

SUMMARY OF DISCUSSIONS OF THE NORTH ATLANTIC SYSTEMS PLANNING GROUP SYMPOSIUM 2015

(Paris, France, 23 to 24 February 2015)

1. Introduction

1.1 The North Atlantic Systems Planning Group Symposium 2015 (NAT SPG SYMP/15) was convened in the European and North Atlantic (EUR/NAT) Office of ICAO in Paris from 23 to 24 February 2015 to complete action on the following NAT SPG/50 Conclusion:

NAT SPG Conclusion 50/04 – Review of NAT SPG Working Structure

That the NAT SPG/51 review its working structure, following the approach developed in 3.1.14 [as follows].

3.1.14 *In this respect, the NAT SPG agreed with the following roadmap:*

- a) *The NAT SPG50 WP28 be submitted to the attention of the Fall sessions of the NAT EFG (24-26 September), NAT IMG (4-7 November 2014) and NAT SOG (1-5 December 2014) for assessment and contributions;*
- b) *The NAT SPG50 WP28 together with the contributions from the three Groups would be consolidated by the Secretariat to produce input to a special Symposium;*
- c) *A two day Symposium would be organized early 2015 (23 to 24 February 2015), to be held in Paris at the EUR/NAT Office of ICAO;*
- d) *The outcome of the Symposium would be presented to the Spring sessions of the NAT EFG (28-30 April 2015), NAT IMG (11 to 14 May 2015) and NAT SOG (1 to 5 June 2015) for final assessment and contributions;*
- e) *The outcome of the Symposium together with the contributions from the NAT EFG, the NAT IMG and the NAT SOG would be presented to the NAT SPG/51 (June 2015). To facilitate the discussions and reach a consensus, the NAT SPG/51 would be organized as a five day meeting, starting on Monday 22 June. The first day of the meeting would address solely the restructuring of its working arrangements.*

1.2 The Symposium was moderated by Mr Asgeir Palsson, the NAT SPG Chairman. He was assisted by Mr George Firican from the EUR/NAT Office of ICAO. Technical support was provided by Messrs Celso Figueiredo, Elkhana Nahmadov, Rodolphe Salomon, Sarantis Poulimenakos, Ms Patricia Caviston and Ms Patricia Cuff from the EUR/NAT Office of ICAO. The meeting was also attended by Mr Michiel Vreedenburgh from ICAO Headquarters.

1.3 Representatives from all NAT SPG member States were in attendance, as well as the North Atlantic Central Monitoring Agency (NAT CMA) and the International Air Transport Association (IATA). The Chairmen of the NAT SOG and NAT EFG were also present however the NAT IMG Chairman sent apologies due to unforeseen travel impediments. The list of participants is at **Appendix A**.

2. Adoption of the Agenda

2.1 The following Agenda was adopted:

- Agenda Item 1: Approval of draft agenda and proposed work schedule of the Symposium;
- Agenda Item 2: Review and discuss proposal presented by Canada on alignment of NAT SPG Work Programmes to support future implementations (NAT SPG/50 – WP/28);
- Agenda Item 3: Review input from the NAT EFG, NAT IMG, NAT SOG and NAT CMA;
- Agenda Item 4: Develop proposal for the re-structuring of the NAT SPG and its Contributory Bodies; and
- Agenda Item 5: Any other business.

2.2 The list of documentation considered by the Symposium is at **Appendix B**.

3. Approval of draft agenda and proposed work schedule of the Symposium

3.1 The Symposium approved the Agenda and appreciated the written input from the NAT Economics and Financial Group (EFG) and from the NAT Central Monitoring Agency (NAT CMA). The Agenda was adjusted accordingly to include the review of the input received from the NAT CMA.

4. Review and discuss proposal presented by Canada on alignment of NAT SPG Work Programmes to support future implementations (NAT SPG/50 – WP/28)

4.1 The Symposium noted that the proposal by Canada to revise the NAT SPG working structure and work programme stemmed from a desire to improve the manner in which work was carried out and in particular, to pre-empt the challenges that technological changes taking place in the aviation environment would present.

4.2 Notwithstanding, it was underlined that the current NAT SPG working structure had been effective so far and that the focus of the proposal was to streamline the structures of the NAT IMG and NAT SOG in order to achieve an even higher degree of efficiency and quality.

5. Review input from the NAT EFG, NAT IMG, NAT SOG and NAT CMA

5.1 The Symposium noted the position of the NAT EFG which concurred that it would support the work of the NAT SPG in its development and/or assessment of business-case analysis of planned implementations proposed under the NAT SPG work programme. Accordingly, the following amendments to the proposed revised Terms of Reference of the NAT EFG (as presented in WP/02) was agreed:

*“3. In coordination with the NAT Economic and Financial Group (NAT EFG), ~~develop and/or assess the cost-effectiveness~~ **business case analysis** of planned implementations proposed under the NAT SPG work programme.”*

5.2 The Symposium was briefed on the positions of the NAT SOG and NAT IMG which agreed that the proposal from Canada was a good basis to conduct deliberations on how work of the NAT SPG sub-structures could be improved. However it was felt that caution needed to be exercised to ensure that changes were made only to areas that required improvements.

5.3 In his presentation, the NAT CMA representative clarified the roles and functions of the NAT CMA, the NAT Scrutiny Group (NAT SG) and the NAT Mathematicians' Working Group (NAT MWG). The integral nature of the event review and mathematical elements of the scrutiny and risk assessment tasks of the NAT SG and NAT MWG that would enable the NAT CMA to fulfill its task as the Regional Monitoring Agency of the ICAO NAT Region was highlighted. In this respect, it was requested

that due account be taken of this integral aspect in the changes to the NAT SPG working structure so that the flow and quality of safety data emerging from the working groups would be maintained and thereby the integrity of the regional safety system would not be compromised.

6. Develop proposal for the re-structuring of the NAT SPG and its Contributory Bodies

6.1 The NAT SPG Symposium agreed that the NAT SPG working structure would be composed of three main pillars; namely, the NAT Safety Oversight Group (NAT SOG), NAT Implementation Management Group (NAT IMG) and NAT Economic, Financial and Forecast Group (NAT EFFG) as well as a series of services available to the whole NAT SPG structure (**Appendix D** refers).

6.2 Therefore following revised Terms of Reference (ToRs) were agreed (**Appendix C** refers):

- a) NAT Economic, Financial and Forecast Group (NAT EFFG);
- b) NAT Implementation Management Group (NAT IMG);
- c) NAT Safety Oversight Group (NAT SOG).

6.3 And the following Services, provided by the following, were agreed:

- a) NAT Central Monitoring Agency (NAT CMA);
- b) NAT Data Link Monitoring Agency (NAT DLMA); and
- c) NAT Document Management Office (NAT DMO).

Note 1: Reporting lines for the bodies providing the above services would be maintained within the relevant Contributory Bodies.

6.4 The Symposium agreed that the NAT SOG and the NAT IMG be tasked to investigate and make concrete proposals to the NAT SPG/51 to restructure their contributory bodies working arrangements, with the view to rationalize the use of resources, avoid duplication of work and address the issues where the necessary expertise exist.

6.5 The **NAT SOG** would take the task to investigate the way its contributory bodies ensure the following two functions:

6.5.1 Risk Estimation

- a) The Risk Estimation function would assess collision risk arising from reported occurrences in specified portions of the ICAO NAT Region and would be carried out under the direction, and to support the work programme, of the NAT SOG. The following is a non-exhaustive list of on-going tasks to be carried out:
 - i. Calculation of monthly and annual estimates of lateral and vertical occupancies in the ICAO NAT Region;
 - ii. Calculation of yearly estimates (from 1 January to 31 December) of lateral, longitudinal and vertical collision risks and comparison of those estimates to the agreed Target Level of Safety in each dimension;
 - iii. Identification of areas where safety improvements appear to be required or could prove most effective based on observed changes in the calculated values of component elements of the collision risk model;
 - iv. Reviewing the parameter values within the mathematical collision risk models and performance of data collections (e.g. core navigation studies) when required to assess their currency;

- v. Reviewing the mathematical collision risk models used in the ICAO NAT Region and assessment of whether updates are required to reflect changes in the operating environment;
 - vi. Providing yearly reports on, and recommendations arising from, the above tasks to the NAT SOG; and
 - vii. Addressing other tasks or studies as directed by the NAT SOG.
- b) It would be expected that experts to address the foregoing tasks may be nominated by: NAT SPG member States, Spain, IATA, IFALPA and IFATCA. The NAT CMA and the NAT DLMA would provide the necessary support to this function.

Note 2: These functions should cover, as the minimum, the activities/functions currently provided by the NAT MWG and NAT SG.

6.5.2 Occurrence Classification & Trend Analysis

- a) The Occurrence Classification and Trend Analysis function would ensure to categorize occurrences reported to the NAT CMA in respect to operations in the ICAO NAT Region and would provide input/comments on emerging or continuing trends related to safety performance. This function would be carried out under the direction, and to support the work programme, of the NAT SOG. The following is a non-exhaustive list of on-going tasks to be carried out:
- i. Reviewing reports provided to the NAT CMA and categorizing the occurrences in accordance with criteria as defined in NAT SPG approved documents or as directed by the NAT SOG;
 - ii. Analysing identified causes for occurrences and determining whether these causes show changes to existing trends or indicate the potential emergence of a new trend with respect to safety performance in the ICAO NAT Region;
 - iii. Providing twice-yearly reports on, and recommendations arising from, the above tasks to the NAT SOG at least two weeks prior to their planned meetings;
 - iv. Completing the categorisation of occurrences reported during each calendar year in sufficient time so as to support the Risk Estimation function's work; and
 - v. Addressing other tasks as directed by the NAT SOG.
- b) It would be expected that experts to address the foregoing tasks may be nominated by: NAT SPG member States, Spain, IATA, IBAC, IFALPA and IFATCA. The NAT CMA and the NAT DLMA would provide the necessary support to this function. A representative from the State which provides the risk estimates at the time will also attend the meeting.

Note 3: These functions should cover, as the minimum, the activities/functions currently provided by the NAT MWG and NAT SG.

6.6 The **NAT IMG** would take the task to investigate the way its contributory bodies ensure the following two functions:

6.6.1 Operations / Procedures

- a) The Operations / Procedures function would develop proposals for new and amended procedures supporting air navigation services provision and aircraft operations in the ICAO NAT Region. This work would be carried out under the direction, and to support the work programme, of the NAT IMG. The following is a non-exhaustive list of on-going tasks to be carried out:

- i. Developing proposed procedures and guidance material to respond to planned technological changes and CNS/ATM implementations affecting operations in the ICAO NAT Region;
 - ii. Developing proposed amendments so as to maintain the currency of the procedures and guidance detailed in: ICAO Regional Supplementary Procedures - North Atlantic Region (NAT SUPPs, Doc 7030), NAT Operations Bulletins and documents promulgated by the NAT SPG;
 - iii. Developing proposals to respond to identified deficiencies in the safety or efficiency of NAT operations and identify areas where harmonisation with other ICAO Regions would be beneficial;
 - iv. Reviewing the procedural and operational aspects of safety assurance and safety risk management material (safety case) presented to support proposed changes affecting operations in the ICAO NAT Region;
 - v. Providing reports on, and recommendations arising from, the above tasks to the NAT IMG; and
 - vi. Addressing other tasks as directed by the NAT IMG.
- b) It would be expected that experts to address the foregoing tasks may be nominated by: NAT SPG member States, Spain, IATA, IBAC, IFALPA and IFATCA.

Note 4: This function should cover, as the minimum, the activities/functions currently provided by the NAT ATMG and NAT SARSIG.

6.6.2 Technology / Automation

- a) The Technology / Automation function would develop proposals to harmonise implementation and increase interoperability between systems supporting air navigation services provision and aircraft operations in the ICAO NAT Region. This work would be carried out under the direction, and to support the work programme, of the NAT IMG. The following is a non-exhaustive list of on-going tasks to be carried out:
- i. Developing proposed guidelines for harmonised implementation and interoperability to respond to planned technological changes and CNS/ATM implementations affecting operations in the ICAO NAT Region;
 - ii. Developing proposed amendments so as to maintain the currency of the technical information detailed in: ICAO Regional Supplementary Procedures - North Atlantic Region (NAT SUPPs, Doc 7030), NAT Operations Bulletins and documents promulgated by the NAT SPG;
 - iii. Developing proposed mechanisms for monitoring and reporting on the performance of CNS/ATM systems and automation supporting operations in the ICAO NAT Region;
 - iv. Reviewing and analysing monitored performance of CNS/ATM systems (as per c) above) and reported problems to identify deficiencies and developing proposals to respond to identified deficiencies in the safety, efficiency and interoperability of CNS/ATM systems or automation supporting NAT operations;
 - v. Reviewing the technical aspects of safety assurance and safety risk management material (safety case) presented to support proposed changes affecting operations in the ICAO NAT Region;
 - vi. Providing reports on, and recommendations arising from, the above tasks to the NAT IMG; and
 - vii. Addressing other tasks as directed by the NAT IMG.
- b) It would be expected that experts to address the foregoing tasks may be nominated by: NAT SPG member States, IATA, IBAC, ICCAIA, IFALPA and IFATCA. Participation is

expected from communication service providers, satellite companies and equipment manufacturers.

Note 5: This function should cover, as the minimum, the activities/functions currently provided by the NAT CNSG and NAT ACSG.

Note 6: The two last functions should cover, as the minimum, the activities/functions currently provided by the NAT OPS/AIR.

7. Any other business

Coordination of proposals with current Contributory Bodies

7.1 The NAT SPG Symposium agreed that its Summary of Discussions should be released to all NAT SPG Contributory Bodies as soon as possible in order to facilitate the conduct of the above tasks by the NAT SOG and NAT IMG.

APPENDIX A — LIST OF PARTICIPANTS

(Paragraph 1.3 refers)

CANADA

Denis GUINDON
Rob THURGUR
Jeff DAWSON

DENMARK

Peter MAJGÅRD NØRBJERG
Kirsten SONDERBY

FRANCE

Murielle SUFFRIN
Christophe GUILPAIN

ICELAND

Reynir SIGURDSSON
Hlín HOLM
Asgeir PALSSON (NAT SPG Chairman)
Leifur HAKONARSON

IRELAND

Sean PATRICK
Peter KEARNEY

NORWAY

Roald A. LARSEN
Per Harald PEDERSEN

PORTUGAL

Albano COUTINHO
Carlos ALVES

UNITED KINGDOM

Stuart LINDSEY

UNITED STATES

Heather HEMDAL
Anthony FERRANTE (NAT SOG Chairman)
Kevin HAGGERTY
David CHIN (NAT EFG Chairman)

IATA

Jeffrey T. MILLER

NAT CMA

David NICHOLAS

ICAO

George FIRICAN (NAT IMG Secretary)
Michiel VREEDENBURGH
Elkhan NAHMADOV
Rodolphe SALOMON (NAT EFG Secretary)
Celso FIGUEIREDO (NAT SOG Secretary)
Sarantis POULIMENAKOS
Patricia CAVISTON
Patricia CUFF

APPENDIX B — MEETING DOCUMENTATION*(paragraph 2.2 refers)*

WP / IP# FL /PPT	Ag item	Title	Presented by
WP01		Draft Agenda	Secretariat
WP02	2	Alignment of Work Programmes to Support Future Implementations	Canada
WP03	2	Input from the NAT EFG	NAT EFG Chairman
WP04	2	NAT CMA Comments	NAT CMA
IP01		Meeting schedule	Secretariat
IP02		Meeting documentation	Secretariat
PP01		Proposed NAT SPG Working Structure	Canada
Flimsy01		Comparison of ToRs of NAT IMG	Secretariat
Flimsy02		Comparison of ToRs of NAT SOG	Secretariat
Flimsy03		Comparison of ToRs of NAT EFFG	Secretariat
Flimsy04		Revised ToRs of NAT IMG/NAT SOG/NAT EFFG	Secretariat
Flimsy05		Tasks for NAT SOG and NAT IMG	Secretariat
Flimsy06		Proposed New Working Structure	Secretariat

APPENDIX C — REVISED TERMS OF REFERENCE (ToRs) OF THE NAT IMG, NAT SOG AND NAT EFG

(paragraph 6.2 refers)

TERMS OF REFERENCE FOR NAT IMPLEMENTATION MANAGEMENT GROUP (NAT IMG)

(as agreed at the NAT SPG Symposium 2015)

~~The NAT IMG was established by a Meeting of North Atlantic High Level Managers, held in Paris 20-21 January 1994 and NAT SPG/30 decided on its initial terms of reference. Its current terms of reference are:~~ The NAT IMG is responsible to the NAT SPG for the identification, development and coordinated implementation of safe and efficient programmes supporting the aviation system within the ICAO NAT Region, and will:

- ~~1. Support the objective of, and abide by the guiding principles of, the NAT SPG Safety Policy whilst carrying out its own activities and directing the activities of its implementation working groups.~~
- ~~1.2. Develop~~ In line with the *Global Air Navigation Plan (GANP)*, *Global Aviation Safety Plan (GASP)* and *Aviation System Block Upgrades (ASBU)*, develop and manage the *NAT Services Development Roadmap*, which identifies (NAT SDR, NAT Doc 009), including recommending implementation priorities and sets out updating timetables with and associated milestones for NAT SPG approval.
- ~~3. Identify, detail and recommend allocation of tasks and resources required to fulfil the NAT Implementation Plan.~~
- ~~4. Assess the cost effectiveness of the elements of the NAT Implementation Plan.~~
- ~~2. 5. Approve~~ Identify, detail and recommend allocation of tasks and resources required to fulfil coordinated implementation of safety and efficiency improvements affecting operations in the ICAO NAT Region and as appropriate, approve or amend the terms of reference of NAT implementation working groups IMG contributory bodies and to direct their work programmes.
- ~~3. In coordination with the NAT Economic, Financial and Forecast Group (NAT EFFG), develop and/or assess business-case analysis of planned implementations proposed under the NAT SPG work programme.~~
- ~~4. In coordination with NAT Safety Oversight Group (NAT SOG), assess the safety performance of the aviation system within the ICAO NAT Region.~~
- ~~65. Ensure the necessary co-ordination and/or consultation with NAT Provider States, other States, NAT Users and appropriate International Organizations.~~
- ~~76. Propose to the NAT SPG amendments to the *North Atlantic Air Navigation Plan*, the *Facilities North Atlantic Regional Supplementary Procedures (Doc 7030)*, and *Services Implementation Document* and the *Nat Implementation Strategy* all other relevant NAT-developed documents as directed by the NAT SPG.~~
- ~~87. Seek guidance from~~ Address other issues as directed by the NAT SPG on issues that the Group cannot resolve.
- ~~98. Provide reports and recommendations concerning the above tasks Report to the NAT SPG.~~

Composition

The NAT IMG is composed of representatives of the NAT SPG member States. In order to ensure that NAT users' views are represented and to provide valuable operational experience, NAT IMG meetings are also attended by representatives from IACA, IATA, IBAC, IFALPA and IBAC/IFATCA.

The NAT IMG might invite other participants as and when required in order to ensure that the relevant expertise is available when addressing specific tasks.

The Chairmanship and vice-Chairmanship of the NAT IMG will be reviewed by an election every four years and confirmed by the NAT SPG¹.

CLEAN VERSION:

TERMS OF REFERENCE FOR NAT IMPLEMENTATION MANAGEMENT GROUP (NAT IMG)

(as agreed at the NAT SPG Symposium 2015)

The NAT IMG is responsible to the NAT SPG for the identification, development and coordinated implementation of safe and efficient programmes supporting the aviation system within the ICAO NAT Region, and will:

1. In line with the *Global Air Navigation Plan* (GANP), *Global Aviation Safety Plan* (GASP) and *Aviation System Block Upgrades* (ASBU), develop and manage the *NAT Services Development Roadmap* (NAT SDR, NAT Doc 009), including recommending implementation priorities and updating timetables and associated milestones for NAT SPG approval.
2. Identify, detail and recommend allocation of tasks and resources required to fulfil coordinated implementation of safety and efficiency improvements affecting operations in the ICAO NAT Region and as appropriate, approve or amend the terms of reference of NAT IMG contributory bodies and to direct their work programmes.
3. In coordination with the NAT Economic, Financial and Forecast Group (NAT EFFG), develop and/or assess business-case analysis of planned implementations proposed under the NAT SPG work programme.
4. In coordination with NAT Safety Oversight Group (NAT SOG), assess the safety performance of the aviation system within the ICAO NAT Region.
5. Ensure the necessary co-ordination and/or consultation with NAT Provider States, other States, NAT Users and appropriate International Organizations.
6. Propose amendments to the *North Atlantic Air Navigation Plan*, the *North Atlantic Regional Supplementary Procedures* (Doc 7030), and all other relevant NAT-developed documents as directed by the NAT SPG.
7. Address other issues as directed by the NAT SPG.
8. Provide reports and recommendations concerning the above tasks to the NAT SPG.

Composition

The NAT IMG is composed of representatives of the NAT SPG member States. In order to ensure that NAT users' views are represented and to provide valuable operational experience, NAT IMG meetings are also attended by representatives from IACA, IATA, IBAC, IFALPA and IFATCA.

The NAT IMG might invite other participants as and when required in order to ensure that the relevant expertise is available when addressing specific tasks.

The Chairmanship and vice-Chairmanship of the NAT IMG will be reviewed by an election every four years and confirmed by the NAT SPG².

¹ NAT SPG Conclusion 49/27 refers.

² NAT SPG Conclusion 49/27 refers.

TERMS OF REFERENCE FOR NAT SAFETY OVERSIGHT GROUP (NAT SOG)

(as agreed at the NAT SPG Symposium 2015)

The NAT SOG is responsible to the NAT SPG for safety oversight ~~in~~^{of} the aviation system within the ICAO NAT Region, and will:

1. Review system safety performance in the ICAO NAT Region.
2. Share data on safety-related occurrences in the ICAO NAT Region.
3. Support the development of best practices in the management of safety in the ICAO NAT Region.
4. Collect data on and monitor the safety Key Performance Indicators (KPI) agreed by the NAT SPG.
5. Advise the NAT SPG annually on the performance of the ICAO NAT Region in relation to the safety KPIs.
46. Keep under review and, when appropriate, propose revisions to the safety Key Performance Indicators (KPI) established for the ICAO NAT Region; KPIs.
57. Ensure safety-related occurrences in the NAT Region are analysed by the appropriate NAT SOG contributory groups to determine ~~root causes~~contributing factors.
68. Provide direction on how occurrences reported to the NAT Central Monitoring Agency (NAT CMA) should be categorized.
9. Identify areas where mitigation is required and ~~report to the NAT SPG and~~ coordinate with the NAT Implementation Management Group (NAT IMG—) to formulate recommendations for the NAT SPG in this regard.
10. Assess the effectiveness of implemented mitigation measures.
711. Keep under review safety monitoring and analysis methods and ~~analysis and~~ recommend improvements to ~~the process~~these processes as appropriate.
812. Monitor safety cases in progress and review completed safety cases prepared to support changes to the NAT ~~air navigation~~aviation system.
9. ~~Collect data on and monitor safety KPIs;~~
10. ~~Advise the NAT SPG annually on the performance of the ICAO NAT Region in relation to the safety KPIs;~~
13. Monitor the implementation of the Global Aviation Safety Plan (GASP) in the ICAO NAT Region.
14. Develop the NAT Region Annual Safety Report and present it to the NAT SPG for approval.
1115. Address other safety-related issues as necessary.
12. ~~Use the fast track to advance safety concerns between formal meetings.~~
1316. ~~Report~~ Provide reports and recommendations concerning the above tasks to the NAT SPG.

Composition

The NAT SOG is composed of representatives ~~from~~^{of} the NAT SPG member States. ~~State representatives should be in a position to address service delivery and flight operations regulatory issues in the NAT Region, and as necessary regulatory issues related to the conduct of flight operations in the NAT Region.~~ In order to ensure that NAT users' views are represented and to provide valuable operational experience, NAT SOG meetings are also attended by representatives from Spain, IACA, IATA, IBAC, IFALPA and IFATCA.

Note: NAT SOG members should be in a position to address regulatory issues related to the conduct of flight operations in the NAT Region.

The NAT SOG may invite participants from other States or organisations as required.

The Chairmanship and vice-Chairmanship of the NAT SOG will be reviewed by an election every four years and confirmed by the NAT SPG³.

³ NAT SPG Conclusion 49/27 refers.

CLEAN VERSION:**TERMS OF REFERENCE FOR NAT SAFETY OVERSIGHT GROUP (NAT SOG)
(as agreed at the NAT SPG Symposium 2015)**

The NAT SOG is responsible to the NAT SPG for safety oversight of the aviation system within the ICAO NAT Region, and will:

1. Review system safety performance in the ICAO NAT Region.
2. Share data on safety-related occurrences in the ICAO NAT Region.
3. Support the development of best practices in the management of safety in the ICAO NAT Region.
4. Collect data on and monitor the safety Key Performance Indicators (KPI) agreed by the NAT SPG.
5. Advise the NAT SPG annually on the performance of the ICAO NAT Region in relation to the safety KPIs.
6. Keep under review and, when appropriate, propose revisions to the safety KPIs.
7. Ensure safety-related occurrences in the NAT Region are analysed by the appropriate NAT SOG contributory groups to determine contributing factors.
8. Provide direction on how occurrences reported to the NAT Central Monitoring Agency (NAT CMA) should be categorized.
9. Identify areas where mitigation is required and coordinate with the NAT Implementation Management Group (NAT IMG) to formulate recommendations for the NAT SPG in this regard.
10. Assess the effectiveness of implemented mitigation measures.
11. Keep under review safety monitoring and analysis methods and recommend improvements to these processes as appropriate.
12. Monitor safety cases in progress and review completed safety cases prepared to support changes to the NAT aviation system.
13. Monitor the implementation of the GASP in the ICAO NAT Region.
14. Develop the NAT Region Annual Safety Report and present it to the NAT SPG for approval.
15. Address other safety-related issues as necessary.
16. Provide reports and recommendations concerning the above tasks to the NAT SPG.

Composition

The NAT SOG is composed of representatives of the NAT SPG member States. In order to ensure that NAT users' views are represented and to provide valuable operational experience, NAT SOG meetings are also attended by representatives from Spain, IACA, IATA, IBAC, IFALPA and IFATCA.

Note: NAT SOG members should be in a position to address regulatory issues related to the conduct of flight operations in the NAT Region.

The NAT SOG may invite participants from other States or organisations as required.

The Chairmanship and vice-Chairmanship of the NAT SOG will be reviewed by an election every four years and confirmed by the NAT SPG⁴.

⁴ NAT SPG Conclusion 49/27 refers.

TERMS OF REFERENCE FOR NAT ECONOMIC, ~~AND FINANCIAL~~ AND FORECAST GROUP (NAT EFFG)

(as agreed at the NAT SPG Symposium 2015)

The ~~establishment of NAT EFFG is responsible to the NAT EFG was based on~~ NAT SPG ~~Conclusion 36/7 to provide for providing~~ economic ~~and~~ financial ~~and traffic forecasting~~ advice to the NAT SPG in order to ensure the cost-effective management of the ~~North Atlantic air traffic management~~ aviation system within the ICAO NAT Region, and ~~will have the following terms of reference:~~

1. Provide the NAT SPG with appropriate financial management expertise and advice in the areas of, inter alia, cost identification, cost allocation models, performance and productivity indicators, variance analyses and standardised financial reporting.
2. Provide advice to the NAT SPG as to best practice in the area of cost recovery and charging for the provision of air navigation services.
3. Develop proposals addressing financial and their related organisational aspects for implementing multinational facilities and services employed by provider States in the ICAO NAT region.
- ~~4. Review and provide input on financial and economic aspects of NAT development plans, in co-operation with the NAT IMG.~~
4. In coordination with the NAT IMG, develop and/or assess business-case analysis of planned implementations proposed under the NAT SPG work programme.
5. Provide NAT ~~Traffic~~traffic forecasts.
6. Address other issues as directed by the NAT SPG.
7. Report to the NAT SPG.

Composition

The NAT ~~EFFG~~EFFG is composed of Members from Canada, Denmark, Iceland, Ireland, Norway, Portugal, the United Kingdom and the United States, IACA, IATA and IBAC and with the participation of France as an observer.

The NAT ~~EFFG~~EFFG may invite other participants as and when required in order to ensure that the relevant expertise is available when addressing specific tasks or issues.

The Chairmanship of the NAT ~~EFFG~~EFFG will be reviewed by an election every four years and confirmed by the NAT SPG⁵.

⁵ NAT SPG Conclusion 49/27 refers.

CLEAN VERSION:**TERMS OF REFERENCE FOR NAT ECONOMIC, FINANCIAL AND FORECAST GROUP (NAT EFFG)****(as agreed at the NAT SPG Symposium 2015)**

The NAT EFFG is responsible to the NAT SPG for providing economic, financial and traffic forecasting advice to the NAT SPG in order to ensure the cost-effective management of the aviation system within the ICAO NAT Region and has the following terms of reference:

1. Provide the NAT SPG with appropriate financial management expertise and advice in the areas of, inter alia, cost identification, cost allocation models, performance and productivity indicators, variance analyses and standardised financial reporting.
2. Provide advice to the NAT SPG as to best practice in the area of cost recovery and charging for the provision of air navigation services.
3. Develop proposals addressing financial and their related organisational aspects for implementing multinational facilities and services employed by provider States in the ICAO NAT region.
4. In coordination with the NAT IMG, develop and/or assess business-case analysis of planned implementations proposed under the NAT SPG work programme.
5. Provide NAT traffic forecasts.
6. Address other issues as directed by the NAT SPG.
7. Report to the NAT SPG.

Composition

The NAT EFFG is composed of Members from Canada, Denmark, Iceland, Ireland, Norway, Portugal, the United Kingdom and the United States, IACA, IATA and IBAC and with the participation of France as an observer.

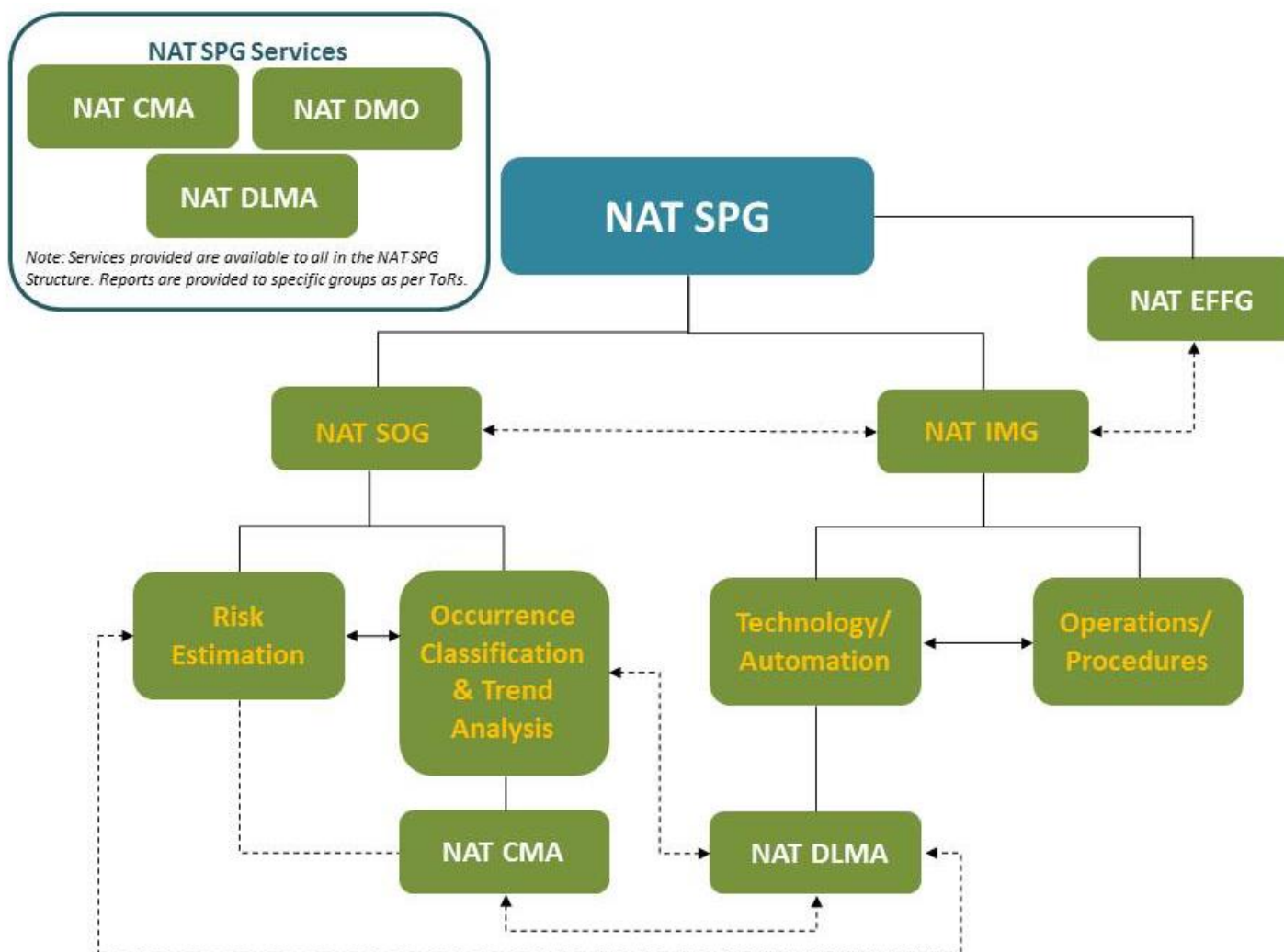
The NAT EFFG may invite other participants as and when required in order to ensure that the relevant expertise is available when addressing specific tasks or issues.

The Chairmanship of the NAT EFFG will be reviewed by an election every four years and confirmed by the NAT SPG⁶.

⁶ NAT SPG Conclusion 49/27 refers.

APPENDIX D — PROPOSED REVISED NAT SPG WORKING STRUCTURE

(paragraph 6.1 refers)



— END —