European Aviation Safety Agency
E2.1

Network of Analysts
Annual Report 2012

Network of Analysts

EXTERNAL

Report

Network of Analysts Report 2012

Document ref.	Status	Date

Contact name and address for enquiries: *John Franklin*
European Aviation Safety Agency
E2.4
Postfach 10 12 53
50452 Köln
Germany

Information on EASA is available at: www.easa.europa.eu

Authorisation :			
	Name	Signature	Date
Prepared	John Franklin		15 Apr 2013
Reviewed 1			
Reviewed 2			
Authorised			

Report Distribution List:	
1	
2	
3	
4	
5	

Table of Contents

1 Introduction to the Network of Analysts 4
1.1 Initial Pilot Trial 4
1.2 Legislative development 4
1.3 Establishment and Development of the NoA 4
2 History of the NoA 4
2.1 Membership 4
2.2 1st Meeting – September 2011 5
2.3 Establishment of the Framework Steering Group (FSG) and 1st NoA FSG Meeting – November 2011 6
2.4 2nd NoA Meeting – February 2012 6
2.5 2nd NoA FSG Meeting – June 2012 8
2.6 3rd NoA Meeting – September 2012 8
2.7 3rd NoA FSG Meeting – November 2012 9
2.8 4th NoA Meeting – February 2013 10
2.9 4th NoA FSG Meeting – February 2013 10
3 The NoA Today 11
3.1 Roles of the NoA 11
3.2 Structure of the NoA 12
3.3 Link to the EASp and Relationship with Other Processes and Groups 14
4 Analysis of Key Safety Risks from the NoA 14
4.1 Risk 1 – Mid Air Collisions/ Airprox 14
4.2 Risk 2 – Runway Incursions 16
4.3 Risk 3 – Loss of Control – In Flight 17
4.4 Risk 4 – Birdstrikes 17
4.5 Risk 5 – Laser Illumination 19
4.6 Risk 6 – Ground Handling 20
4.7 Risk 7 – Maintenance Error 21
4.8 Risk 8 – Runway Excursions 22
4.9 Risk 9 – Airshows 23
4.10 Risk 10 – Effective Implementation of SMS 23
4.11 Risk 11 – Unstabilised Approaches/ Non Standard Approaches 24
4.12 Risk 12 – Airport Emergency Planning 25
4.13 Risk 13 – CFIT 25
4.14 Risk 14 – Incomplete Knowledge of Theory of Flight 26
4.15 Risk 15 – New products, systems and technologies (UAS) 26
4.16 Risk 16 – Fatigue 27
4.17 Risk 17 – Carriage of Lithium Batteries 27
5 NoA Sub Group Summary 28
5.1 Risk Classification – Framework Sub Group 28
5.2 Safety Performance Indicator – Framework Sub Group 28
5.3 Loss of Control (In Flight) - Analysis Sub Group 29
5.4 MAC/ Airprox- Analysis Sub Group 29
6 Surveys and Questionnaires 30
6.1 Purpose of Survey and Questionnaires 30
6.2 1st NoA Survey 30
6.3 Occurrence Reporting Rates Survey 31
7 Other NoA Work Areas 31
7.1 Support to ECCAIRS 5 Transition 32
7.2 Taxonomy 32
7.3 Library of Information 32
7.4 Coordinated Working 32

8 Strategy for 2013 and Beyond 33
8.1 The NoA in 2013 33
8.2 Long Term Planning 33
9 Summary and Key Points 34

1 Introduction to the Network of Analysts

1.1 Initial Pilot Trial

The concept of a coordinated approach to Safety Analysis in Europe was first explored by EASA in 2009 when a Network of Analysts (NoA) Case Study was carried out. This case study was run by EASA and involved a coordinated analysis of Runway Incursions between EASA and the NAAs of Spain, Sweden and the UK. During the study it was identified early on that it was vital for a single organisation to act as coordinator of such a network, but also that it was vital that all the parties involved carried an equal weight in the group's work and outputs. The anticipated benefits of such a network were that larger datasets could be used with new analysis methods to provide a better understanding of the aviation safety risks in Europe. It would also enable EASA MS to compare their own analysis and issues with European data. There were also anticipated to be a number of indirect benefits including the chance to increase the experience of analysts across Europe thorough their sharing of experiences. Moreover, the Network was expected to lead to greater communication between the safety analysis departments of the NAAs.

1.2 Legislative development

In the context of the decision making process which led to the adoption of Regulation (EU) No996/2010 on the investigation and prevention of accidents and incidents in civil aviation, the issue of the analysis of safety data at European level, and in particular of the information contained into the European Central Repository (ECR), was extensively discussed and led to the adoption of Article 19(1) which puts the obligation on " EASA and the competent authorities of the Member States to participate regularly and in collaboration in the exchange and analysis of information" contained into the ECR.

1.3 Establishment and Development of the NoA

After the success of the initial pilot trial and the new obligation imposed by Regulation (EU) No 996/2010, EASA considered that the establishment of such a network would require full time staffing to ensure that the NoA could be the primary focus of one EASA staff member in the Safety Analysis and Research Department. The EASA Safety Analysis Coordinator was recruited into the Agency in February 2011. During the time it took to receive approval for the post and complete the recruitment process the concept of the NoA was discussed further within EASA and with the EASA MS through the EASA/ NAA Partnership Meeting. This helped to build up interest and enthusiasm for the NoA, which meant that once the Safety Analysis Coordinator arrived at EASA there was already a considerable amount of interest in the group before it had even begun to exist. Given that there was a level of expectation before the NoA was officially formed, a questionnaire was sent to the NAAs and SIAs of the EASA MS to understand more about their hopes and ideas for the NoA. This information was combined with the work already carried out in EASA to develop an initial strategy for the NoA.

2 History of the NoA

2.1 Membership

At the early stages of the NoA's development, there was a great deal of discussion concerning its potential membership. It was vital that the group was able to bring together the safety analysis teams of the NAAs and SIAs whilst still being manageable in terms of size. There were also a number of Manufacturers and Operators who had heard about the establishment of the NoA and were keen to become involved. Given the logistical and practical constraints of trying to establish the NoA with so many interested parties, it was decided that at the start of the NoA's activities the membership would be limited to the safety analysis departments of the NAAs and SIAs of the EASA MS in accordance with Article 19(1) of Regulation No 996/2010. In

most cases EASA MS' are represented at the NoA by their NAA, 2 countries are represented by both the NAA and the SIA, whilst the remaining countries are represented by their SIA. The European Commission (DG MOVE and JRC) and Eurocontrol are also key members of the NoA. As the NoA has developed, other groups and organisations have started to become involved in some of the specific activities of the NoA. More and more work is being undertaken as joint activity with the groups of the European Strategic Safety Initiative (ESSI) to support the European Aviation Safety Plan (EASp). The NoA is chaired by the EASA Safety Analysis Coordinator and is supported by other members of the EASA Safety Analysis Section. Of the 31 EASA MS, there is regular participation in the NoA from over 20 countries and there are a number who are unable to travel for budgetary reasons but participate by correspondence. In addition, Croatia, in their status as an accession state, have recently joined the NoA in late 2012.

2.2 1st Meeting – September 2011

The 1st NoA Meeting was held on 1st September 2011. It was attended by 28 people from 18 EASA Member States, the EC (DG MOVE and JRC) and Eurocontrol. The key points of note from the 1st NoA Meeting[1] were:

a. **Terms of Reference**. Terms of Reference (TORs)[2] for the NoA were agreed, which included the main aims and roles of the NoA. It also set out the Membership of the NoA and identified that the key groups with which the NoA would work and interface included the groups of the ESSI, ECCAIRS Steering Committee Meeting (SCM), European Human Factors Advisory Group (EHFAG) and the European Network of Civil Aviation Safety Investigation Authorities (ENCASIA).

b. **Safety Analysis Survey**. It was agreed that a Safety Analysis Survey would be carried out across the EASA MS to understand more about the various aspects of safety analysis in each country. The survey covered the size and structure of the safety analysis department in the EASA MS, information about Occurrence Reporting processes, IT systems used and other information to help the NoA work as well as possible.

c. **Data Quality**. The meeting discussed ways of improving data quality at both a National and European Level. The 1st Meeting considered that this should be a major effort for the NoA, both in terms of ECCAIRS tools and the support of documents such as coding guidelines.

d. **SINAPSE Community**. An online community area was established using the EU's SINAPSE system. SINAPSE enables documents to be stored online, surveys to be carried out and supports other tasks to support the active work of the NoA.

e. **NoA Analysis Activity**. The 1st Meeting of the NoA agreed that the activity of the NoA should be focussed on supporting the EASp and State Safety Plans (SSPs). It was agreed that an initial analysis would be carried out to consider key issues for further analysis. A decision making process[3] was also agreed to enable the NoA to make informed decisions on which specific area were chosen for detailed analysis. The following areas were chosen for the initial analysis, mainly based on the operational issues from the EASp; Runway Excursions, Runway Incursions, MAC/ Airprox, CFIT, LOC-I, GCOL, General Aviation, Laser Illumination and Birdstrikes.

f. **NoA Governance and the Steering Group**. With 28 people attending the 1st Meeting, it was obvious that it would be difficult to have a lot of in depth discussions on

[1] Reference 1 - 1st NoA Meeting – Record of Decisions.
[2] Reference 2 - NoA Terms of Reference.
[3] Reference 3 - NoA Process Document 1 – Decision Making Process

safety matters with such a large group. It was therefore agreed that the NoA needed a smaller Steering Group to provide strategic direction to the Main NoA and to help organise its activities.

2.3 Establishment of the Framework Steering Group (FSG) and 1st NoA FSG Meeting – November 2011

The NoA Framework Steering Group (FSG) met for the first time on 29-30 November 2011. It has since had a further 2 meetings in June and November 2012, held between each NoA Meeting. The NoA FSG is chaired by the EASA Safety Analysis Coordinator and it's membership is taken from the EC (DG MOVE and JRC), Eurocontrol and a selection EASA MS (currently the NAAs of Denmark, France, Latvia, Sweden, Switzerland, The Netherlands and UK). The NoA FSG has the following key roles in its TORs[4]:

- To provide strategic direction to the NoA, notably to enable it to contribute to the EASp.

- To support the development of European legislation in areas of interest to safety analysis.

- To support the work of the NoA and its individual members through the provision of tools, best practice knowledge and frameworks to support safety analysis in Europe.

The main points of the 1st NoA FSG Meeting held in November 2011[5] are provided below. The focus of the 1st NoA FSG Meeting was to decide how the NoA, particularly given its size, could be managed and organised to provide outputs to support both the EASp and the SSPs of the EASA MS. The information provided by the EASA MS in the Safety Analysis Survey, which was agreed at the 1st NoA Meeting, was used to consider the way the NoA and the FSG should function. The key decisions were:

a. **FSG TORs**. The NoA FSG TORs were developed.

b. **Structure of NoA Meetings**. The structure of Main NoA Meetings was discussed. It was agreed that meetings would start with each EASA MS providing a verbal update on their top 3 current and emerging risks, new tools or processes developed for safety analysis and issues they thought might be relevant for discussion at the NoA. A National Update template was developed so that the EASA MS could provide their updates in written form 2 weeks before each NoA Meeting. The remainder of the NoA Meetings would focus on specific analysis work and tools/ information to support safety analysis. It was agreed that the NoA FSG would develop the agenda for each NoA Meetings.

c. **Establishment of NoA Sub Groups**. Given the size of the NoA, it was agreed that the NoA would be split into 4 smaller Sub Groups to carry out specific in depth activity. Of these 4 groups, 2 would focus on the development of frameworks and process for safety analysis and the remaining 2 would carry out in-depth analysis in specific areas of interest. A process was developed to govern how the Sub Groups would operate[6].

2.4 2nd NoA Meeting – February 2012

The 2nd NoA Meeting was held from 31 January to 2 February 2012. It was attended by 42 people from 23 EASA Member States, the EC (DG MOVE and JRC) and Eurocontrol. The meeting was also joined by the Chairman of the NATO Flight Safety Panel to provide a link

[4] Reference 4 – TORs for NoA FSG.
[5] Reference 5 – 1st NoA FSG Meeting – RoDs.
[6] Reference 6 – NoA Process Document 2 – NoA Sub Groups.

between the NoA and its military equivalent group. The key points of note from the 2nd NoA Meeting[7] were:

a. **National Updates**. The attendees provided updates on their Top 3 current and emerging risks.

1) **Top 3 Current Risks**: From all the EASA MS attending the meeting the Top 3 Current Risks were:

- Loss of Separation/ MAC/ Airprox – 12 EASA MS.
- Runway Incursions – 7 EASA MS.
- Runway Excursions – 5 EASA MS.

2) Top 3 Emerging Risks: The Top 3 Emerging Risks were:

- Laser Illumination – 8 EASA MS.
- Birdstrikes – 5 EASA MS.
- Fatigue – 2 EASA MS.

b. **Decisions on Further Analysis**. Data from the EASA MS had been provided to the EASA Safety Analysis Coordinator in ECCAIRS format for the operational areas that were agreed at the 1st NoA Meeting. An analysis of this data was used with the information provided in the National Updates to agree the subjects for the 2 Analysis Sub Groups. The NoA decision making process was used to select LOC-I and MAC/ Airprox as the subjects for the Sub Groups.

c. **Framework Sub Groups**. The subjects for the 2 Framework Sub Groups were agreed. These were the development of a European common Risk Classification Scheme and SPIs. Risk Classification was chosen in order to prepare the implementation of the future EU legislation on occurrence reporting which will impose on EU MS to classify the occurrences in terms of risk according to a single and harmonised scheme. Such a scheme should enable a number of different activities to be brought together under a single team which took over an action from ECAST on the development of a common risk classification scheme. SPIs was chosen for the reason that the developing of SSPs had established a need for EASA MS to develop SPIs to support safety planning and safety management at a National Level. The opportunity to work together on the development of SPIs was considered to be of great benefit to the EASA MS and would also help the goal of collecting data and monitoring SPIs at a European Level to support the EASp.

d. **Sub Group Meetings**. The 4 Sub Groups met for the first time with the primary task of scoping out the work that they would do and following the process document that had been developed to structure the work of the Sub Groups. Further details on the work carried out by the Sub Groups is provided later in this report.

e. **Occurrence Reporting Proposal**. The NoA was provided with a presentation on the development of the new Occurrence Reporting Legislative proposal by the European Commission.

[7] Reference 7 – 2nd NoA Meeting – RoDs.

2.5 2nd NoA FSG Meeting – June 2012

The 2nd NoA FSG Meeting[8] was held on 12-13 June 2012 and the meeting was able to consider the developing work of the Sub Groups, planning for the 3rd NoA Meeting and the developing role of the NoA in the wider strategic context of the EASp. The key points of discussion from the meeting were:

a. **NoA/ ECAST Working Arrangements**. With the establishment of the NoA, the European Civil Aviation Safety Team (ECAST) had been considering whether there was still a requirement for their Safety Analysis Team and if so, what role it might have in the analysis of safety data to support the EASp. Similarly, the work of the NoA Sub Group had already started to expand their membership beyond the NoA to include some ECAST to enable the appropriate operational experts to take part in addition to the NAAs and SIAs already involved in the NoA. Additionally, the developing needs of the EASp had led to the need for a more coordinated approach to both general and specific analysis and then subsequent development of solutions for the aviation community. The strategic role for the various groups such as the NoA, ESSI (ECAST/ EHEST/ EGAST) and the EHFAG in supporting the EASp has since been the subject of a great deal of work both within the NoA and EASA. Full details of the outcome of this work is provided in Chapter 7 – Strategy.

b. **Review of the 2nd NoA Meeting**. The FSG reviewed the 2nd NoA Meeting to identify any areas for improvement to help the planning of future meetings. The National Updates Template was revised to request information on the information and data used to support the selection of the Top 3 Current and Emerging Risks as well as the actions in the country's SSP for each risk. The Template was also amended to request more information on the ECCAIRS 5 transition process and to ask more specific questions about the assistance that the NoA could provide in specific areas such as SPI development, surveys and data analysis. The FSG used the experiences from the previous NoA meeting to develop the Agenda for the 3rd NoA Meeting.

2.6 3rd NoA Meeting – September 2012

The 3rd NoA Meeting was held from 18-19 September 2012. It was attended by 53 people from 22 EASA Member States, the EC (DG MOVE and JRC)and Eurocontrol. The meeting was also joined by various individuals and organisations that were involved in the Sub Groups. Work on the individual Sub Groups took up 1 full day of the agenda of the 3rd NoA Meeting. The key points of note from the 3rd NoA Meeting[9] were:

a. **National Updates**. The attendees again provided updates on their Top 3 current and emerging risks with additional information on the data used to support these risks and actions being taken to mitigate them.

1) **Top 3 Current Risks**: From all the EASA MS attending the meeting the Top 3 Current Risks were:

- Loss of Separation/ MAC/ Airprox – 10 EASA MS.
- Runway Incursions – 5 EASA MS.
- Loss of Control in Flight – 4 EASA MS.

2) **Top 3 Emerging Risks**: The Top 3 Emerging Risks were:

[8] Reference 8 – 2nd NoA FSG Meeting – RoDs.
[9] Reference 9 – 3rd NoA Meeting – RoDs.

- Laser Illumination – 8 EASA MS.
- Loss of Separation/ MAC/ Airprox – 4 EASA MS.
- New products, technologies, UAS and associated issues – 4 EASA MS.

b. **Occurrence Reporting Proposal**. The NoA was provided with a further presentation on the development of the new Occurrence Reporting Legislative proposal by the European Commission. The NoA then supported the European Commission by performing some work on the recommended data fields for occurrence reporting.

c. **ECCAIRS 5 Transition**. The meeting considered how the NoA might support the transition of the EASA MS to ECCAIRS 5. It was agreed that an ECCAIRS 5 standard would be established and the NoA would support all the EASA MS in reaching this standard by providing assistance such as documentation, guides and training. The establishment of a common standard would greatly improve the NoA's ability to improve data quality and carry out coordinated analysis.

2.7 3rd NoA FSG Meeting – November 2012

The 3rd NoA FSG Meeting[10] was held on 27-28 November 2012 and after a full year since the NoAs establishment spent a significant amount of time reviewing the NoA's activities and processes. The key points of discussion from the meeting were:

a. **Review of 3rd NoA Meeting**. During the review of the 3rd NoA Meeting, there were a number of key issues discussed that were useful for the later discussion on the NoA strategic planning.

1) **National Updates**. It was considered that carrying out full National Updates every 6 months was too often and that this should become an annual task. Additionally, the National Updates should not necessarily be limited to the Top 3 Risks and should be more closely linked to the EASp/ SSP process.

2) **Sub Groups**. The logistics of running 4 Sub Groups as part of each NoA Meeting was considered to be extremely challenging and meant that the EASA Safety Analysis Coordinator was unable to provide the same level of support to all the groups.

3) **ECCAIRS SCM**. The proximity of the September NoA Meeting each year to the ECCAIRS Steering Committee Meeting (SCM) meant that there had been some duplication between these 2 events in 2012. The JRC has joined the NoA FSG to support closer planning between the NoA and the ECCAIRS SCM.

b. **NoA Strategic Planning**. There was a great deal of discussion on how the NoA had evolved in its first year and how it could be organised to be more focussed on supporting the EASp and the SSPs of the EASA MS. There was the need for a much closer relationship between the NoA and other events such as EASA's EASp Summit, the ECCAIRS SCM and the work of the ESSI groups. It was considered that the Sub Group Meetings should no longer be held as part of main NoA Meetings. The Sub Groups would then become more stand-alone groups in their own right, to work of specific issues to support the EASp and SSPs by drawing in members from outside the NoA depending on the specific needs of the Sub Group.

[10] Reference 10 – 3rd NoA FSG – RoDs.

c. **Review of National Updates and Key Risks**. The FSG Meeting reviewed the many issues that had been raised as key risks in the National Updates and from the general analysis work of the NoA. It was considered vital that everything carried out by the NoA each year was summarised and brought together in Annual Report so that the information was available in one place.

2.8 4th NoA Meeting – February 2013

The 4th NoA Meeting was held on 5-6 February 2013[11] and the key points of discussion from the meeting were:

a. **National Updates**. Because the key risks had been provided in significant detail at the previous meeting in September, a full update of National risks will be provided at the next Main NoA Meeting in February 2014. Instead of full National Updates presentations were provided to the meeting on the subjects of Exposure Data (Sweden), Occurrence Report Processing (The Netherlands), Development of QPulse for Use with ECCAIRS (Finland) and Low Visibility ILS Approaches (France).

b. **NoA Annual Report**. The meeting reviewed this Annual Report document and agreed that the report would be produced for review at the main NoA Meeting in February each year. The NoA Members would review the final version of the report in March prior to final publication in April.

c. **Occurrence Reporting**. The European Commission provided an update on the latest situation concerning the proposed revision to the Occurrence Reporting Legislation. The meeting agreed that the NoA should consider the possibilities for developing common reporting forms for use across Europe.

d. **ECCAIRS**. The JRC provided a presentation on the custom views available in ECCAIRS 5; for example it is possible to provide custom forms depending on the Occurrence Categories selected in ECCAIRS. The meeting agreed that the NoA would agree the best possible set of data fields for each Occurrence Category, the JRC would then develop the custom views for use by the whole ECCAIRS Community. There was also discussion about the support to be provided by the NoA to the ECCAIRS 5 transition process. In addition, it was agreed that NoA would work to support the strategic development of systems being used with ECCAIRS for Safety Management to ensure this was done in an organised way to prevent all the EASA MS having to potentially pay suppliers for a slightly different versions of work already done for another country.

2.9 4th NoA FSG Meeting – February 2013

The 4th NoA FSG Meeting was held on 7 February 2013, which gave the meeting to review and amend the changes made to the NoA at the previous FSG Meeting in November 2012. The key points of discussion from the meeting were:

a. **Future NoA Meeting Structure**. It was agreed that the future NoA Meeting would be structured in the following areas/ subjects:

1) Risks and Operational Issues (National Updates).

2) Occurrence Reporting.

3) Systems and Tools (Including ECCAIRS),.

[11] Reference 11 – 4th NoA FSG – RoDs.

4) Safety Analysis.

In June each year, NoA Members will be asked for suggestions of issues and presentations they might wish to provide in each of these subject areas. The NoA FSG will meet in September/ October at the ECCAIRS SCM to plan the Main NoA meeting around the themes and issues raised by the NoA Members. Each topic/ subject will be focussed on specific issues starting with presentations to introduce the subject and then followed by small group discussion before the whole meetings comes back together to agree solutions and make final conclusions.

b. **Planning for ECCAIRS SCM**. There was discussion concerning the planning for the ECCAIRS SCM 2013 that would be held on 10/11 October 2013 in Italy. In the same week there would also be meetings of the CAST/ ICAO Common Taxonomy Team (7/ 8 October 2013) and the ECCAIRS Taxonomy WG/ NoA FSG (9 October 2013). The NoA would take responsibility for providing 1 or 2 Workshops and approximately 3 presentations at the event, further discussion on the meeting organisation would take place with the JRC in the coming months.

3 The NoA Today

3.1 Roles of the NoA

The NoA has now been running since September 2011 and in that time the roles of the NoA, notably in application of the mandate given by Article 19 of Regulation No 996/2010, has become much clearer. Additionally, the role of the NoA in the supporting the safety planning process has also evolved. Consequently, the main focus of the NoA is now to support the EASp and to support the SSPs of the EASA MS. The key roles of the NoA are:

a. **General Analysis**. To perform general analysis of the available aviation safety data in Europe to support the EASp and the SSPs of the EASA MS. The main data sources used for this process include, but are not necessarily limited to:

1) European Central Repository.

2) National Databases – Using information from National Databases on specific issues, normalised using EASA exposure data (See notes from FSG)

3) EASA ADREP Database – Finalised at the ICAO Safety Indicator Study Group (SISG) in February each year.

4) Future European groups for the analysis of accidents and serious incidents in the areas of Commercial Air Transport (ECAST), Helicopters (EHEST) and, in the longer term, General Aviation (EGAST).

b. **Detailed Analysis**. Where specific areas are identified at the General Analysis stage or an action is requested from another process or group (EASp, EASAC, ESSI, EHFAG) the NoA will perform more detailed analysis. This type of analysis should be focussed on identifying specific issues/ problems that can then be dealt with in SSPs at a

state level. This type of analysis is likely to include both an analysis of data and also an analysis of previous work or studies in that subject. Detailed Analysis work might also involve the establishment of a Sub Group and where this is required the membership would not be limited to just the NoA but would also include any relevant specialists from other groups such as ESSI.

c. **Tools and Frameworks**. In order to perform the best possible safety analysis there are certain tools and frameworks that might be identified for development or improvement. These include issues such as Risk Classification, SPIs, ECCAIRS and Taxonomies, for which a NoA Sub Group may be established involving the relevant specialists from across the European Aviation Community.

d. **NoA Meeting Structure**. Main NoA meetings will be structured around the following 4 subject areas:

1) Risks and Operational Issues (National Updates).

2) Occurrence Reporting.

3) Systems and Tools (Including ECCAIRS),.

4) Safety Analysis.

In the planning for each meeting, themes will be chosen in each of these areas and these will form the basis for the discussion at each meeting with the goal of resolving specific issues and problems in an organised way.

3.2 Structure of the NoA

The NoA consists of the following groups:

a. **Main NoA**.

1) **Membership**. Chaired by EASA, the members of the Main NoA are the European Commission (DG MOVE and JRC), Eurocontrol and the NAAs/ SIAs of the EASA MS.

2) **Meeting Frequency**. The Main NoA meets twice per year, once in February as a meeting of its own and once in conjunction with the ECCAIRS SCM, normally in September/ October each year.

3) **Purposes and Tasks**. The main purposes of the Main NoA are:

- To consider, in the February meeting each year, the key aviation safety risks in the EASA MS (National Updates on key risks provided by the EASA MS to the NoA in February each year). This will be used with analysis carried out both by the EASA Safety Analysis and Research Department and, in the future, the planned classification and analysis groups of the ESSI to inform the EASAC, EASA Internal Safety Committee (ISC) as part of the EASp process. In will also be used to the support the SSPs of the EASA MS and help to inform the priorities of the ESSI Groups and the EHFAG.

- To determine the requirement to establish a NoA Sub Group for a particular subject and to agree the scope of that Sub Group.

- To review the work of all NoA Sub Groups.

- To support, where necessary, the development of European legislation in the fields related to occurrence reporting and safety analysis.

- To enable the promotion of best practice methods and technologies in the field of aviation safety analysis.

b. **NoA Framework Steering Group (FSG)**.

1) **Membership**. Chaired by EASA, the members of the NoA FSG are the European Commission (DG MOVE and JRC), Eurocontrol and any volunteering NAAs/ SIAs who are members of the NoA. The NoA FSG should ideally have at least 8, but not more than 12 Members.

2) **Meeting Frequency**. The NoA FSG meets twice per year directly after the Main NoA Meetings.

3) **Purposes and Tasks**. The main purposes of the NoA FSG are:

- To provide strategic direction to the NoA, notably to enable it to contribute to the EASp and to support SSPs of the EASA MS.

- To support the work of the NoA and its individual members through the provision of tools, best practice knowledge and frameworks to support safety analysis in Europe.

- To monitor the activity of the NoA Sub Groups.

c. **NoA Sub GroupsFSG**.

1) **Membership**. The members of NoA Sub Groups should be chosen from across the European Aviation Community and is dependent of the subject and requirements of the Sub Group. The membership will mainly be taken from the Main NoA, ESSI Groups, EHFAG and EASA, but could be chosen from any organisation or group with the experience to assist the Sub Group's activity. They are chaired by members of the Framework Steering Group. The EASA Safety Analysis will be involved in every Sub Group to provide the organisation and coordination required to support the Sub Group.

2) **Meeting Frequency**. The NoA Sub Groups will meet as required to meet their goals. Wherever possible Sub Group Meetings will be held in conjunction with other relevant meetings to minimise the travel requirements for Sub Group Members.

3) **Purposes and Tasks**. The main purposes of each NoA Sub Group will be determined when the group is first established using NoA Process Document 2. The Sub Groups will always be focussed towards support to the EASp, the SSPs of the EASA MS and how they can provide safety improvements to the European Aviation Community.

3.3 Link to the EASp and Relationship with Other Processes and Groups

The NoA is only one part of a much larger process of safety planning in the European Aviation Community. During its first year the NoA has been establishing its position within the wider framework of this process. It is vital that the NoA is closely linked with the process of the EASp and is closely linked to other groups that are also involved with supporting the Plan. This coordination is carried out as part of the normal work of the EASA Safety Analysis and Research Department, which is where the Secretariats for the EASp, NoA, ESSI and EHFAG are co-located.

a. **Identification of Safety Issues**. Once a year, the NoA will produce an Annual Report that will inform the EASAC, the EASA ISC and the EASp on the safety risks and issues that the NoA, through the involved EASA MS, has identified through its analysis. It will also provide updates to the groups of the ESSI on their analysis of areas within their work areas and also to the EHFAG on Human Factors issues.

b. **EASp Actions**. Where necessary, the NoA will be tasked with actions through the EASp for either analysis tasks or the developments of frameworks or tools to support safety management in Europe.

c. **Development of Safety Improvements**. NoA Sub Groups are likely to be involved in the analysis of specific operational issues to support the EASp and to develop safety improvements. The NoA will work closely with other groups previously mentioned to carry out these tasks, which will often involve the establishment of a NoA Sub Group.

d. **Support to SSPs**. One of the key areas of the NoA's work is to provide more detail on actions in the EASp so that the subsequent actions in the SSPs of the EASA MS are developed and monitored in a standard way. This will also save the EASA MS having to carry out a lot of work separately, in theory 31 times, whilst enabling information to be brought together more effectively at a European Level.

4 Analysis of Key Safety Risks from the NoA

In 2012, the NoA has gathered a great deal of information on the many aviation safety risks faced both a European Level and by the EASA MS. Information has been provided by the EASA MS attending the NoA through their National Updates, where they were asked for their Top 3 Current Risks and their Top 3 Emerging Risks. A summary of the risks, ranking in the order of the number of countries that raised the issue is provided, full details can be found in the 3rd NoA National Updates Summary[12]. In future years, the National Updates provided to the NoA will not be limited to only the Top 3 Risks but will widened to ask for information on all risks included in the SSP or risks being monitored on a regular basis.

4.1 Risk 1 – Mid Air Collisions/ Airprox

a. **Subject Description**. Mid Air Collisions/ Airprox, which includes other pre-cursor events such as Airspace Infringements, IFR-VFR Traffic and Airborne Conflict.

b. **Number of Countries**.

- **Current Risks**: 10 EASA MS. **Emerging Risks**: 4 EASA MS.

c. **Ranking in Top 3 Current Risks**. 1st – 5, 2nd – 2, 3rd - 3.

[12] Reference 12 – 3rd NoA National Updates Summary.

d. **Data Used to Support Inclusion as Top 3 Risk**. There were a number of different reasons provided by the various EASA MS to explain the inclusion of MAC/ Airprox in their key risks. These included a high number of occurrences, a number of high risk occurrence and high rates of occurrences. Some countries had noted that there had been a recent decrease in such occurrences but it remained a key concern. In most cases it was considered that the majority of airspace infringement reports were provided by ATCOs.

e. **Summary of Actions**.

- **Europe**: There are 9 actions in the EASp related to the issue of MAC etc, from which further details can be found from Page 43 of the 2012-2015 EASp at the following link. The subject is also being dealt with a part of a NoA Sub Group.

- **Belgium**: Establishing a national action plan for airspace infringement risk reduction derived from the European plan. Promoting and verifying the implementation of the national action plan for airspace infringement risk reduction.

- **Estonia**: Meetings have been held between Estonian stakeholders to improve civil-military co-operation.

- **Finland**: A Trafi information letter was sent out in 2012 on this subject. The delivery covered all Finnish licensed pilots, pilot training organizations, flying clubs and Finavia, the company maintaining the network of 25 airports in Finland and the air navigation system covering the entire country. The progress of the trend will be continuously monitored by the SPI AI. The Finland Safety Plan can be found here.

- **Lithuania**: Proposals to amend national legal acts (Flight rules, Organization of the Airspace rules) recently have been submitted to the Ministry of Transportation.

- **Poland**: National program for the prevention of airspace infringements will be part of the SSP.

- **Slovak Republic**: The CAA is using training with respective organisations to assist with the reduction in airspace infringements.

- **Spain**: Have risks for Madrid TMA and Airspace Infringements. Madrid TMA Actions: Establishment of MADRID TMA SAFETY WG (ANSP + NAA) – Task force in charge of studying and analysing the various conflicts detected within Madrid TMA. This TF has carried out specific studies and has issued specific recommendations on different topics (i.e. Undesired TCAS-RA prevention initiative, English Language conflict mitigation in Madrid TMA, etc). Before this TF, other specific actions were taken in order to solve particular problems related to Madrid TMA (i.e. Restrictions for Gliders and general aviation operation in Madrid TMA via NOTAM).

- **Sweden**: National Action plan on prevention of Airspace Infringements in place, with actions proposed in the European Action Plan on prevention of Airspace infringements.

- **Switzerland**: Actions in place with the Airspace Infringement Working Group. Raising awareness through promotion and campaigns. Actions targeting VFR-IFR mix traffic in particular airspace. CAA constantly underlines the importance of adequate flight planning among GA pilots.

- **The Netherlands**: In 2012 a working group was set up by the Dutch CAA, including stakeholders like ATC, general aviation, flight clubs and the national police service agency. A cause analysis has taken place and the results were used to identify effective measures. This year different publications (a. o. A publication of the Dutch Occurrence Bureau) were sent to sector parties to enhance the awareness of the danger of airspace infringements. Besides that ATC improved their publications of (changes in) the airspace. On the long term (starting next year) measures will be taken on communication (hotspot information and GPS updates), training and the improvement of on board equipment.

- **UK**: The UK CAA addresses Airborne Conflict as one of its Significant Seven. Actions include a Level Bust Working Group, Airspace and Safety Initiative, Airspace Infringement Working Group. Full details can be found in Action 3.1.5 of the UK CAA Safety Plan. A number of reports on Airprox can be found on the website of the UK Airprox Board here.

f. **Conclusion**. A NoA Sub Group has been established on this subject and a summary of the Sub Group work so far is included in Section 5. Additionally, Eurocontrol have developed a European Action Plan for Airspace Infringement Risk Reduction, which can be found here. Moreover, Skybrary information on MAC/ Airprox is here.

4.2 Risk 2 – Runway Incursions

a. **Subject Description**. Runway Incursions, mainly involving Commercial Air Transport at Airports.

b. **Number of Countries**.

- **Current Risks**: 5 EASA MS. **Emerging Risks**:

c. **Ranking in Top 3 Current Risks**. 2nd – 3, 3rd – 2.

d. **Data Used to Support Inclusion as Top 3 Risk**. A high number of occurrence and the risk involved in some occurrences. In some countries, SPIs have identified an increasing trend between 2008 and 2010.

e. **Summary of Actions**.

- **Europe**. The EASp includes Runway Incursions under the subject of Ground Collision and there are a number of actions that have been identified. In general, work on Runway Incursions is currently being taken forward as part of the European Action Plan for the Prevention of Runway Incursions.

- **Belgium**: Promoting the recommendations from the EAPRI to the aviation industry. Verifying the implementation of EAPRI recommendations by all stakeholders and ensuring the local Runway Safety Teams are dealing with runway safety and runway incursions based on local risks.

- **France**: This is a top Safety concern, in France since years 1995-2000, and at that time DGAC was pushing hard Eurocontrol to launch a program which became later EAPPRI.

- **Sweden**: National seminar on runway safety planned for 5-6 November, covering both RI and RE.

- **Switzerland**: Focus on the implementation of EAPRI Actions, introduction of Runway Safety Teams at particular locations, HAZID and airport certification.

- **UK**. Runway Incursions are covered within the UK CAA Plan as one of the Significant Seven. The main focus for the work is the Runway Incursion Steering Group. Further information can be found in Action 3.1.4 of the Safety Plan here.

f. **Conclusion**. Work on Runway Incursions is currently being taken forward as part of the European Action Plan for the Prevention of Runway Incursions, which can be downloaded here.

4.3 Risk 3 – Loss of Control – In Flight

a. **Subject Description**. Loss of Control – In Flight.

b. **Number of Countries**.

- **Current Risks**: 4 EASA MS. **Emerging Risks**: 1 EASA MS.

c. **Ranking in Top 3 Current Risks**. 1st – 3, 2nd – 1.

d. **Data Used to Support Inclusion as Top 3 Risk**. EASA MS raising the issue of LOC-I in their National Updates stated that a high number of occurrences in their country and in some cases, specifically a number of high risk occurrences were the main reasons.

e. **Summary of Actions**.

- **Europe**: LOC-I is covered within the EASp and further information on the Actions is available on Page 45 of the EASp 2012-2015 here.

- **Estonia**: Plan to develop SPI to reflect LOC events. Promote reporting on all LOC related events: system or component failures, flight control errors, environmental factors etc.

- **Hungary**: Safety conference for stakeholders.

- **UK**: Loss of Control in Flight is one of the Signficant Seven in the UK CAA Safety Plan. The actions for this subject are detailed in Action 3.1.1 of the Plan, here. The next scheduled deliverable is for CAA Flight Operations to disseminate monitoring training and assessment best practice to industry, promote its use within EASA and undertake oversight activity to ensure that operators appropriately consider the principles of best practice in their own risk mitigation activities.

f. **Conclusion**. The subject of LOC-I is being taken forward by a NoA Sub Group. A total of 21 different major activities for LOC-I have been identified and the challenge is to use this information meaningfully to provide achievable actions for the EASp and SSPs. Full details is provided in Enclosure 1 to this document[13]. In addition to analysis of LOC-I, the NoA LOC-I Sub Group is also focussed on summarising the information of these additional groups to enable meaningful actions to be developed for SSPs.

4.4 Risk 4 – Birdstrikes

[13] Reference 13 – Summary of LOC-I Initiatives.

a. **Subject Description**. Birdstrikes of aircraft both involving EASA MS Registered Aircraft and aircraft at Airports and Aerodromes in the EASA MS.

b. **Number of Countries**.

- **Current Risks**: 4 EASA MS. **Emerging Risks**: 2 EASA MS

c. **Ranking in Top 3 Current Risks**. 1st – 1, 2nd – 2, 3rd – 1.

d. **Data Used to Support Inclusion as Top 3 Risk**. The key factor for the inclusion of Birdstrikes was a high rate of occurrences and specific know problems at particular Airports.

e. **Summary of Actions**.

- **Europe**: Birdstrikes are not currently included within the EASp.

- **Belgium**: Organisation of courses for Bird Control Unit (BCU) personnel. Exchange of experience. Improvement of the reporting of wildlife occurrences. Development of regulatory actions.

- **Lithuania**: Airport Wildlife Hazard and Prevention Management plans are in place. Airport safety committees meetings with the participation of CAA representatives are organized quarterly.

- **Slovak Republic**: Working with airports to improve airport bird control measures.

- **The Netherlands**: A combination of measures for instance development of detection devices, no (new) breeding place around Schiphol and bird population control. Single measures has had no effect.

Further Analysis: As of 7 November, in the ECR, there were 22,611 Birdstrike occurrences, an initial analysis of this information is provided in Enclosure 2. Of these the breakdown by Occurrence Class was:

Accident – 17
Serious Incident – 20
Major Incident – 42
Significant Incident – 4265
Incident – 14,069

The number of Birdstrike occurrences in the ECR increased significantly between 2008 and 2009 and then has increased slightly to 2011. The State of Occurrence of the Birdstrike data suggested no specific trends. In terms of the location of occurrences, within the EASA MS the top 5 locations were:

Amsterdam Airport – 1712
Madrid Airport – 1014
Barcelona Airport – 707
Paris Charles de Gaulle – 598
Brussels Airport – 494

Outside the EASA MS, the list reflects the numbers of reports received from different countries, the top 5 outside the EASA MS were:

Entebbe Airport, Uganda – 112

Fort de France Airport, Martinique – 105
Point-a-Pitre Airport, Guadeloupe – 94
Noumea, New Caledonia – 55
Papeete Airport, French Polynesia – 52

Resources for Bird Control and Birdstrike Prevention. There are many different initiatives around the world to raise awareness of proactive methods of bird and wildlife control. These include (Hyperlinks provided):

Skybrary

International Birdstrike Committee (Additional links available)

German Birdstrike Committee (In German and English)

Italian Birdstrike Committee (In Italian and English)

UK Birdstrike Avoidance Team

USA Birdstrike Committee

f. **Conclusion**. At the 4th NoA Meeting in February 2013, there will be discussion concerning the need for further work on Birdstrikes.

4.5 Risk 5 – Laser Illumination

a. **Subject Description**. Illumination of aircraft and air traffic control facilities by lasers.

b. **Number of Countries**.

- **Current Risks**: 3 EASA MS. **Emerging Risks**: 12 EASA MS

c. **Ranking in Top 3 Current Risks**. 2nd – 2, 3rd – 1.

d. **Data Used to Support Inclusion as Top 3 Risk**. The main source of data was an increasing number of attacks on aircraft by mainly green lasers.

e. **Summary of Actions**.

- **Europe**: The EASA ISC has recently considered the need for further action on Laser Illumination of aircraft, for whom an Analysis Paper was recently produced[14].

- **Belgium**: Complete the aviation law of 27th June 1937 to make the malicious use of lasers against aircraft and ATS personnel an offence. Improve the cooperation between Belgian CAA, ANSPs and Federal Police by developing procedures to follow in the case of laser interference.

- **Czech Republic**: From 2011 the Czech government adopted legislative measures in the code of criminal conduct (AAII participated in legislation process).

- **Estonia**: ANSP follows a routine procedure to immediately inform Estonian Security Police after receiving information about laser interference. Laser interference is

[14] Reference 14 – EASA Paper on Laser Illumination.

considered to be act against flight safety and therefore a criminal offence. So far no one has been caught and prosecuted.

- **Hungary**: Coordination meetings between the competent authorities to amend legislation to help to identify the perpetrators.

- **Lithuania**: ATS procedures reviewed, the coordination activities with the Police included. Consultations with the Police. Proposal to amend the Administrative Code by introducing penalties for this type of illegal activities.

- **Poland**: Aviation law being modified to add articles concerning lasers and also a national regulation is under development concerning laser use against aviation.

- **Slovak Republic**: Cooperation with the Police.

- **Spain**: Proposal to introduce restrictions on the sale and use of laser devices through national legislation. Procedure developed for the coordination between airport TWRs and Law Enforcement Authorities in order to detect, locate and remove the laser source. Proposal to modify the Spanish Penal Code in order to lay down penalties for illuminating or interfering aircraft with lasers interference acts.

- **Sweden**: Taking part in a national WG on prevention of Laser Illuminations.

- **The Netherlands**: The Dutch Occurrence Bureau published a newsletter including hot spot information. The Ministry of Justice has prepared legislation to ban the possession and use of lasers. Legislation will be implemented this year.

f. **Conclusion**. The EASA ISC Paper on Laser Illumination gathered various guidance material on how aviation personnel can reduce the risk posed by lasers. This information will be placed in an EASA Safety Information Bulletin (SIB), which will be publicised as widely as possible across the aviation community. Laser illumination will continue to be monitored by EASA and the NoA.

4.6 Risk 6 – Ground Handling

a. **Subject Description**. Accidents and incidents such as ground collisions and personal injury caused during the ground handling process.

b. **Number of Countries**.

- **Current Risks**: 2 EASA MS. **Emerging Risks**:

c. **Ranking in Top 3 Current Risks**. 1st – 2.

d. **Data Used to Support Inclusion as Top 3 Risk**. The rate of occurrences and a risk analysis of the issue were the reasons why this issue had been included in the NoA National Updates.

e. **Summary of Actions**.

- **Belgium**: Investigating the handling companies in order to gather information on their organisational structure, activities, equipment, training courses completed etc. Thoroughly inspecting the procedural manuals of handling companies and airlines. Examining the contracts with the airlines and the internal and external audit reports. Drafting national regulations for ground handling.

Further Analysis: Occurrences within the ECR were analysed, which led to a few interesting pieces of information. From a time perspective, the hour from 0000-0100 hrs had a disproportionally high number of occurrences compared to adjacent hours. The key Event Types were:

Aerodrome and Ground Aids:
- Line Maintenance - 4945
- Vehicle/ Equipment Operations – 2834
- Loading - 1662
- Servicing – 1655
- Foreign Object Control - 508

Aircraft Operation Generally:
- Ground Handling (Movements) – 3693
- Incorrect Loading – 2843
- Collision Aircraft-Object Ground – 652
- Near Collision with Object on Ground – 519
- Security Generally – 435

The key Descriptive Factors were:

Aerodrome Generally:
- Ramp service equipment and vehicles – 3801
- Vehicle/ equipment operations – 1699
- Apron/ Ramp as an Entity – 1315
- Apron/ Ramp Surface Condition – 363
- Taxiway as an Entity – 334

Aircraft and Operations:
- Aircraft Cargo – 2013
- Parking Procedure – 1691
- Pushback/ Towing Procedure – 1285
- Handling Procedures – 1071
- Refuelling Procedures – 912

f. **Conclusion**. Analysis of Ground Handling issues was made more difficult because of the structure of the Taxonomy in ECCAIRS, which made understanding the key issues extremely difficult. These taxonomy issues will hopefully be resolved by taxonomy improvement initiatives being undertaken as part of the work of the CAST/ ICAO Common Taxonomy Team (CICTT). The issue would be monitored and analysed in more detail by the NoA in 2013.

4.7 Risk 7 – Maintenance Error

a. **Subject Description**. Technical issues involving aircraft that were caused by errors made by maintenance personnel.

b. **Number of Countries**.

- **Current Risks**: 2 EASA MS. **Emerging Risks**:

c. **Ranking in Top 3 Current Risks**. 1st – 1, 3rd – 1.

d. **Data Used to Support Inclusion as Top 3 Risk**. An increasing number of occurrences was raised as the major reason for the inclusion of this risk.

e. **Summary of Actions**.

- **Finland**: EASA Part-145 and Part-M continual auditing and ACAM monitoring acc. to EASA EC2042/2003, SAFA inspection process acc. to Directive 2004/36/CE ("SAFA Directive") and ICAO. As a part of Trafi's Monthly Safety Review (MSR) process, and due the increase in analyse personnel, our department has monitored all Technical occurrence reports more thoroughly from 12/2011. When necessary, an MSR "Action Item" will be set for follow up and to cover a more detailed clarification and account from the subject organisation. When they are satisfied with the result, including the root cause analyse and corrective actions, the action item will be closed and filed in their data system. (A File with Limited access) Such issues may be followed up during audits, as necessary. In the near future, we will start to support Trafi's Control dept. auditing by pre-analyses.
In addition, Trafi Safety and Analysis department has visited most of the Finnish operators and MROs as for marketing the needs and the positive effects of the SMS system, including the benefits of proactive risk management and open occurrence reporting culture.

- **Lithuania**: The oversight of operators and maintenance organisations has been strengthened, a risk based approach is now applied.

Further Information: There have recently been some additions to the ECCAIRS Taxonomy to include the Maintenance Error Types from the Boeing Maintenance Error Decision Aid (MEDA), which will enable better coverage of maintenance error within ECCAIRS Systems. There have been a number of studies carried out concerning maintenance error including:

UK CHIRP Maintenance Error Website

UK CHIRP Maintenance Error Data Review

UK CAA Aircraft Maintenance Incident Analysis

f. **Conclusion**. The addition of some new maintenance error information in the ECCAIRS Taxonomy is a welcome addition to improve understanding of this subject. The situation will be monitored in 2013.

4.8 Risk 8 – Runway Excursions

a. **Subject Description**. Runway excursions.

b. **Number of Countries**.

- **Current Risks**: 2 EASA MS. **Emerging Risks**:

c. **Ranking in Top 3 Current Risks**. 2nd – 2.

d. **Data Used to Support Inclusion as Top 3 Risk**. This risk was included due to a number of high risk occurrences and following analysis of worldwide fatal accidents by the UK CAA.

e. **Summary of Actions**.

- **Europe**: Runway Excursions is covered as an action in the EASp – The majority of the work is focussed on the development of a European Action Plan for the Prevention of Runway Excursions[15] (EAPPRE), which has recently been published.

- **UK**: CAA Safety Plan details the actions. The next scheduled deliverable is for the Winter Information Group to deliver report and recommendations relating to their runway assessment trial.

f. **Conclusion**. Now that the EAPPRE has now been published, in 2013 the NoA will consider how the Plan can be summarised for inclusion in the SSPs of the EASA MS. Moreover, the SPI Sub Group will consider what SPIs could be developed to monitor this risk.

4.9 Risk 9 – Airshows

a. **Subject Description**. Safety in the operation organisation of airshows.

b. **Number of Countries**.

- **Current Risks**: 1 EASA MS. **Emerging Risks**: 0 EASA MS

c. **Ranking in Top 3 Current Risks**. 1st – 1.

d. **Data Used to Support Inclusion as Top 3 Risk**. This issue was included following a number of fatal accidents at airshows in recent years.

e. **Summary of Actions**.

- **Poland**: New national regulation being prepared concerning airshows including qualifications for pilots and zones for aerobatics.

f. **Conclusion**. Airshows are a particularly interesting issue as they are one area where Civilian and Military flying often come together. The European Airshow Council exists to promote excellence and safety at airshows. More information can be found on their website here.

4.10 Risk 10 – Effective Implementation of SMS

a. **Subject Description**. With the introduction and increasing publicity for SMS in the global aviation industry, ineffective implementation presents a risk in itself.

b. **Number of Countries**.

- **Current Risks**: 1 EASA MS. **Emerging Risks**: 0 EASA MS.

c. **Ranking in Top 3 Current Risks**. 1st – 1.

d. **Data Used to Support Inclusion as Top 3 Risk**. Oversight activities reflect a varied level of implementation of SMS in aviation operations.

e. **Summary of Actions**.

[15] Reference 15 – European Action Plan for the Prevention of Runway Excursions.

- Many EASA MS are placing a great deal of importance on close coordination of SSPs and Safety Plans with SMS related activities, including internal SMS training for CAA inspectors.

- There is a great deal of work being done across the EASA community and also globally in this area. There is developing regulatory guidance from EASA and also practical assistance/ guides from the ESSI groups as well.

f. **Conclusion**. The NoA will gather all available relevant material and ensure this is provided to both the NoA and the SSP focal points.

4.11 Risk 11 – Unstabilised Approaches/ Non Standard Approaches

a. **Subject Description**. Unstabilised approaches that lead to a range of different outcomes including hard landings and runway excursions. A non-standard approach is an undesirable event in which an IFR flight does not reach the FAF/FAP in good conditions.

b. **Number of Countries**.

- **Current Risks**: 1 EASA MS. **Emerging Risks**: 1 EASA MS.

c. **Ranking in Top 3 Current Risks**. 1st – 1.

d. **Data Used to Support Inclusion as Top 3 Risk**. This issue was included because of 6 accidents and 3 serious incidents in Western Europe over the last 30 years with a non-standard approach as a contributing factor and at the same time we are not aware of any approach and landing fatal accident for which the approach was within the standards.

e. **Summary of Actions**.

- **France**: A symposium for non-stabilised approaches has been organised in 2007 by the DSAC. Documents and action plan are available on Internet. The two major points of the plan are:

  - pilots are required to make a positive announce "stabilised" in order to proceed for landing.

  - controllers are requested to report any non-standard approach (such as glide from above).

French airlines are monitoring their non-stabilised approaches through FDM at 500 or 1000 feet. Each airline has its own thresholds.

f. **Conclusion**. There were over 4,000 occurrences with the Event Type of Unstablised Approach in the ECR. Of these there were 124 accidents. The main Occurrence Categories were:

OTHER
ATM/ CNS
Windshear
CFIT
LOC-I

In terms of other events types involved in Unstablised Approaches:

Ground Proximity Warning System Triggered
Tailwind
Windshear
Turbulence
Hard Landing

More analysis will be carried out on Unstabilised Approaches in 2013 and consideration will be given to the formation of a Sub Group on this issue as it is very closely related to a some of the other risks already mentioned.

4.12 Risk 12 – Airport Emergency Planning

a. **Subject Description**. The planning of airports for emergency situations.

b. **Number of Countries**.

- **Current Risks**: 1 EASA MS. **Emerging Risks**:

c. **Ranking in Top 3 Current Risks**. 2nd – 1.

d. **Data Used to Support Inclusion as Top 3 Risk**. The risk was raised by one of the EASA MS after a specific single occurrence in which incomplete and out of date airport emergency plans and insufficiently trained personnel was identified as a problem.

e. **Summary of Actions**.

- **Hungary**: Recommendations to amend, harmonize and update existing procedures, trainings and to urge more effective authority controls.

f. **Conclusion**. The NoA would gather available information and guidance material that can be made available to the NoA to help provide useful information for their airports.

4.13 Risk 13 – CFIT

a. **Subject Description**. Controlled flight into terrain.

b. **Number of Countries**.

- **Current Risks**: 1 EASA MS. **Emerging Risks**:

c. **Ranking in Top 3 Current Risks**. 3rd – 1.

d. **Data Used to Support Inclusion as Top 3 Risk**. CFIT was included following Analysis of worldwide fatal accidents, supported by monitoring of high risk occurrences involving CAT.

e. **Summary of Actions**.

- **Hungary**: Safety conference on the subject for the stakeholders.

UK: CAA Safety Plan details the actions. The most recent deliverable was a programme of safety promotion road-shows relating to Approach with Vertical Guidance (APV) to aircraft and aerodrome operators implemented.

f. **Conclusion**. It is interesting to note that despite the perceived improvements in technology, the number of occurrences continues to increase year on year. For CFIT occurrences a particularly high proportion of the occurrences are accidents (40%), which were mainly in General Aviation. Key Event Types in CFIT occurrences are Unstablised Approaches and Technical issues with the Independent Position System of the aircraft.

4.14 Risk 14 – Incomplete Knowledge of Theory of Flight

a. **Subject Description**. Incomplete knowledge of theory of flight and the technical specifications of an aircraft leading pilots to misjudge failure signs resulting in incorrect decisions in emergency situations.

b. **Number of Countries**.

- **Current Risks**: 1 EASA MS. **Emerging Risks**:

c. **Ranking in Top 3 Current Risks**. 3rd - 1.

d. **Data Used to Support Inclusion as Top 3 Risk**. An analysis of this issue in one EASA MS had identified that this issue was a contributory factors in 30% of accidents and serious incidents.

e. **Summary of Actions**.

- **Hungary**: Safety conferences are held on the subject for the aviation stakeholders.

f. **Conclusion**. The issue will be subject to further discussion with EGAST.

4.15 Risk 15 – New products, systems and technologies (UAS)

a. **Subject Description**. The lack of coordinated information for the regulation and operation of new products, systems and technologies, particularly UAS.

b. **Number of Countries**.

- **Current Risks**: 0 EASA MS. **Emerging Risks**: 4 EASA MS.

c. **Ranking in Top 3 Current Risks**. 0.

d. **Data Used to Support Inclusion as Top 3 Risk**. Some EASA MS raised this issue in their emerging risks having performed an analysis of the increasing number of UAS and other new technologies being added to the spectrum of aircraft operations. There was also the concern that the operations of UAS was becoming more complex.

e. **Summary of Actions**.

- Close co-operation with aviation industry and training organisations is taking place in many EASA MS to prepare for the assessment of new products, systems, technologies and operations and determine the needs for personnel. Further UAS regulation at a National Level is under discussion.

f. **Conclusion**. The increasing use of the UAS and new technologies will be monitored by the NoA in 2013.

4.16 Risk 16 – Fatigue

a. **Subject Description**. Occurrences caused by fatigue of both Pilots and ATC Staff have been raised by some EASA MS, the issue is also relevant for other aviation personnel.

b. **Number of Countries**.

- **Current Risks**: 0 EASA MS. **Emerging Risks**: 2 EASA MS.

c. **Ranking in Top 3 Current Risks**. 0.

d. **Data Used to Support Inclusion as Top 3 Risk**. Some EASA MS raised this issue in their emerging risks due to a high rate of fatigue occurrence, which also showed an increasing trend. There had also been concern raised by pilots' unions to some NAAs on the issue.

e. **Summary of Actions**.

- **Europe**: The have been a number of recent and high profile areas of work on duty time limitations for aviation personnel. More detailed information can be found on the EASA Flight Standards Website, which is available here.

- **Finland**: No actual action taken as yet but the progress of the trend will be monitored by an SPI for Fatigue.

- **Sweden**: Monitoring incoming reports of fatigue and duty time exceeded by flight crew.

f. **Conclusion**. The issue will be monitored by the NoA in 2013.

4.17 Risk 17 – Carriage of Lithium Batteries

a. **Subject Description**. The risk of combustion caused during the carriage of Lithium Batteries in aircraft.

b. **Number of Countries**.

- **Current Risks**: 0 EASA MS. **Emerging Risks**: 1 EASA MS.

c. **Ranking in Top 3 Current Risks**. 0.

d. **Data Used to Support Inclusion as Top 3 Risk**. A number of recent accidents and high risk occurrences.

e. **Summary of Actions**.

- **Europe**: Analysis carried out by the NoA for ECAST identified that the majority of issues concerning Lithium Batteries were related to incorrect packing and labelling for transport. Existing regulation had been found not to have been applied during a number of inspections carried out by NAAs.

f. **Conclusion**. The issue will be monitored by the NoA in 2013.

5 NoA Sub Group Summary

5.1 Risk Classification – Framework Sub Group

a. **Purpose of Group**. The Risk Classification Sub Group was formed to to prepare the implementation of the future EU legislation on occurrence reporting which will impose on EU MS to classify the occurrences in terms of risk according to a single and harmonised scheme. It will take into consideration work previously carried out by ECAST on the development of Risk Classification Schemes, the work of Eurocontrol on the Risk Analysis Tool (RAT) and other schemes such as ARMS. The main goal of the Sub Group is to develop a European common Risk Classification Scheme to support the implementation of the future legislation on occurrence reporting.

b. **Members**. The European Commission (DG MOVE) and Eurocontrol are co-chairs, with organisational support from EASA and the UK CAA. The members of the group include 9 EASA MS, Airbus, Air Berlin, Air France, DFS (German ANSP), DSNA, IATA, ICA, IFATCA, INAER, the JRC of the European Commission and NLR.

c. **Progress to Date**. The main focus of the Sub Group's work so far has been to research and understand the existing methods and processes used for Risk Classification. These include ARMS, RAT and the Spanish CAA ORS Risk Analysis Methodology. A Technical Sub Group will shortly be established to identify the elements missing from the existing Risk Classification Schemes and to develop a way forward to engineer a common European Risk Classification Scheme.

d. **Future Work**. To complete the work of the Technical Sub Group, which will provide recommendation to the main Risk Classification Sub Group on the best approach to achieve the goal of the group. These recommendations will then be transmitted as a proposed way forward to the European Commission who is responsible to develop and implement the European common Risk Classification Scheme.

e. **Expected Completion Date**. 2014.

5.2 Safety Performance Indicator – Framework Sub Group

a. **Purpose of Group**. The SPI Sub Group was established to develop a common set of SPIs for use across all the EASA MS and to provide guidance material on the development and use of SPIs. It is also intended to develop clear definitions for terms related to SPI and to consider the data and system requirements to enable SPIs to be monitored.

b. **Members**. The Sub Group is co-chaired by the EASA Safety Performance Expert and the CAA of The Netherlands with representatives from 12 NAAs.

c. **Progress to Date**. The initial focus of the Sub Group was to understand the SPIs already in use across the EASA MS. This was achieved by carrying out the SPI Survey, for which the final report was published in July 2012[16]. The group then agreed the sectors of aviation for which high level SPIs would be developed and considered the subsequent development of operational SPIs. The group has also begun to consider the data requirements for SPIs and the system requirements to capture the data required to monitor safety performance.

[16] Reference 16 – SPI Survey Summary Report – July 2012.

d. **Future Work**. The main tasks for the next Sub Group Meeting in February 2013 will be to agree the definitions for high level SPIs, to prepare guidance material on the development of SPIs and to develop clear definitions for SPI related terms. The group would also consider the data and system requirements to support SPIs in more detail. Further work will also be carried out to develop operational SPIs.

e. **Expected Completion Date**. The initial work of the group, to agree definitions for SPIs and to set up SPIs for some operational areas, is expected to be completed in early 2014. However, the Sub Group would continue to improve and build on these SPIs to support the developing needs of the EASp and SSPs. The SPI Sub Group will, in the future, meet twice per year in conjunction with EASA's EASp Summit.

5.3 Loss of Control (In Flight) - Analysis Sub Group

a. **Purpose of Group**. The main purpose of the LOC-I Sub Group is to analyse the data and information and data available on the subject to develop a set of actions that can be used by EASA MS in their SSPs and also the wider European Aviation Community in order to reduce the risk of this issue.

b. **Members**. The group is chaired by DGAC France and involvement from EASA and the NAAs/ SIAs of 5 EASA MS.

c. **Progress to Date**. An initial study[17] was carried out, which considered data on LOC-I between 2007 and 2011. A detailed ECCAIRS query was developed by the DGAC and the data from Finland, France, Hungary and Italy was analysed using a taxonomy that was specifically developed for the task. The initial study also identified a number of other groups and studies on the subject of LOC-I. Further work has identified that there are 21 different studies being undertaken in this subject. The existence of so many different views on LOC-I, some of which are extremely in depth makes the task of EASA MS using this information to support their SSPs very challenging.

d. **Future Work**. The LOC-I Sub Group will meet again in February 2013, where it will continue the analysis of occurrences using the additional LOC-I Taxonomy developed by DGAC France. In addition, the knowledge gain from the data analysis and also from the other 21 studies on LOC-I will be used to develop a clear list of actions that can be used by the EASA MS in their SSPs.

e. **Expected Completion Date**. It is anticipated that the LOC-I Sub Group will complete its work by the end of 2013 and that the final report will be signed off at the NoA Meeting in February 2014.

5.4 MAC/ Airprox- Analysis Sub Group

a. **Purpose of Group**. From the National Updates to the NoA, MAC/ Airprox and related issues such as loss of separation have been the major risks raised by the EASA MS. MAC/ Airprox is already included in the EASp with the following key actions:

> **AER2.1 Airspace infringement risk**. MS should implement actions of the European Action Plan for Airspace Infringement Risk Reduction[18] (EASA MS).

[17] Reference 17 – Initial LOC-I Study – 2007-2011.

[18] Reference 18 – European Action Plan for Airspace Infringement Risk Reduction.

AER2.8 Include MAC in national SSPs. Mid-air collisions shall be addressed by the MS on their SSPs. This will include as a minimum agreeing a set of actions and measuring their effectiveness (EASA MS).

AER2.9 Share national actions and measures. Share actions and measures in use at national level to address the safety issue and participate in a dedicated workshop (EASA and EASA MS).

The main purpose of the MAC/ Airprox Sub Group is to use the data and information available to agree a clear set of actions that can be used by the EASA MS in their SSPs for actions AER2.8 and to share these with the wider community. A key resource as is the European Action Plan for Airspace Infringement Risk Reduction that was developed by Eurocontrol and the work of the Sub Group will also help support the EASA MS in their implementation of action AER2.1.

b. **Members**. The MAC/ Airprox Sub Group is co-chaired by EASA and Swiss FOCA with other members taken from the UK Airprox Board, Eurocontrol and the NAAs of 4 of the EASA MS.

c. **Progress to Date**. An initial analysis of the available data in EASA's ADREP Database and the ECR was carried out, which was developed into an initial report[19]. This information and further information from the Airprox Board/ Groups of Spain/ Switzerland and the UK was used to develop an intial list of the pre-cursors, causal and contributory factors surrounding MAC/ Airprox occurrences.

d. **Future Work**. Given the limitations of the existing taxonomy, a bespoke taxonomy will be developed to allow a more detailed analysis to be carried out. Additionally, information from other sources will be used, in conjunction with this analysis to develop an agreed action plan for the EASA MS for EASp AER2.8. It is then hoped that EASA would host a MAC/ Airprox awareness event to share the information developed with the wider European Aviation Community.

e. **Expected Completion Date**. It is anticipated that the Sub Group work will be complete by the end of 2013 and that the final report will be agreed at the NoA Meeting in February 2014.

6 Surveys and Questionnaires

6.1 Purpose of Survey and Questionnaires

One of the key strengths of the NoA, is that it brings together a large number of organisations from the 31 EASA MS in a collaborative environment with the same common goal. With so many diverse countries involved in the NoA and the experience of almost 100 safety analysis experts to call upon surveys and questionnaires have proved to be a useful way to understand the different activities and approaches across them. Before working in a particular area, it is vital to understand what is currently being done and how.

6.2 1st NoA Survey

a. **Introduction to 1st NoA Survey**. At the very start of the NoA, it was important for EASA, as organisers of the group, to find out about the different approaches to safety analysis across the EASA MS, the resources available for the task and the systems that were used. Moreover, it was very important for EASA to understand the expectations

[19] Reference 19 – NoA MAC/ Airprox Sub Group Initial Report.

and ideas of that the different countries had concerning the NoA. To achieve this, shortly after the 1st NoA Meeting in September 2011, the 1st NoA Survey was carried out. The results of the survey can be found in the 1st NoA Survey Report[20].

b. **Contents of 1st NoA Survey**. The survey was 6 different areas across a range of subjects related to safety analysis. The first part asked for more information about the organisation of the safety analysis departments in the EASA MS, the number of staff compared to the number of reports received and the level of automation in the occurrence reporting process. There were also questions about the expectations for the NoA. The survey also asked for information about the occurrence reporting processes, types of reports used and methods used to improve data quality. It also covered the IT systems used for reporting and analysis, processes for tasks such as Risk Classification, SPIs and the existence of any information exchange or analysis networks already in place at a national level.

c. **Summary of 1st NoA Survey**. Of the 27 EASA MS that were actively involved in the NoA, 24 states completed the survey. This provided a great deal of useful information on the different approaches to safety analysis across the NoA community. Across the 24 states that responded there were 3.2 safety analysts per state, which had on average 5,480 occurrence reports per year. The benefits of working together through the NoA was highlighted in the fact that collectively there were over 80 analysts with access to data from over 130,000 occurrence reports per year. The survey highlighted that there was a great deal being achieved across the NoA community in many different areas from developing positive reporting cultures to establishing frameworks for risk classification and safety indicators that enable a good understanding of the key risks and issues faced by aviation in Europe. There are many areas where the NoA would be able to use the considerable expertise at its disposal to develop on these excellent foundations to provide pan-European solutions. The 1st NoA Survey provided the initial foundations from which the NoA has developed and the knowledge gained from the survey has been invaluable.

6.3 Occurrence Reporting Rates Survey

Whilst the NoA would never be used to benchmark countries against each other, at the 1st NoA it was considered useful to explore ways that countries could benchmark themselves against others. To support this, the Irish Aviation Authority volunteered to conduct a survey of occurrence reporting rates of airlines in the EASA MS in such a way that the results were anonymised and would not enable the identification of individual countries or airlines but merely to consider trends and observations at a European Level. A comprehensive explanation[21] of the operation of the survey was provided to all NoA Members during the initial data gathering phase. The information received from the 10 EASA MS that participated was compiled into a final report[22], which included data from 80 airlines.

7 Other NoA Work Areas

In addition to the work already described supporting the EASp with analysis of operational aviation safety risks and the development of frameworks to support safety analysis, there are a number of other related activities that the NoA is involved in. There are many common issues related to both safety management and safety analysis that are shared by the EASA MS and the NoA has provided an excellent opportunity to share and discuss issues of a common nature. The ability to share resources and solve problems collectively is one of the biggest benefits of the NoA.

---

[20] Reference 20 – 1st NoA Survey Report.
[21] Reference 21 – Occurrence Reporting Rates Survey Explanation.
[22] Reference 22 – Final Report on Occurrence Reporting Rates.

7.1 Support to ECCAIRS 5 Transition

2012 has seen the release of ECCAIRS 5 to the European Aviation Community and the improvements that have been made to the system make it a powerful tool for the collection and analysis of safety occurrences for Europe. The work of the NoA will be greatly improved were all NoA Members to use the same version of ECCAIRS with the same associated tools for data quality and analysis (particularly the Aggregation Work Bench). The level of support that the JRC are able to provide directly to EASA MS and individual organisations is limited to training for ECCAIRS administrators. EASA and a small number of EASA MS have already implemented ECCAIRS 5 and in the process have also developed a number of different tools to support and augment the core ECCAIRS 5 functions. Understanding these many different possibilities can be very challenging, therefore in 2013 the NoA, through EASA, will support the ECCAIRS 5 transition as follows:

a. **ECCAIRS Standard**. At the 4th NoA Meeting on 6th February 2013, the Group will seek to agree an ECCAIRS standard for the community which might include a range of different tools such as a Narrative Spell Checker, Custom Fields and Forms, Reference Databases, Quality Add-Ins and the use of AWB.

b. **Current Situation in the EASA MS**. A questionnaire has recently been produced by the NoA to understand the ECCAIRS implementation status of each EASA MS.

c. **Grouped Support by Status**. The questionnaire will enable countries at similar stages in the process to be grouped together and enable EASA and the NoA to support the different communities depending on their implementation status.

7.2 Taxonomy

At a global level, taxonomies are normally developed through the CAST/ ICAO Common Taxonomy Team (CICTT), which is attended by EASA and a number of other EASA MS. CICTT is mainly involved with specific taxonomies at the higher level of function, such as Occurrence Categories, Aircracft Make/ Model/ Series and Causal/ Human Factors. At a European/ ECCAIRS Level, the full detail required by the ECCAIRS is managed by the ECCAIRS Taxonomy WG, which is organised by EASA and the JRC. As the NoA are the main users of the taxonomies used in ECCAIRS, they are the main source of information about taxonomy problems and issues. They are also involved with the update of operator and aerodrome information in their countries using the ECCAIRS Web Value List Manager. The NoA will shortly produce a user guide to support the EASA MS in this task and manage the handover of responsibility from the JRC to the EASA MS. The NoA has also been involved in providing invaluable comments on some taxonomy development work being carried out by CICTT.

7.3 Library of Information

Across the NoA countries, there are many analysis reports and other very useful pieces of information that are generated each year and have been written in the past. Additionally, in the course of their work, NoA Members come across other very useful documents. The more information that can be brought together in one place for the use of EASA and the EASA MS, the better informed their decisions become. At the moment, the NoA has begun to bring together information in an electronic library on the EU's SINAPSE Community System, however, a more interactive and user friendly system would be of great benefit in the longer term.

7.4 Coordinated Working

As the NoA develops, there will much more work carried out between a variety of organisations. At the moment the work of the NoA is largely limited to the NAAs and SIAs of the EASA MS and the SINAPSE community had been used so far to enable information to be shared across the many diverse organisations. Developments in technology mean that there are many possibilities in bringing occurrence data, analysis, safety related documents and

other resources together in a single IT environment that would provide a much more real-time way of interacting with the safety data and subsequently what is then done with that data. Over the coming years, the NoA will consider how it can use the improvements in technology to use the significant amount of data for the greatest possible benefit. In addition, the NoA will also need to consider how it can work closely with countries outside Europe in a wider Global Network.

8 Strategy for 2013 and Beyond

8.1 The NoA in 2013

In 2013, the NoA will have a much closer strategic relationship with the EASp, from which its key tasks and objectives will flow. The NoA will perform joint analysis across the European Aviation Community to provide the EASp and the EASA MS with the understanding they need on the key aviation safety risks to support decision making at a European and National Level. Where specific risks or other work areas are identified the NoA will work with other groups such as the ESSI Groups, EHFAG and the ECCAIRS SCM in order to develop joint solutions that will benefit the whole community. In 2013, the key tasks of the NoA are:

a. **General Analysis**. Use all available data sources to provide a general analysis of the key aviation safety issues in Europe to support the EASp and the SSPs of the EASA MS.

b. **Detailed Analysis**. Perform detailed analysis of specific aviation safety issues to provide clear actions that can be used and monitored by the SSPs of the EASA MS.

c. **Tools and Frameworks**. Support the development of tools and frameworks to support safety analysis and safety management in Europe.

d. **Support the EASA MS**. Provide support to the European Aviation Community in tasks associated with safety analysis including ECCAIRS 5 transition and the spread of good ideas and practices.

e. **Strategic Development**. Support the strategic development of aviation safety management and safety analysis in Europe and develop stronger links at a Global Level.

8.2 Long Term Planning

Over the longer term the NoA will continue to develop its close links with the EASp process and provide an Annual analysis of the key aviation safety risks in Europe. It will also continue to work on specific operational issues and developing the frameworks required to support the group's tasks and roles. Of increasing importance will be the development of SPIs to support the ongoing monitoring of safety in such a way that this can be carried out in a coordinated way at both a National and European Level. One of the greatest long term tasks will be how the NoA, and the wider European Aviation Community, is able to use the recent improvements in technology to make the use of safety information much more immediate and real time. A great deal of information is collected an available and the 2 main challenges for the longer term are:

a. How taxonomies can be developed to organise the data we have in a way that it tell us what we need to know.

b. How can technology help to have the right information, when we need it, to make the best possible decisions.

The NoA will also support the development and the implementation of the future legislation on occurrence reporting notably by providing recommendations to the European Commission or to legislators when relevant.

9 Summary and Key Points

The NoA has now be running for just over a year and this report provides details of the work it has carried out in this time. The NoA will produce an Annual Report each year, which will be approved at its first meeting each year in February. The key points of interest concerning the NoA are:

a. **What is the NoA?**

The NoA is a coordinated group that brings together the European Commission (DG MOVE and JRC), EASA, Eurocontrol and the NAAs and the SIAs of the EASA MS in an effort to understand the key aviation safety risks in Europe to support the EASp and the SSPs of the EASA MS. Where necessary it establishes smaller groups of aviation experts from across the European Aviation Community to deal with specific issues and develop action and implementation plans. Planning for the work of the NoA is carried out by EASA and the NoA Framework Steering Group made up of a smaller group of NoA Members.

b. **When does the NoA meet**?

The NoA is organised to minimise the need for travel and physical meetings. The main NoA Meeting takes place in February each year. There is also a NoA Meeting as part of the ECCAIRS SCM, which is held in September/ October each year. Throughout the year there are meetings of the NoA Sub Groups as necessary to achieve their goals and tasks. Currently the NoA has the following Sub Groups:

1. Risk Classification – Framework Sub Group.
2. Safety Performance Indicators – Framework Sub Group.
3. Loss of Control (In-Flight) – Analysis Sub Group.
4. MAC/ Airprox – Analysis Sub Group.

c. **What are the key roles of the NoA?**

The key roles of the NoA are:

1. **General Analysis**. Use all available data sources to provide a general analysis of the key aviation safety issues in Europe to support the EASp and the SSPs of the EASA MS.

2. **Detailed Analysis**. Perform detailed analysis of specific aviation safety issues to provide clear actions that can be used and monitored by the SSPs of the EASA MS.

3. **Tools and Frameworks**. Support the development of tools and frameworks to support safety analysis and safety management in Europe.

d. **What is the NoA actually doing**?

The key achievements and pieces of work for the NoA so far are:

1. **Analysis**. Analysis of the key aviation safety risks in the EASA MS and at a European Level. The key risks identified by the NoA and, importantly what is being done about them are:

   - **MAC/ Airprox**: Being worked on by NoA Sub Group.

   - **Runway Incursions**: Taken forward in the European Action Plan for the Prevention of Runway Incursions, which has been developed by Eurocontrol.

   - **Loss of Control (In-Flight)**: Being worked on by NoA Sub Group.

   - **Birdstrikes**: At the moment this is dealt with at a National Level by the EASA MS for whom it is an issue. Further analysis will be carried out to determine if there is a requirement for more activity at a European Level.

   - **Laser Illumination**. EASA has developed an analysis paper on Laser Illumination, which gathers various sources guidance material on how aviation personnel can reduce the risk posed by lasers. This information will be placed in an EASA Safety Information Bulletin (SIB), which will be publicised as widely as possible across the aviation community. Laser illumination will continued to be monitored by EASA and the NoA.

2. **Risk Classification**. Ongoing development of a European common Risk Classification Scheme through the Risk Classification Sub Group.

3. **SPIs**. Ongoing development of SPIs for use at both a European and National Level, with clear definitions and the generation of ECCAIRS tools to help collect and present data for SPIs.

4. **ECCAIRS**. Providing structured support to the NoA Community in their transition to ECCAIRS 5. The NoA is also involved in developing and providing tools and documents to support occurrence reporting, coding, classification and data analysis.