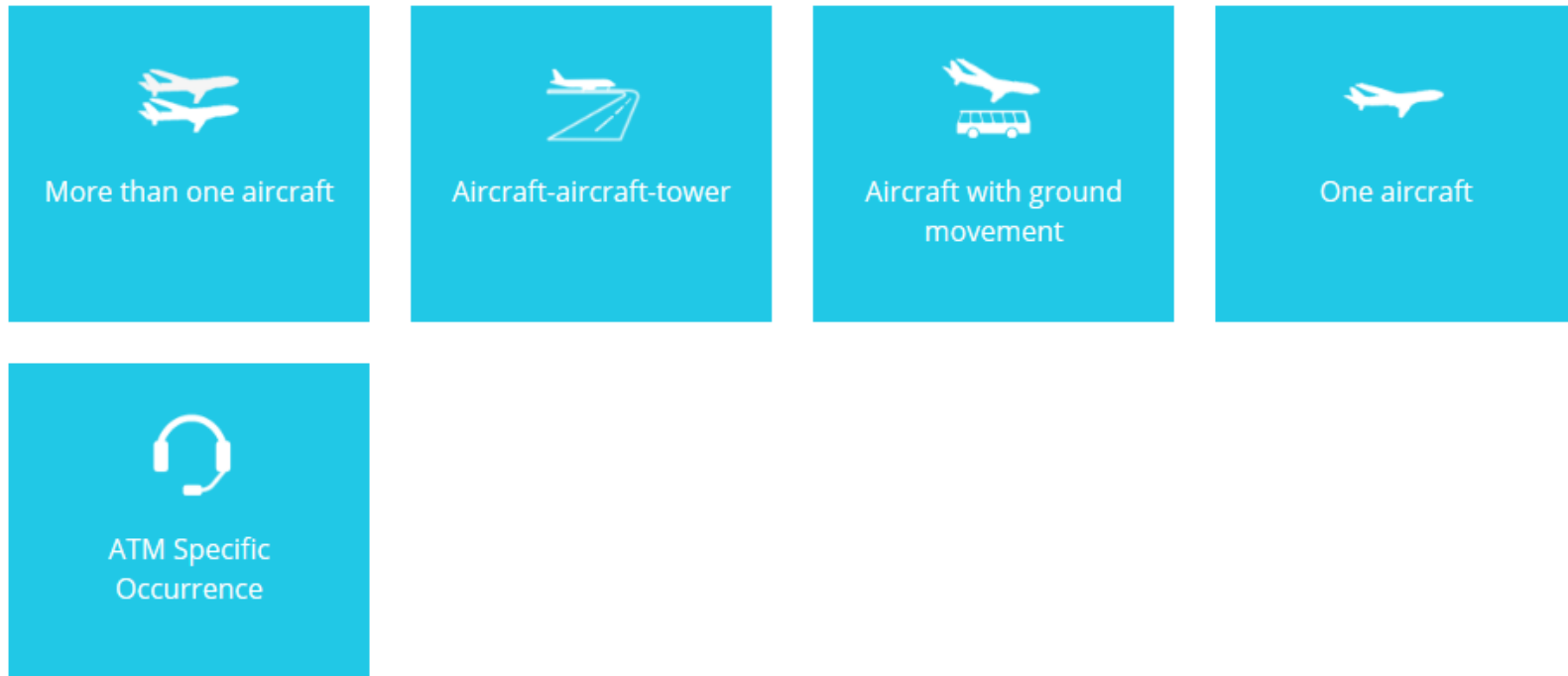


Tool 3

RAT – Risk Analysis Tool



New risk analysis choose an occurrence type



demonstration



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RAT – Risk Analysis Tool



Hide Matrix

Risk Matrix

☐ Reliable severity scoring

A1	B1	C1	E1	D1	N1
A2	B2	C2	E2	D2	N2
A3	B3	C3	E3	D3	N3
A4	B4	C4	E4	D4	N4
A5	B5	C5	E5	D5	N5

Risk ATM: E5

Risk ATM Ground: E5

Reliability Factors

Overall

Overall

0%

Severity

0%

Repeatability

0%

Ground

Overall

0%

Severity

0%

Repeatability

0%

More than one aircraft

Mode

Quantitative

Save

XML

PDF

XLS

⚙

Description

Name

Reference number

Date

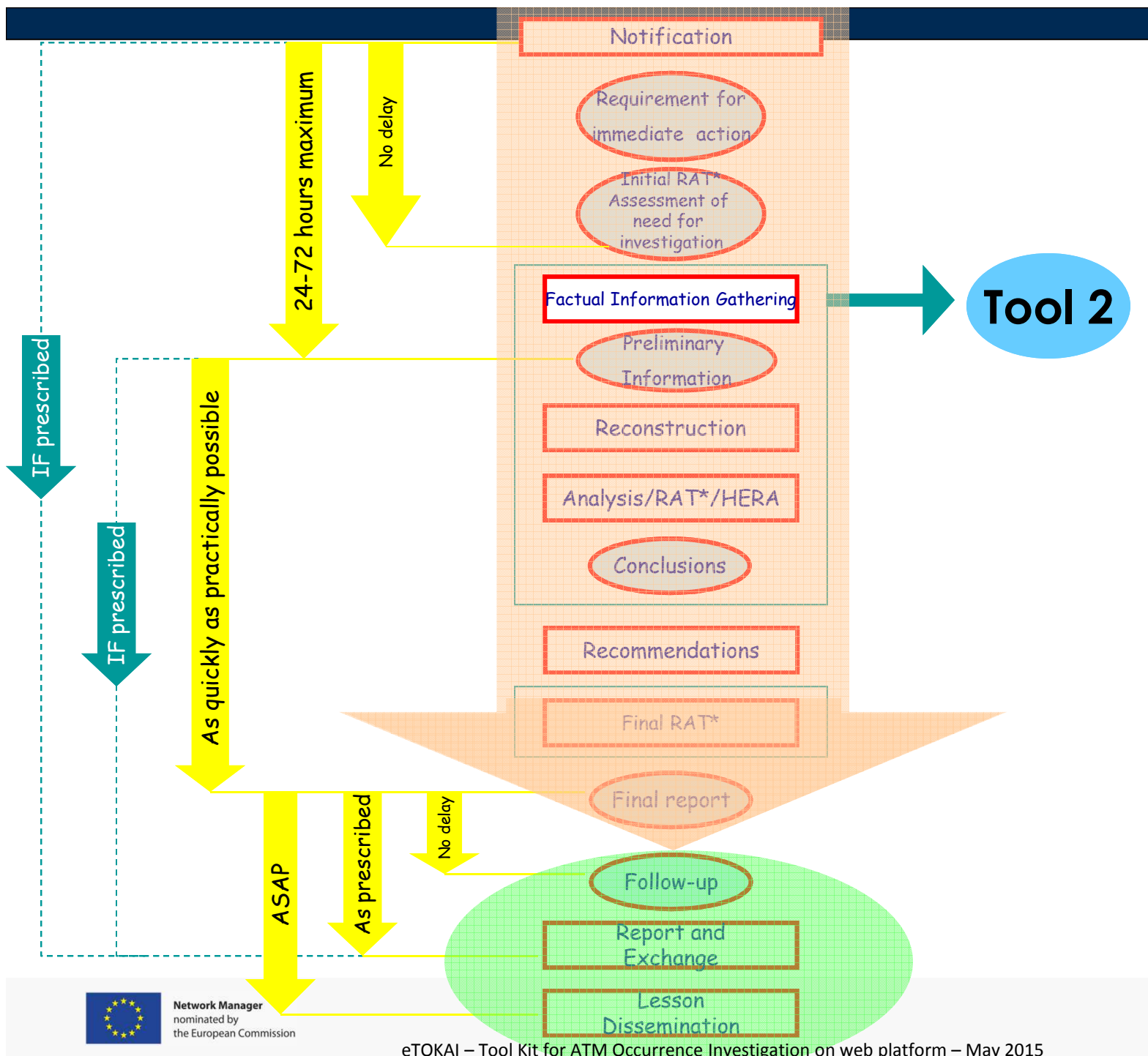
Time

Description

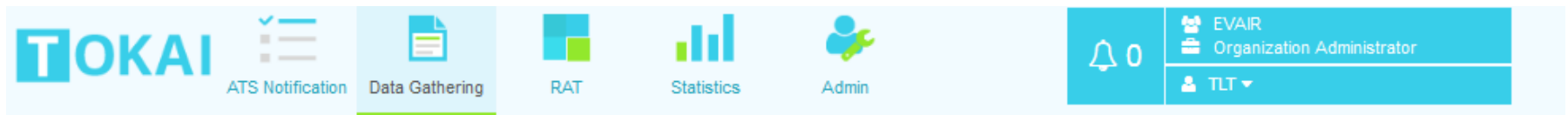
⊕ Severity

⊕ Repeatability

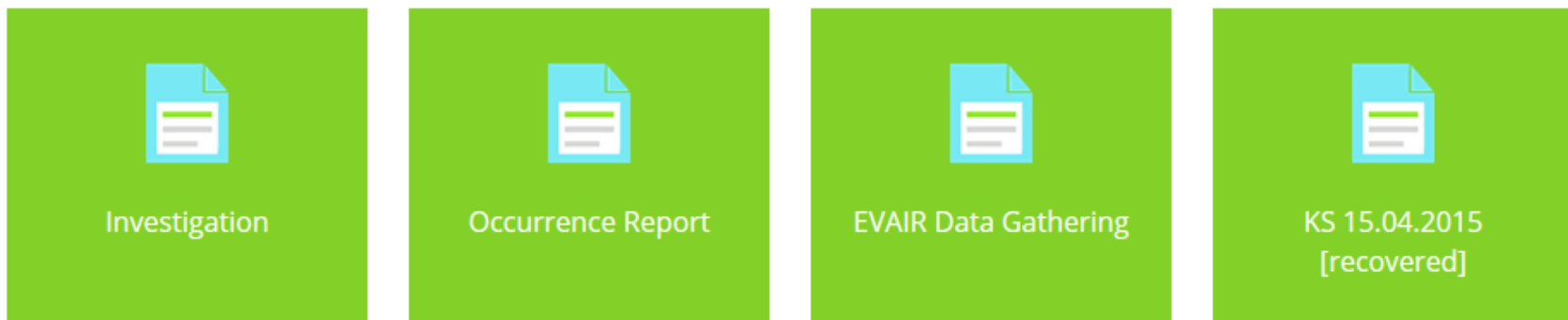




Tool 2 Data Gathering



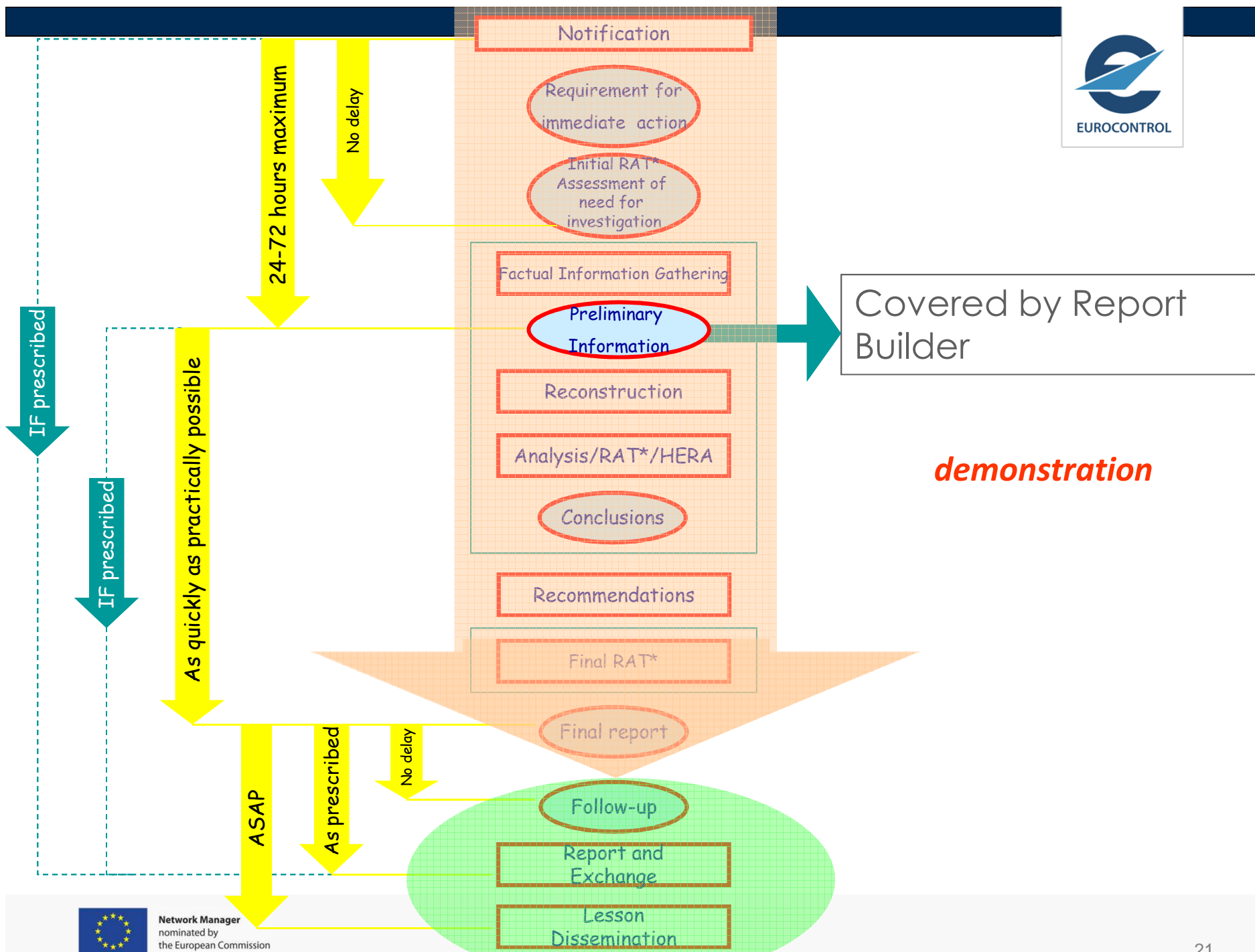
Select a Data Gathering Template

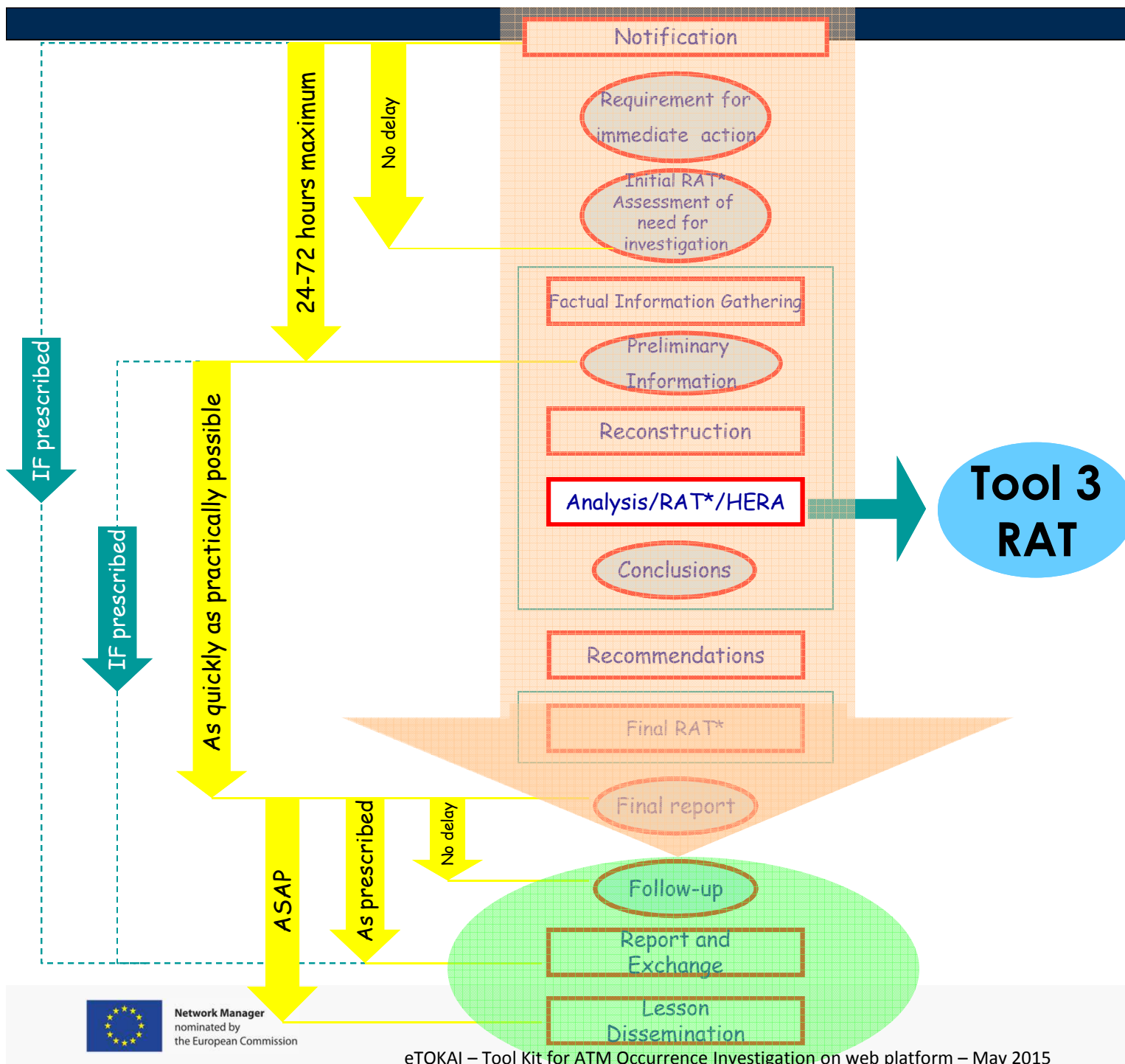


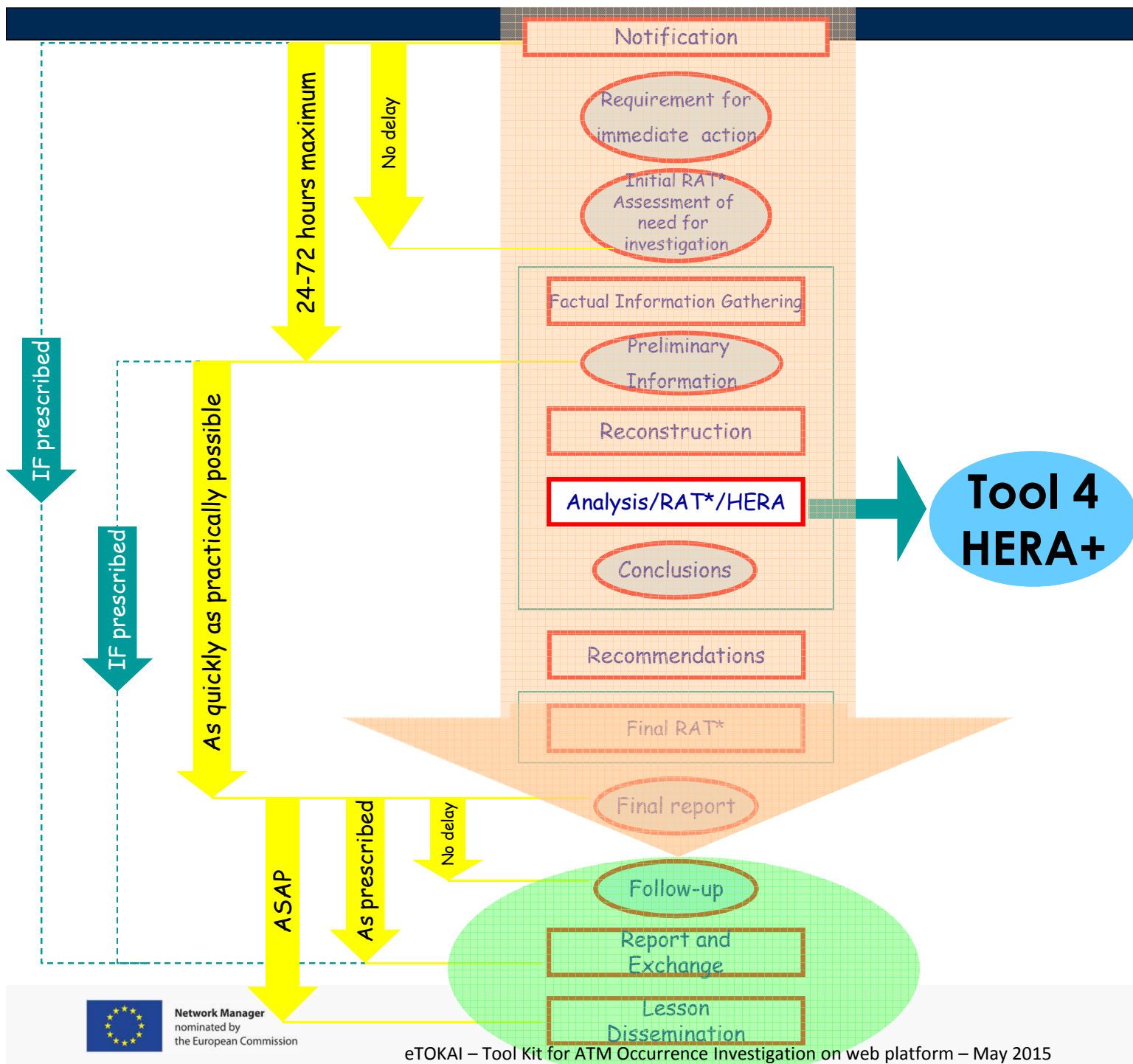
demonstration



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Tool 4

HERA and HERA+



TOKAI

ATS Notification

Data Gathering

HERA

RAT

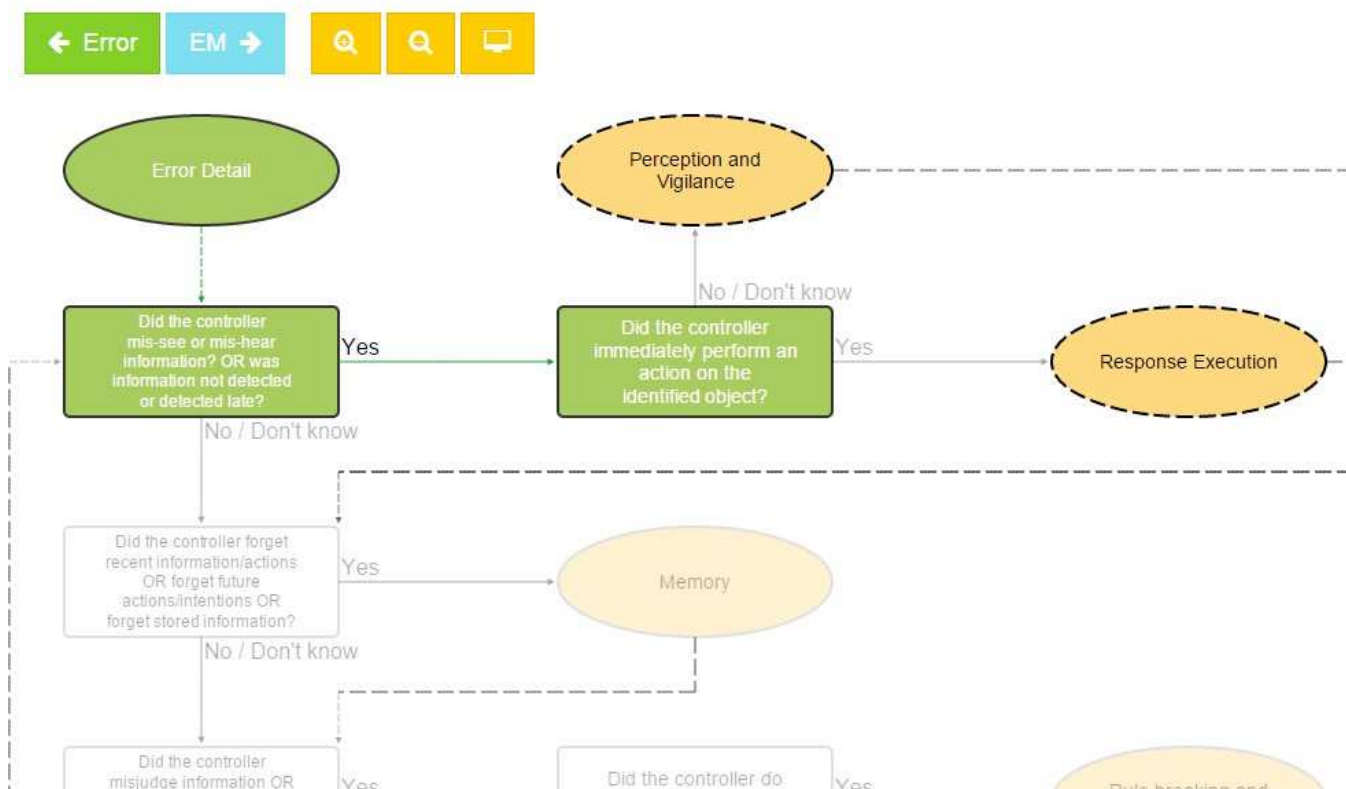
Query System

Admin



BUH
Organization Adm
jlgadmin

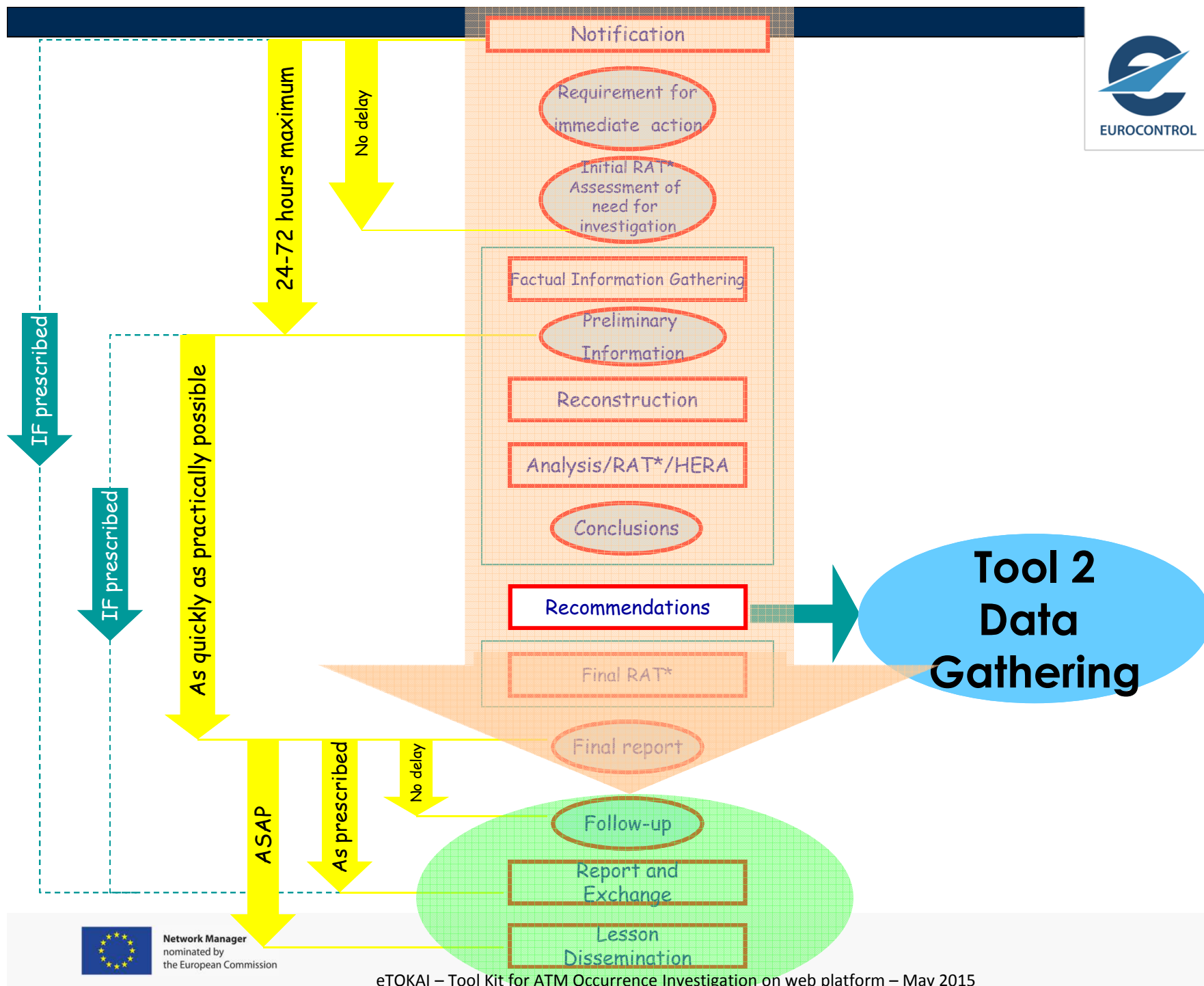
Error Detail

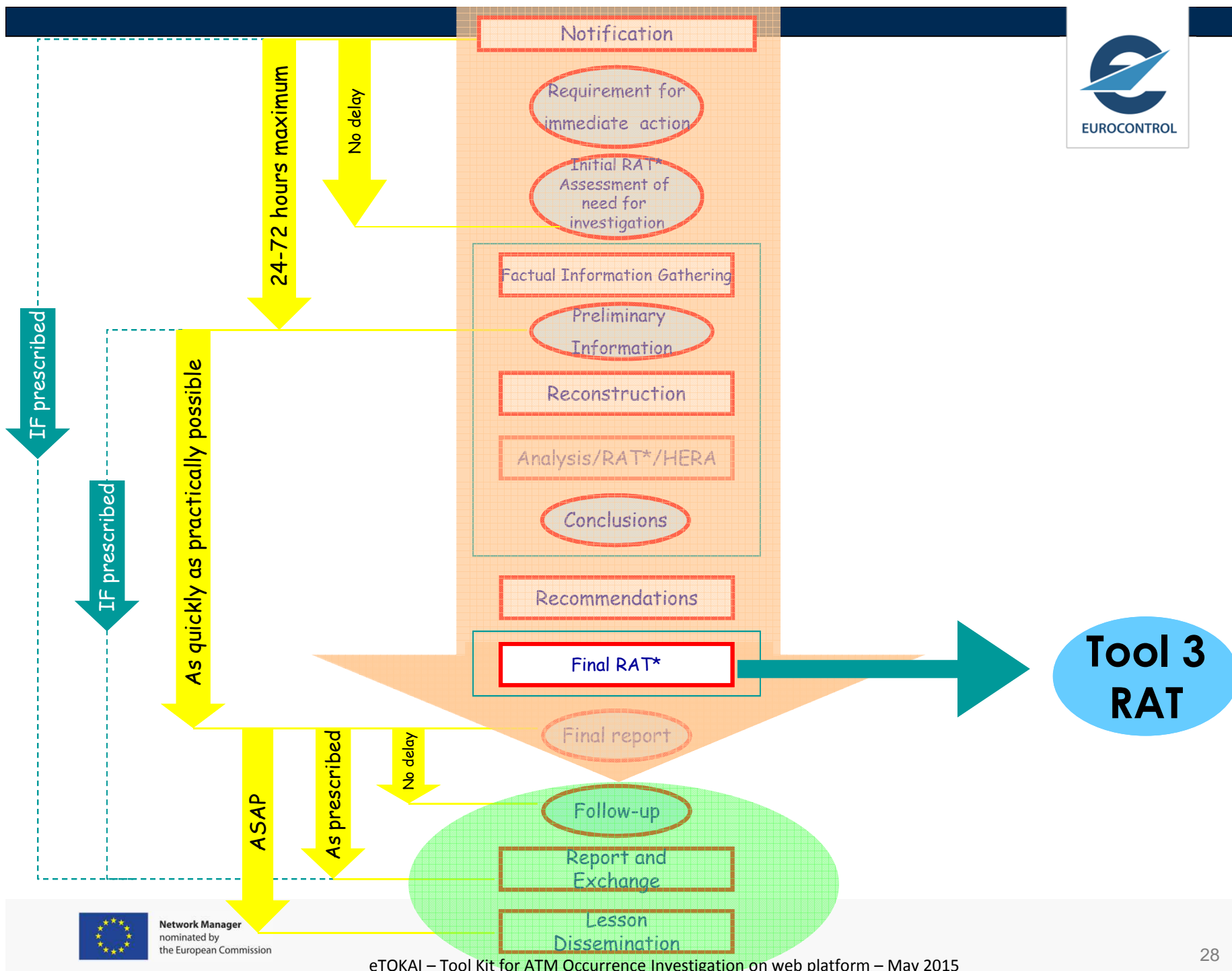


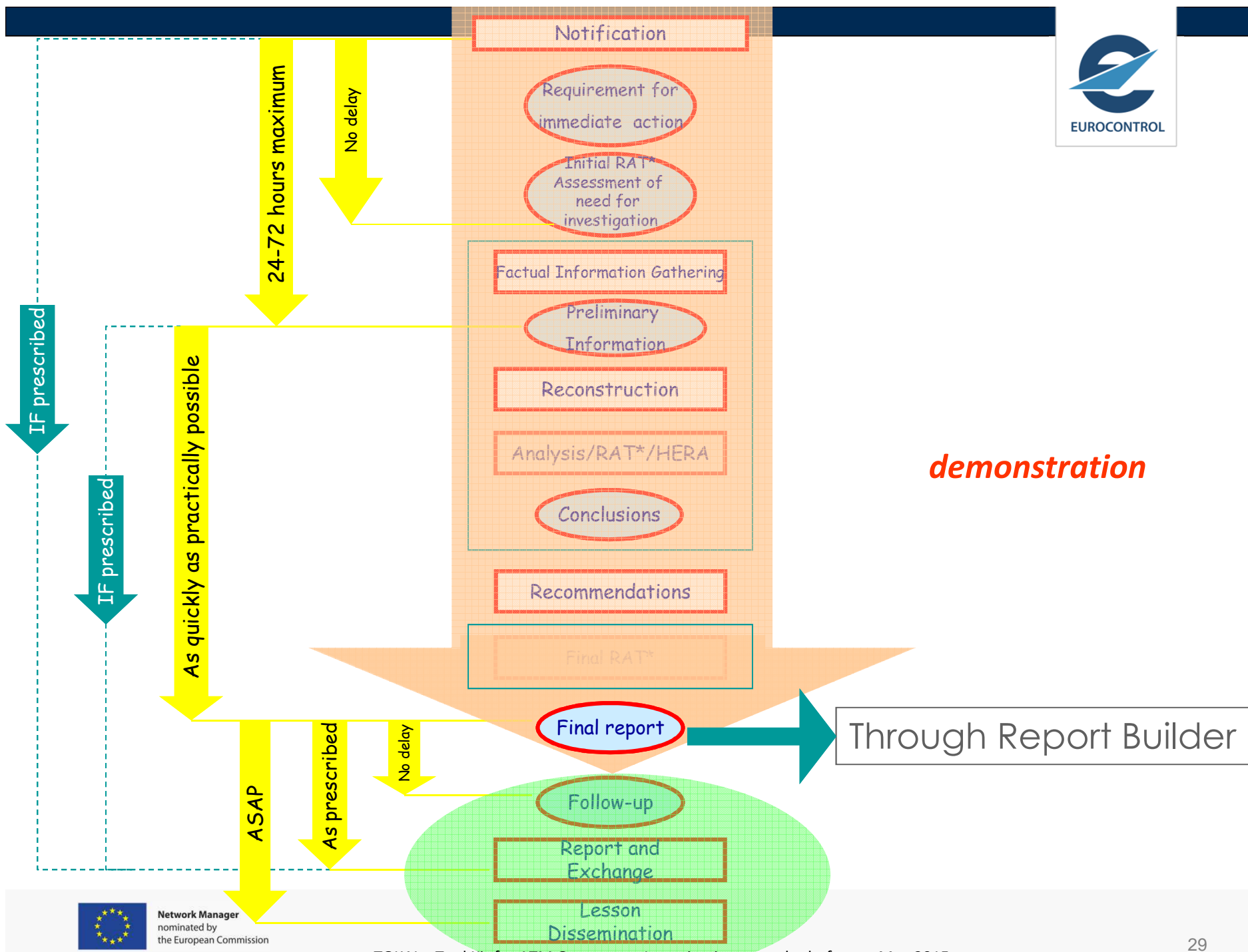
demonstration

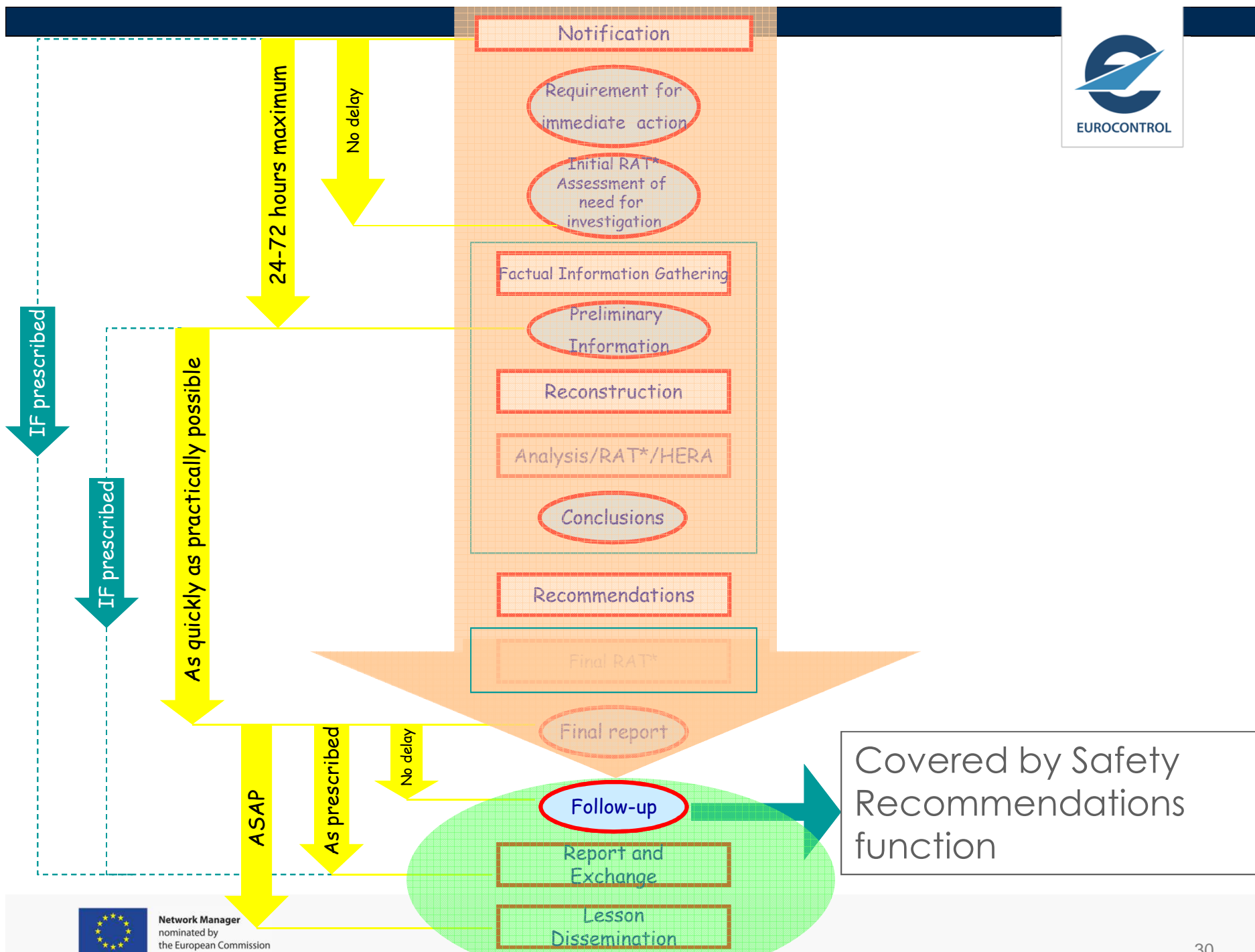


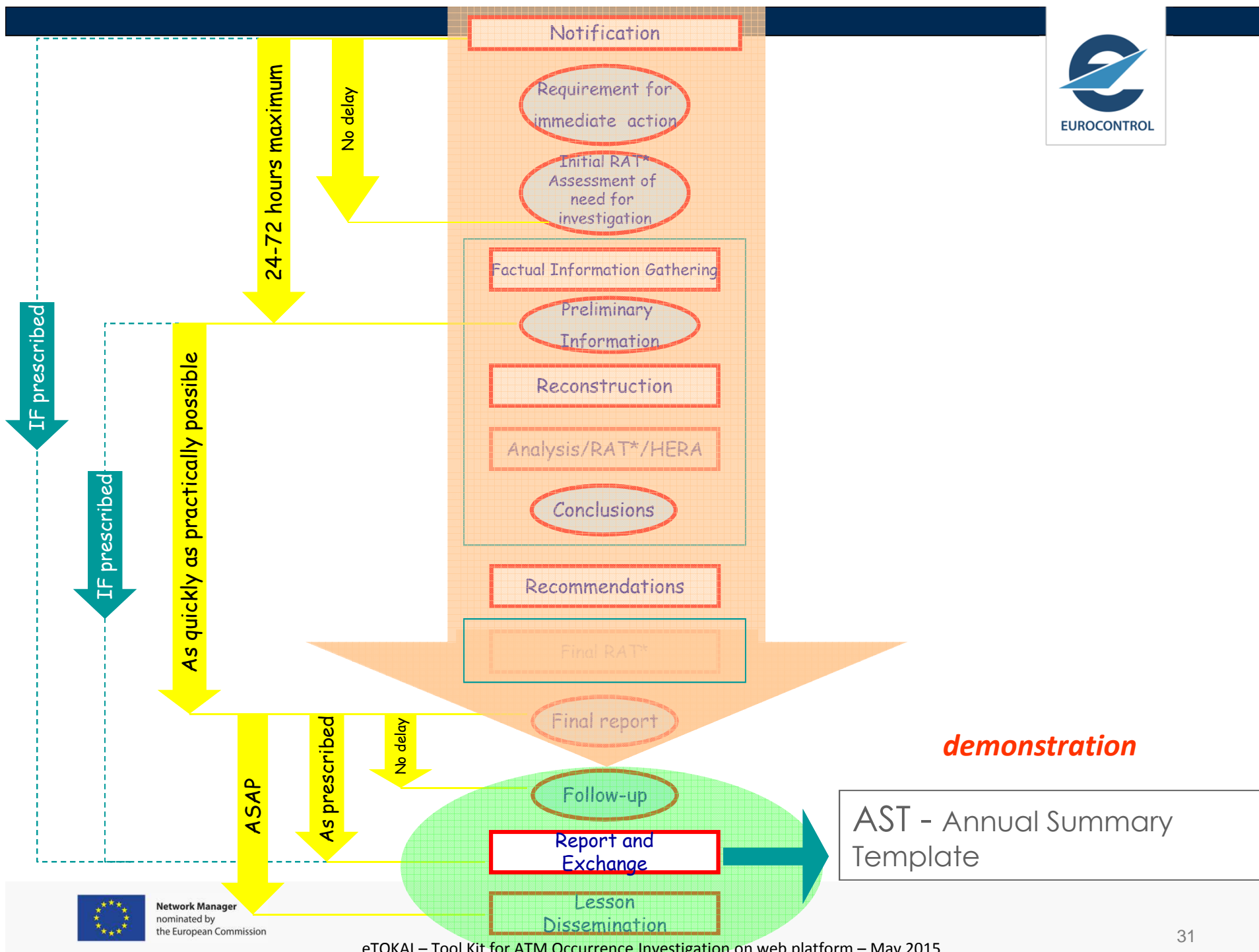
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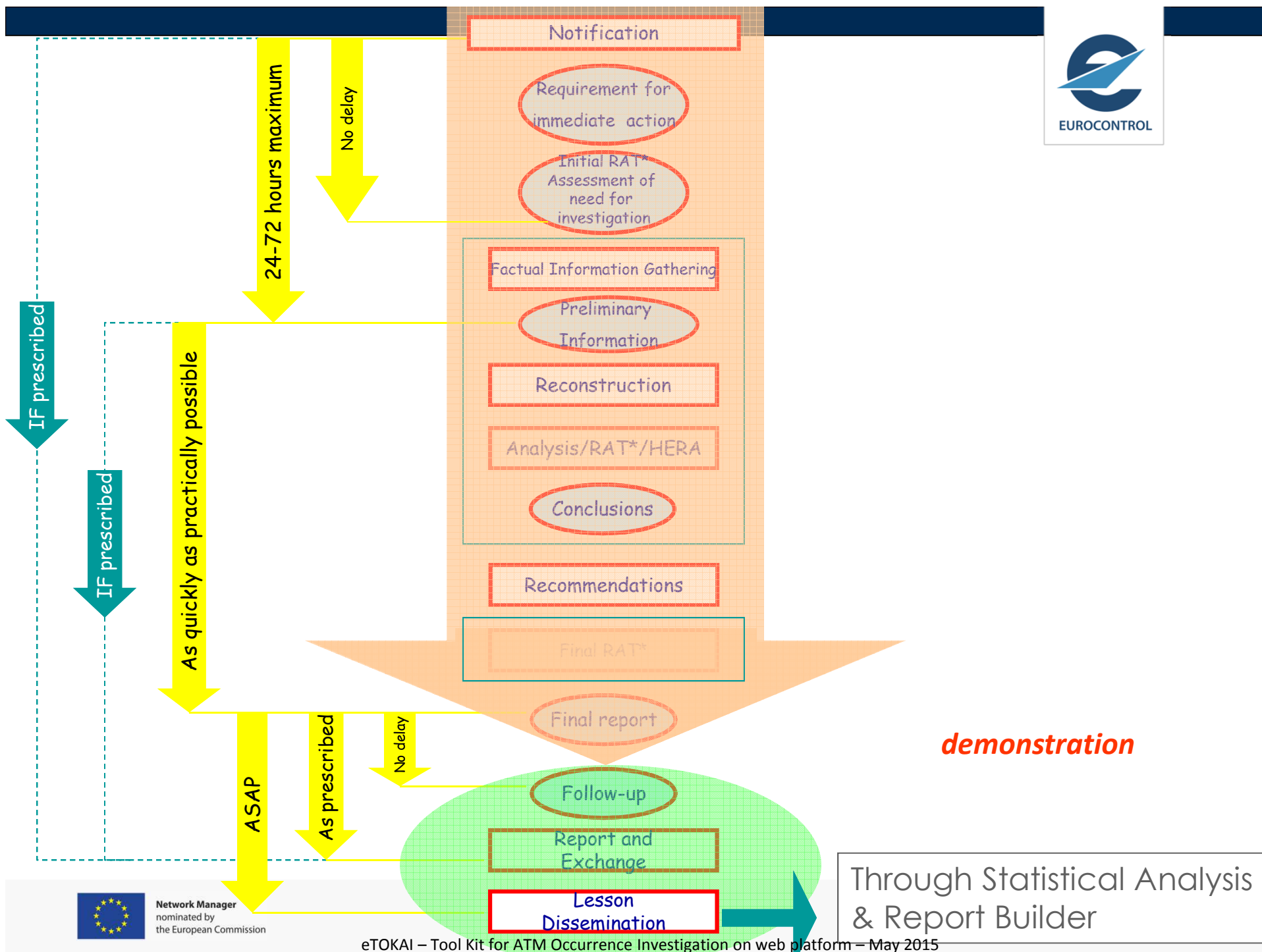






demonstration

AST - Annual Summary Template



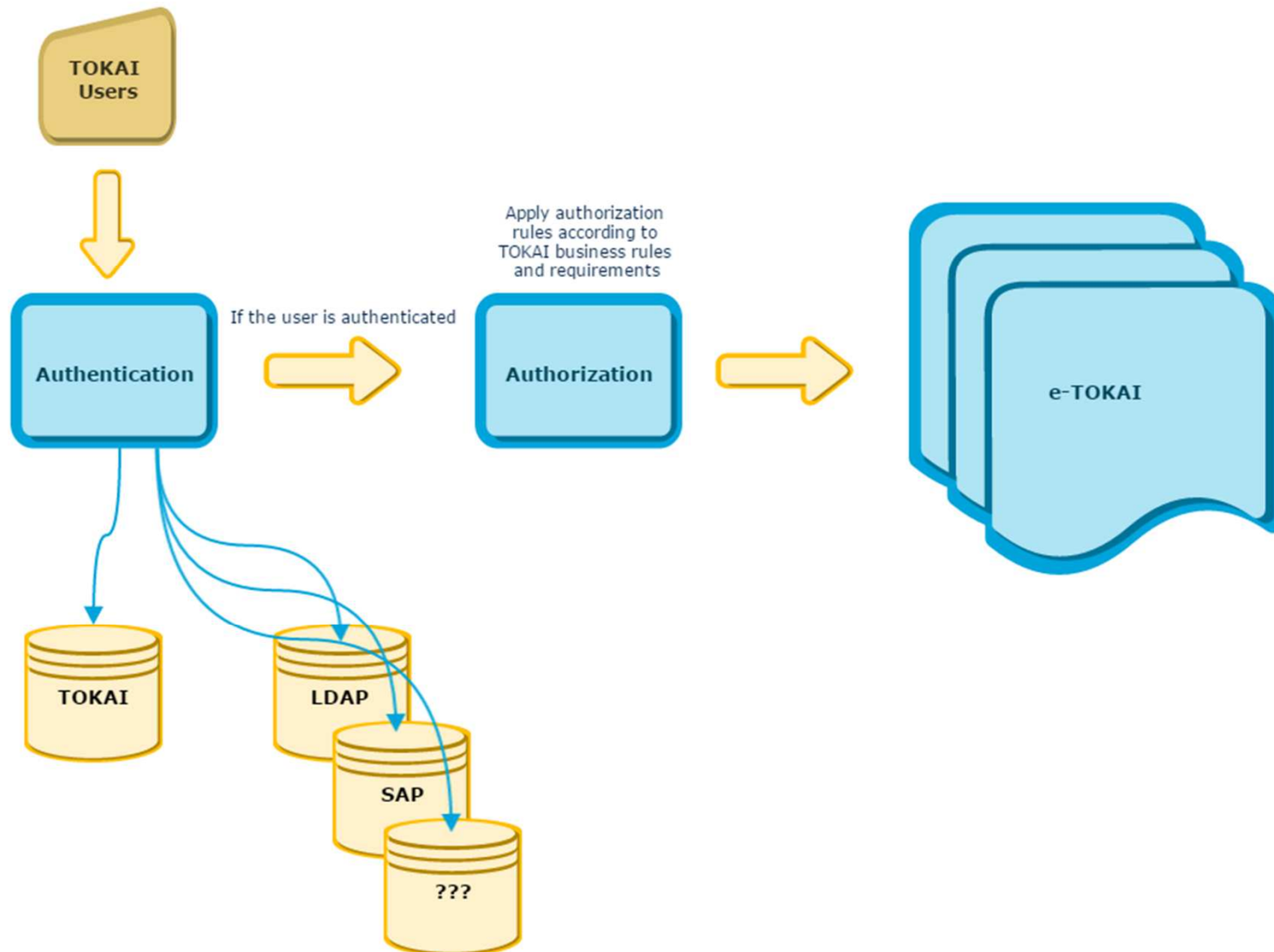
What's coming in the next version of e-TOKAI

- Custom organization workflows (*in beta*)
- Configurable time based alert system (*in beta*)
- Real-time notification system (*in beta*)
- Re-engineered user management system (*in beta*)
- RAT matrix statistics drilldown capability (*in beta*)
- Export / Import from ECCAIRS (mapping of taxonomy completed)
- A new and enhanced Audit & Trace module

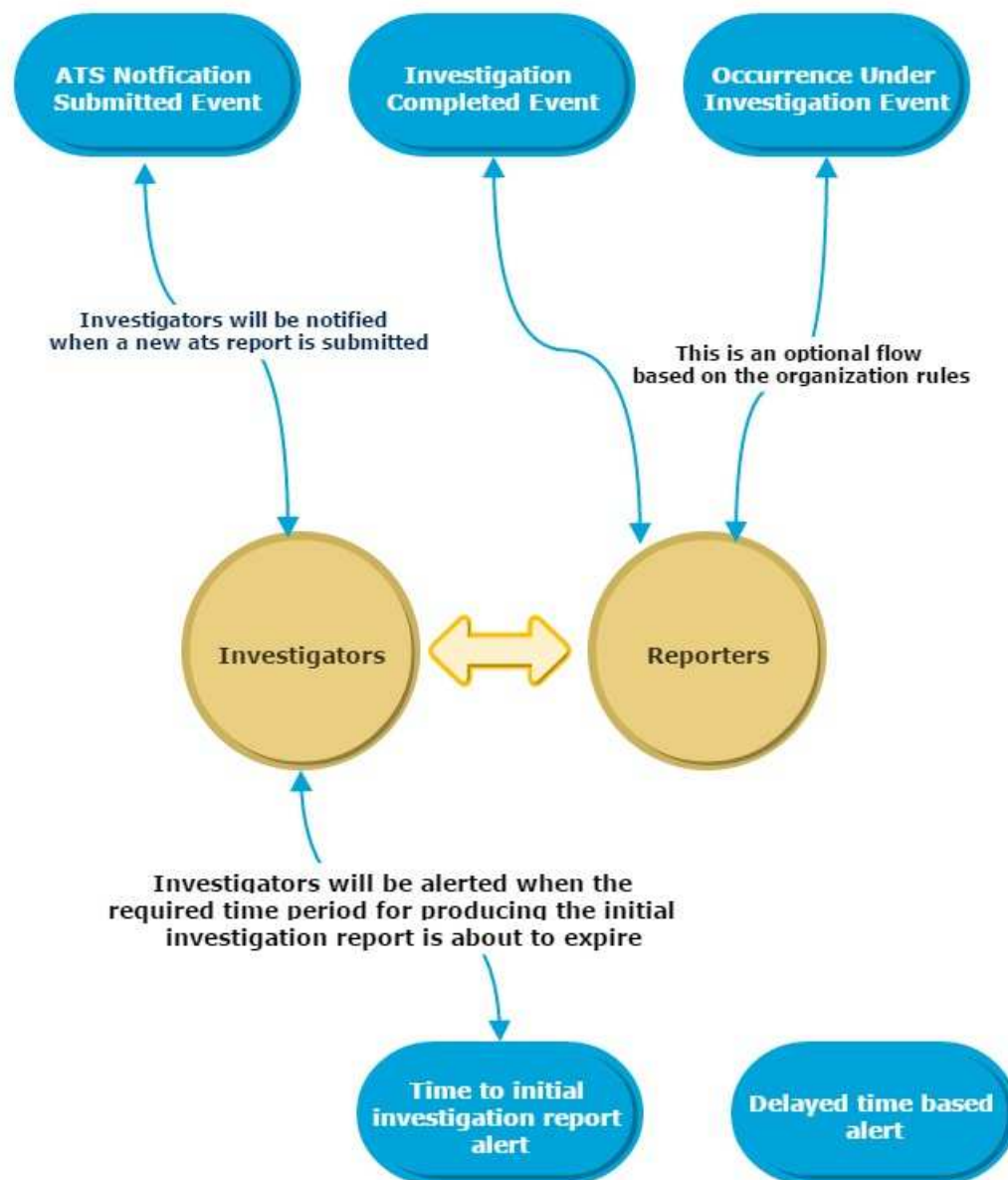


Re-engineered user management system

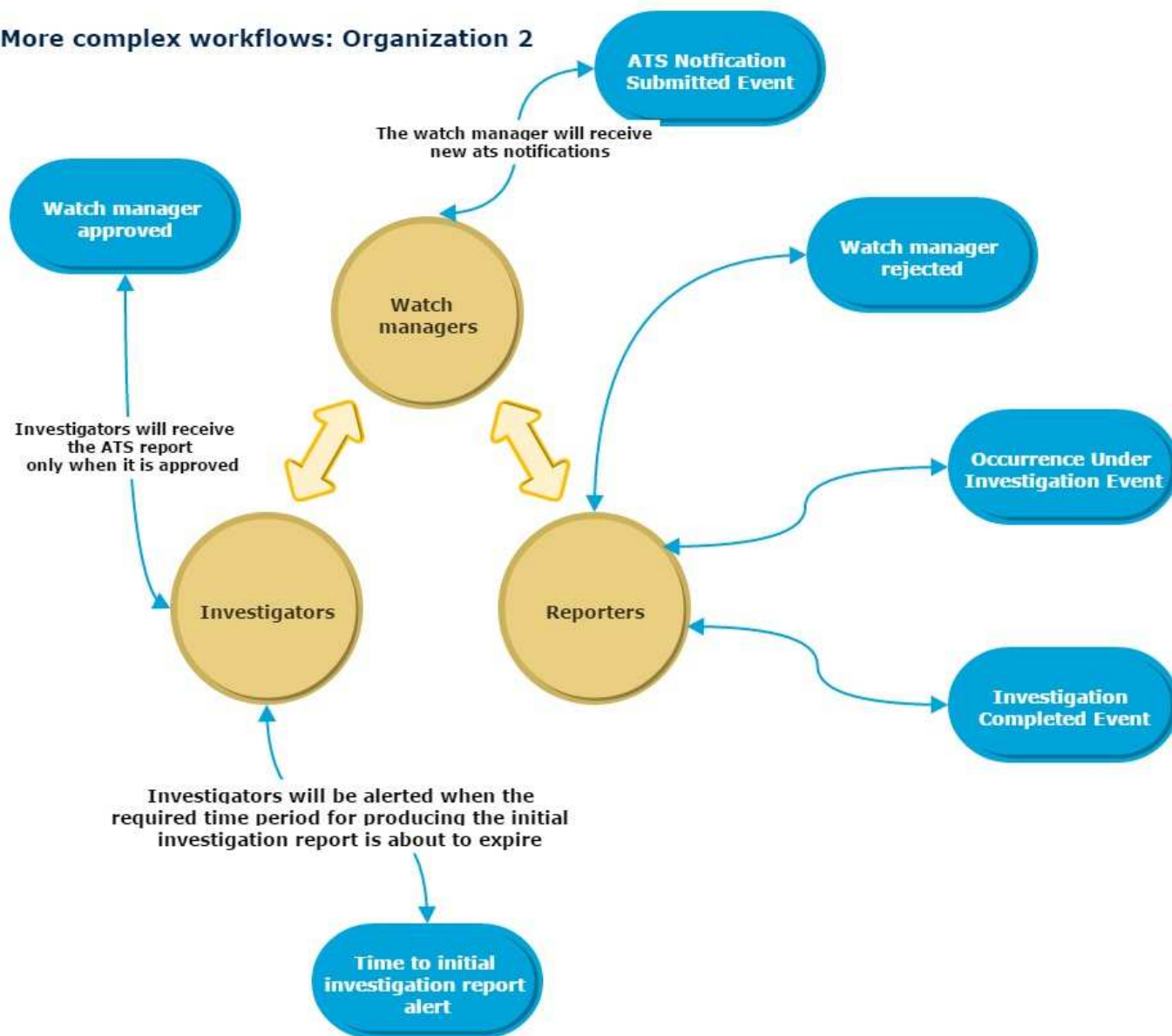
Authentication & Authorization as two different processes



Custom workflows: Organization 1



More complex workflows: Organization 2



What do you need to do (with our support) to deploy eTOKAI



- Choose server (EUROCONTROL NM or internal in your ANSP/FAB)
- Review forms and taxonomy
- Build forms and update taxonomy
- Build the SMS flow in the tools
- Set-up the units, regions, organisations, staff allocation and rights, distribution lists (all administration of the tool)
- Train the administrators
- Train the investigators
- Allow period for testing and feed-back
- Go live
- (mapping old taxonomy/database to new taxonomy to import your history)

Thank you for your attention !

Questions?

