

**NAT SPG/SYMP/08**

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**



**SUMMARY OF DISCUSSIONS  
OF THE  
NORTH ATLANTIC SYSTEMS PLANNING GROUP  
SYMPOSIUM ON STRUCTURE AND WORKING METHODS**

*Paris, 3 to 5 November 2008*

PREPARED BY THE EUROPEAN AND NORTH ATLANTIC OFFICE OF ICAO

**NOVEMBER 2008**

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## 1. Introduction

1.1 The North Atlantic Systems Planning Group (NAT SPG) Symposium on Structure and Working Methods was convened in the European and North Atlantic (EUR/NAT) Office of ICAO in Paris from 3 to 5 November 2008 to complete action on the following NAT SPG/44 Conclusion:

### **NAT SPG Conclusion 44/41 – Structure and working methods of the North Atlantic (NAT) NAT SPG**

That the NAT SPG Chairman and Secretary convene, from 3 to 5 November 2008 in the ICAO EUR/NAT Office, a Symposium to:

- a) review the structure and working methods of the NAT SPG; and
- b) develop a recommendation for a NAT SPG Safety Policy to:
  - i) describe how safety is managed in the NAT Region taking account of the Global Aviation Safety Plan (GASP);
  - ii) show the inter-relationship between the NAT SPG contributory groups with regard to safety management activities; and
  - iii) show how safety management information is to be exchanged between the NAT SPG contributory groups.
- c) submit proposals to NAT SPG/45 through NAT IMG/34

1.2 The Symposium was moderated by Mr Karsten Theil Regional Director, EUR/NAT Office of ICAO, and was assisted by Mr Jacques Vanier and Mrs Carole Stewart-Green from the same Office. Additional assistance was provided by Mrs Nikki Goldschmid from the EUR/NAT Office of ICAO.

1.3 The Symposium was attended by all NAT SPG member States. The Symposium regretted the absence of IATA. A list of participants is at **Appendix A**.

1.4 The Meeting approved the following Agenda:

**Agenda Item 1:** Review and discuss the processes and functions necessary to discharge the obligations of the NAT SPG

**Agenda Item 2:** Review of the Global Aviation Safety Plan and establish a NAT Region Safety Policy

**Agenda Item 3:** Review the Global Air Navigation Plan and develop a proposal for the re-structuring of the NAT SPG and its Contributory Bodies

**Agenda Item 4:** Any other business

1.5 The list of documents considered by the Symposium is at **Appendix B**.

## **2. Review and discuss the processes and functions necessary to discharge the obligations of the NAT SPG**

2.1 NAT SPG/44 recognised the work that had been progressed by the ICAO Council and Air Navigation Commission (ANC) on the subject of increasing the effectiveness of the Planning and Implementation Regional Groups (PIRGs). It also recognised the need to re-evaluate the extent to which it was meeting the challenges brought about by the separation of regulation/oversight and Air Navigation Services (ANS) provision, the changing traffic characteristics, technological advances and the need to adopt a more performance based approach to regional planning and implementation.

2.2 The Symposium noted that the role of Regional Air Navigation (RAN) meetings to develop and agree on regional requirements had increasingly been transferred to the PIRGs. For that reason, the NAT SPG considered it important that, when setting regional requirements, due consideration be given to global requirements and to seamless operations and interoperability as stipulated by the Global Air Traffic Management (ATM) Operational Concept (Doc 9854), which had been endorsed by the 11<sup>th</sup> Air Navigation Conference (AN-Conf/11 – Montréal, 22 September to 3 October 2003). The basis for planning however would still be sound traffic forecasting along the lines of those prepared by the NAT Traffic Forecasting Group (NAT TFG).

2.3 AN-Conf/11 recommended that ICAO, as a high priority, develop a set of ATM functional and operating requirements for a global ATM system on the basis of the Global ATM Operational Concept, which would take full account of the need to move to a performance based system. The Symposium noted that the Global ATM Operational Concept, when translated to fit into the NAT environment, suggested a set of NAT regional performance requirements with regard to:

- Safety – acceptable level of safety.
- Regularity – maximum acceptable delay.
- Efficiency – i) acceptable direct and indirect costs of service provision.  
ii) reductions in CO<sub>2</sub> emissions.
- Communications – acceptable availability to ensure intervention capability.
- Navigation – acceptable precision.
- Surveillance – acceptable availability and accuracy.

2.4 The Symposium acknowledged the importance of the involvement of the regulatory/supervisory entities of the provider States in setting the performance requirements as they are responsible for the approval/certification/licensing of the ANS providers and the aircraft operators against those requirements. The involvement of the users' organisations was equally important to ensure that the overall system performance would meet expectations.

2.5 When discussing performance requirements, it was pointed out that AN-Conf/11 had agreed that actual performance should be assessed and monitored. It was recalled that the lateral navigation performance in the NAT Region has been monitored since the introduction of Minimum Navigation Performance Specifications (MNPS) airspace in the early 1980s and that the monitoring had been expanded in the 1990s to include height keeping performance required for Reduced Vertical Separation Minimum (RVSM).

2.6 The Symposium recognised that, although work was ongoing in other fora, there was no commonly agreed guidance available to assist it in its considerations on the methodology of monitoring and assessment of the actual NAT Region system performance. Guidance was also lacking on how to integrate safety management and oversight into the work programme of PIRGs.

2.7 The Symposium acknowledged the background information that was presented and agreed that it was important that the material be taken into account when evaluating its working structure to ensure that it was consistent with global developments. In particular, it was agreed that the performance requirements identified in paragraph 2.3 above should be included in the working structure.

2.8 The Symposium acknowledged the necessity to include "environment" to the regional performance requirements and to keep environment differentiated within efficiency, in particular differentiated from flight efficiency as seen from a user's or from a provider's point of view.

### 3. Review of the Global Aviation Safety Plan and establish of a NAT Region safety policy

3.1 The Symposium recalled that the 36<sup>th</sup> Session of the ICAO Assembly adopted Resolution A36-7 which called upon States, and invited other stakeholders, to cooperate in the development and implementation of regional, sub-regional and national plans based on the framework of the global plans. The objective of the GASP was to reduce the accident risk for civil aviation by providing a common frame of reference for all stakeholders in order to allow a more proactive approach to aviation safety and to help coordinate and guide safety policies and initiatives worldwide. The GASP includes the Global Air Navigation Plan and the Global Aviation Safety Roadmap. Global Safety Initiatives which, *inter alia*, calls for the following are in the roadmap:

- a) effective error and incident reporting at the level of CAAs and industry;
- b) consistent use of Safety Management Systems (SMS); and
- c) compliance with regulations.

3.2 It was recognised that the NAT SPG, its workgroups and ANS stakeholders had taken an active role in managing safety. The approaches and methodology used made the record as it is today. It was therefore proposed that the NAT SPG should now orient its safety policies and planning and implementation mechanisms to ensure alignment with the GASP.

3.3 The Symposium recalled that NAT SPG Conclusion 40/19 (2004) established the Safety Management Coordination Group (NAT SMCG) with the specific mandate to continuously monitor the level of safety in the NAT Region, to coordinate the actions related to the identification of trends, to develop mitigation proposals and to communicate with interested stakeholders. In addition, the NAT SPG had agreed to manage safety in the NAT Region on the basis of safety management principles. The Symposium also recalled that NAT SPG Conclusion 44/41 had directed the Symposium to develop a recommendation for a NAT Region Safety Policy.

3.4 In developing such a recommendation, the Symposium agreed that it would be appropriate to consider the role and responsibilities of the regulators, the Air Navigation Service Providers (ANSP) and the NAT SPG itself, including all its contributory bodies. It also considered that a common NAT SPG safety policy should be endorsed by both the regulators and the service providers concerned.

3.5 With the foregoing in mind, the Symposium agreed on the high level Safety Policy which is at **Appendix C**. As regards the promulgation of this information, the Symposium agreed that, initially, the Policy Statement should be published in the NAT SPG Handbook and that the ICAO Regional Director be requested to circulate it in a State Letter.

3.6 In addition, the Group discussed the current list of safety related tasks that were included in the Terms of Reference and work programmes of the various bodies of the NAT SPG working structure. It was agreed that this list should be referenced in developing draft Terms of Reference (ToR) for the proposed Safety Oversight Group (paragraph 4.10 refers). The list would also be reviewed when developing material to show the inter-relationship between the NAT SPG contributory groups with regard to safety management activities and how safety management information would be exchanged between the NAT SPG contributory groups (NAT SPG Conclusion 44/41 a) ii and iii refer).

#### 4. Review the Global Air Navigation Plan and develop a proposal for the structure of the NAT SPG and its contributory bodies

4.1 In introducing this agenda item, the Symposium recalled that the 184<sup>th</sup> Session of the Council of ICAO decided on the composition of PIRGs as well as terms of reference. As regards the NAT SPG, the terms of reference remained unchanged. The Symposium also recalled that the main activities of the NAT SPG were divided into two main areas:

- a) monitoring the safety of the system and taking action when required; and
- b) overseeing planning and implementation activities.

4.2 The Symposium agreed that there was no need to propose any changes to the existing terms of reference nor was there a need to modify the work breakdown shown in paragraph 4.1 above. It was however agreed that it was necessary to make adjustments to accommodate the change in emphasis to performance based requirements, as driven by the Global ANP, and to take account of the GASP. With that objective and bearing in mind the Council directives and guidelines, the Symposium agreed on the proposed requirements driven approach as shown in **Appendix D**. As can be seen from the diagram, performance based requirements could originate from any stakeholder. The NAT SPG would then assign tasks to one or all three of its contributory bodies. Each contributory body would be responsible to organise its work along the principles outlined in paragraph 4.4 below.

4.3 The work of the NAT SPG would be centred on three main areas: safety oversight, planning and implementation, and financial considerations. This is illustrated in the diagram shown in **Appendix E**. It was highlighted that planning and implementation activities were closely linked to safety oversight and to financial considerations (business cases).

4.4 The Symposium then developed a more detailed **organisation chart** which showed the interrelationships of the contributory bodies with the NAT SPG on the one hand and with each other. The NAT IMG would remain as is but it would absorb the NAT Operations Managers (OPS MNG) and the Aeronautical Communications Group (ACG). Other changes were proposed to the internal structure of the NAT IMG, which are depicted in the **work flow diagram** shown in **Appendix F**. The Symposium noted that the NAT IMG would discuss the proposed changes at its 33<sup>rd</sup> meeting in November 2008.

4.5 As regards the work of the NAT Operations Managers, the Symposium noted the value that derived from the bilateral and multilateral arrangements used to address day to day operational issues between the Air Traffic Services (ATS) units concerned. It was agreed that these types of arrangements were best left to the operational level but that issues requiring support within the NAT IMG work programme should be addressed within its framework. Accordingly, it was agreed to recommend the de-activation of the NAT Operations Managers Group, as a formal part of the NAT SPG working structure, with the understanding that the actual day to day inter-unit coordination would continue and that any required coordination with the NAT IMG working structure would take place directly between the ATS units and their respective NAT Air Traffic Management Group (ATMG) representatives.

4.6 Concerning the ACG, it was felt that their working arrangements should be similar to the OPS MNG. Operational coordination should take place at the ATS unit level but planning activities should be managed from within the NAT IMG framework. Accordingly, it was also recommended that the ACG be de-activated as a formal NAT SPG group and that instead, it be attached to the NAT IMG.

4.7 The Symposium noted that the NAT IMG actively assessed and managed the work programmes of its contributory bodies. Accordingly, groups would continue to be deactivated if there was no work. Only active projects/initiatives would be the subject of NAT SPG work. Also, the NAT IMG was encouraged to use time-limited task forces to address specific issues. The NAT IMG should review and

update the terms of reference and work programmes of its contributory bodies to take account of the re-alignment of tasks and especially to ensure that safety management was incorporated in work programmes.

4.8 It was pointed out that the NAT SPG did not establish informal groups, as may occur in other Regions. Nevertheless, such groups were established from time to time by the ANSPs and it was recognized that they may generate inputs appropriate for consideration in the NAT SPG work programmes. Groups such as the EUR/North America (NAM) Air Traffic Flow Management (ATFM) Task Force provided a good example. However, it was necessary to avoid duplication of effort; therefore, the relationship with informal groups and the NAT SPG should be reviewed by NAT IMG/33 in November 2008.

4.9 Considering the financial constraints as well as human resource limitations, the Symposium felt that ways and means should be explored to reduce the frequency of face-to-face meetings and to determine whether better use of technology could assist. The Symposium noted that the NAT IMG would take this into account when managing its contributory bodies.

4.10 As regards the establishment of a NAT Safety Oversight Group (NAT SOG), as shown in the **work flow diagram** included in Appendix F, the Symposium agreed to recommend that the NAT SMCG, at its next meeting (November 2008), should initiate work on developing draft terms of reference for the NAT SOG as well as reviewing those that currently exist for the Mathematicians Working Group and the former Scrutiny Group (NAT SPG Conclusion 40/19 also refers) taking account of the list of tasks shown in **Appendix C**, page C-2. It was also recommended that the SMCG should examine and propose changes if need be to the working arrangements between the NAT Central Monitoring Agency (CMA) and the future NAT SOG. The NAT SMCG would be subsumed by the NAT SOG. Finally, the SMCG should also propose how best to ensure an effective working arrangement with the NAT IMG regarding safety related issues.

4.11 On the basis of the proposals that may stem from the next meeting of the SMCG in November 2008, the Secretary of the NAT SPG would consult with the Group as a whole (members and observers) to seek approval for the changes. If possible, they would be put in place for NAT SPG/45 planned for June 2009.

4.12 The Symposium recommended that no changes were required to the NAT Economic and Finance Group (NAT EFG) for the time being. As the NAT EFG was established pursuant to a request from IATA, they would be contacted to ensure that the group was still required.

4.13 The Symposium agreed that the NAT TFG provided very useful planning material to the NAT SPG as well as to other outside users. As such, it was recommended that no changes to the Group were necessary for the time being. In the same vein, the Symposium agreed that the Document Management Office (DMO), the Programme Coordination Office (PCO) – (web site) and the NAT IMG Cost Effectiveness (NICE) Group provided valuable support but that they should not be formally attached within the organisation chart. This is depicted in **Appendix E**. Therefore, they should continue as is.

## 5. Any other business

### *Draft NAT SPG Agenda*

5.1 On the basis of the discussions outlined above and taking account of the agreement to propose that the NAT SPG amend its working structure to take account of the Council directives, the Symposium examined the standard NAT SPG Agenda, which also served as a template for the work programme. It was agreed to recommend that the draft agenda be modified as shown in **Appendix G**. By agreeing to the revised draft agenda, the Symposium was cognisant that the material that had been presented in the past would be presented differently at future meetings. Essentially, the safety related material that was normally submitted by the Mathematicians Working Group, the Safety Management Coordination Group

report and the safety management material from the NAT IMG would all be filtered through the NAT SOG. It was agreed to test the new structure but that care should be used to ensure that no safety related elements that would normally be seen by the NAT SPG were overlooked.

5.2 The NAT IMG, the NAT SOG and the NAT EFG, when reporting to the NAT SPG, should emphasise recommendations and appropriate actions with regard to monitoring and/or reporting against agreed requirements. This would be done in addition to their normal reporting on planning activities and monitoring the levels of safety (paragraph 4.1 refers).

5.3 The Symposium recommended that regulators should participate in the initial NAT Safety Oversight Group meeting in Spring 2009. They would then meet separately (just prior to NAT SPG/45) to assess whether their involvement would be sufficient for them to carry out their oversight functions or whether they would need to take a different position.



**APPENDIX A - LIST OF PARTICIPANTS***(Paragraph 1.3 refers)***CANADA**

Larry LACHANCE

**DENMARK**

Knud ROSING

**FRANCE**

André BERMAN

**ICELAND**

Asgeir PALSSON

Jón GUNNLAUGSSON

Hlin HOLM

**IRELAND**

Pat RYAN

**NORWAY**

Per Harald PEDERSEN

Gitte VIKSAAS

**PORTUGAL**

Carlos ALVES

**UNITED KINGDOM**

Matthew TEMPLE-SMITH

David NICHOLAS

William MUIR

**UNITED STATES**

Luis RAMIREZ

Anthony FERRANTE

Daniel VACA

**ICAO**

Karsten THEIL

Carole STEWART-GREEN

Jacques VANIER

Nikki GOLDSCHMID

**APPENDIX B - LIST OF DOCUMENTS***(Paragraph 1.5 refers)*

<b>WPs</b>	<b>Title</b>	<b>Presented by</b>
<b>1</b>	Draft Agenda	Secretariat
<b>2</b>	A planning and implementation process	Secretariat
<b>3</b>	Global aviation safety plan	Secretariat
<b>4</b>	Current working structure of the NAT SPG and its subsidiary bodies	Secretariat
<b>5</b>	Participation in NAT SPG activities	Secretariat
<b>6</b>	Safety policy	Secretariat
<b>7</b>	Conference on the Economics of Airports and Air Navigation Services (CEANS) - Outcome	Secretariat
<b>8</b>	Role of the national supervisory authorities/regulatory authorities in the context of the NAT SPG	Iceland, France, Denmark and Norway
<b>9</b>	Amendment of the North Atlantic Special Planning Group (NAT SPG) structure	United States

<b>References</b>
<b>Doc 9828</b> - Report from the ICAO 11th Air Navigation Conference (AN-Conf/11 – Montréal, 22 September to 3 October 2003)
<b>Doc 9854</b> – Global Air Traffic Management operational concept
<b>Doc 9750</b> - Global Air Navigation Plan
<b>Doc 9882</b> - Air Traffic Management System Requirements
<b>Doc 9883</b> - Manual on Global Performance of the Air Navigation System
<b>ALLPIRG/5 Report</b> - (Report from the Fifth Meeting of the All Planning and Implementation Regional Group (ALLPIRG/5 – Montréal, 23 to 24 March 2006)

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**APPENDIX C – DRAFT SAFETY POLICY***(Paragraph 3.5 refers)***SAFETY POLICY STATEMENT**

Safety is one of NAT SPG core business functions. The NAT SPG is committed to developing, implementing, maintaining and constantly improving strategies and processes to ensure that all our aviation activities take place under a balanced allocation of organizational resources. The NAT SPG will aim to achieve the highest level of safety performance and meet regional safety objectives in line with national and international standards, the Global Aviation Safety Plan (GASP) and the Global Air Navigation Plan.

**OBJECTIVE**

The objective of the NAT SPG member States is to maintain and, where possible, improve the agreed safety standards in all activities supporting the provision of air navigation services in the North Atlantic Region:

- All involved States are accountable for the delivery of the agreed level of safety performance in the provision of air navigation services in the North Atlantic Region.
- All involved States are accountable for the delivery of the agreed level of safety performance in aircraft operations in the North Atlantic Region.
- Safety in the NAT Region is managed through the organization and activities of the relevant implementation and oversight groups established by the NAT SPG, in coordination with the non-member States and observers, to achieve its Safety Objective.

**Guiding Principles**

The NAT SPG will act to:

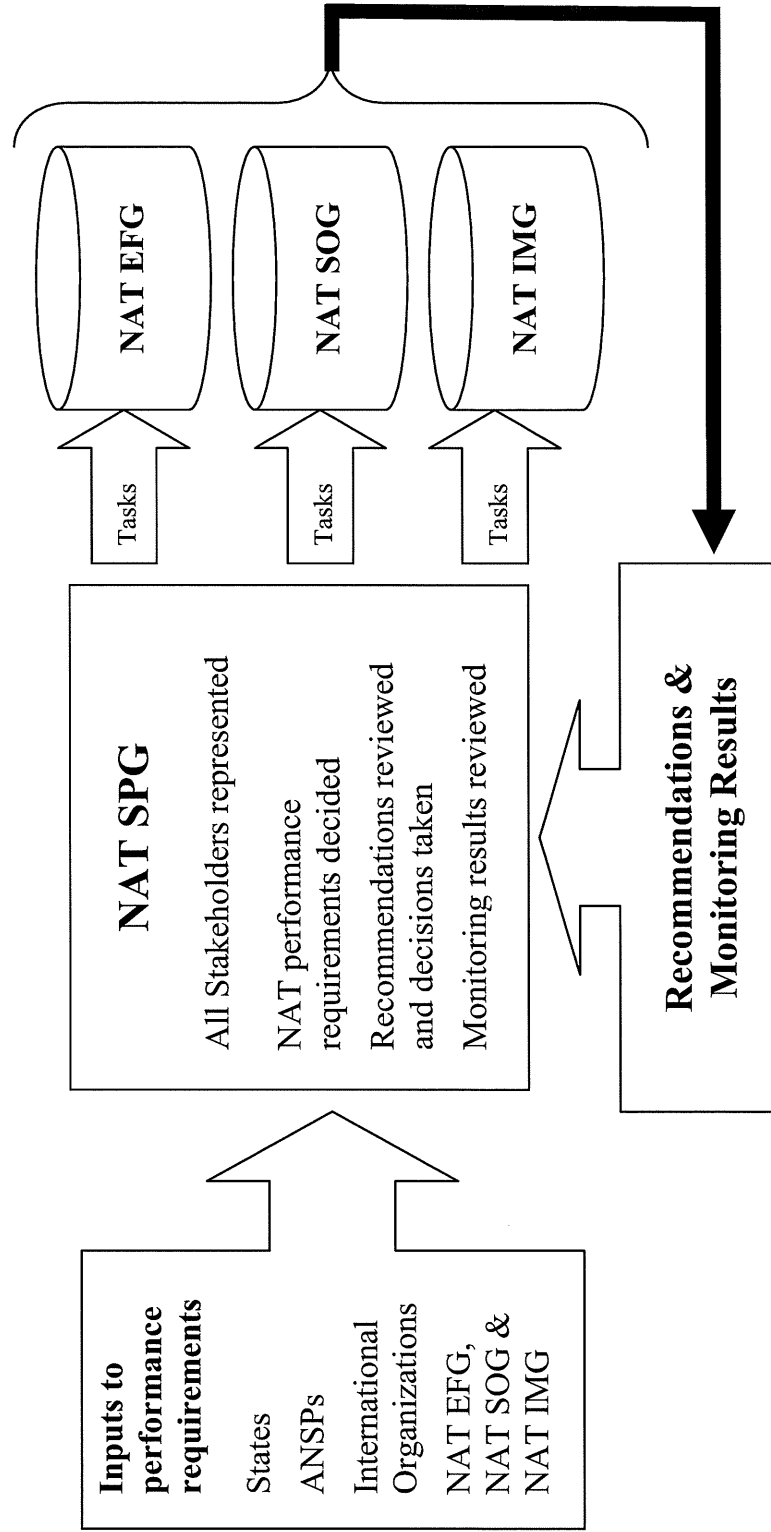
- **Clearly** define all accountabilities and responsibilities for the delivery of safety performance with respect to the provision of air navigation services and participation in the NAT SPG and its contributory bodies;
  - **Support** the safety management activities that will result in an organizational culture that fosters safe practices, encourages effective safety reporting and communication, and actively manages safety within the NAT Region;
  - **Share** safety related data, knowledge and expertise with concerned stakeholders;
  - **Disseminate** safety information and NAT operating requirements to stakeholders;
  - **Establish and implement** hazard identification and risk management processes in order to eliminate or mitigate the safety risks associated with air navigation services supporting aircraft operations in the North Atlantic Region;
  - **Establish and measure** NAT Region safety performance against agreed safety standards;
  - **Continually improve** our safety performance through safety management processes
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**Draft material for consideration when developing TORs and activities for the SOG**  
(Paragraph 4.10 refers)

<b>Function (Safety Management)</b>	<b>Current Safety (ToR) activities within NAT SPG groups</b>	<b>Current NAT/SPG Group</b>	<b>Proposed NAT/SPG Group</b>
"MONITOR"	1) Continuously study, monitor and evaluate the system <b>(safety)</b> in light of changing traffic characteristics, technological advances and updated traffic forecasts;		
MONITOR	2) Continuously monitor safety through the assessment of current collision risk;		
MONITOR	3) Review safety monitoring and analysis methods, and improve the process as appropriate;		
MONITOR	4) Review the system safety performance in the NAT Region;		
Promotion	5) Promote best practices in the management of safety in the NAT Region;		
Occurrence Reporting	6) Establish and amend, as required, mechanisms for the collection and analysis of occurrence data;		
Occurrence Reporting	7) Employ common procedures for submitting, analysing and categorising occurrence reports;		
Analysis	8) Compile data necessary to conduct safety analysis in the NAT Region;		
Occurrence Analysis	9) Investigate and analyse the causes of occurrences, including operational errors, in the NAT region;		
Monitoring	10) Height monitoring by CMA and remedial actions where applicable		
Occurrence Reporting / Corrective Actions	11) Coordinate appropriate action with the responsible regulatory authorities in all cases of safety occurrences;		
Lesson Dissemination	12) Share data on all occurrences in the NAT Region;		

# APPENDIX D – PROPOSED NAT SPG REQUIREMENTS DRIVEN APPROACH

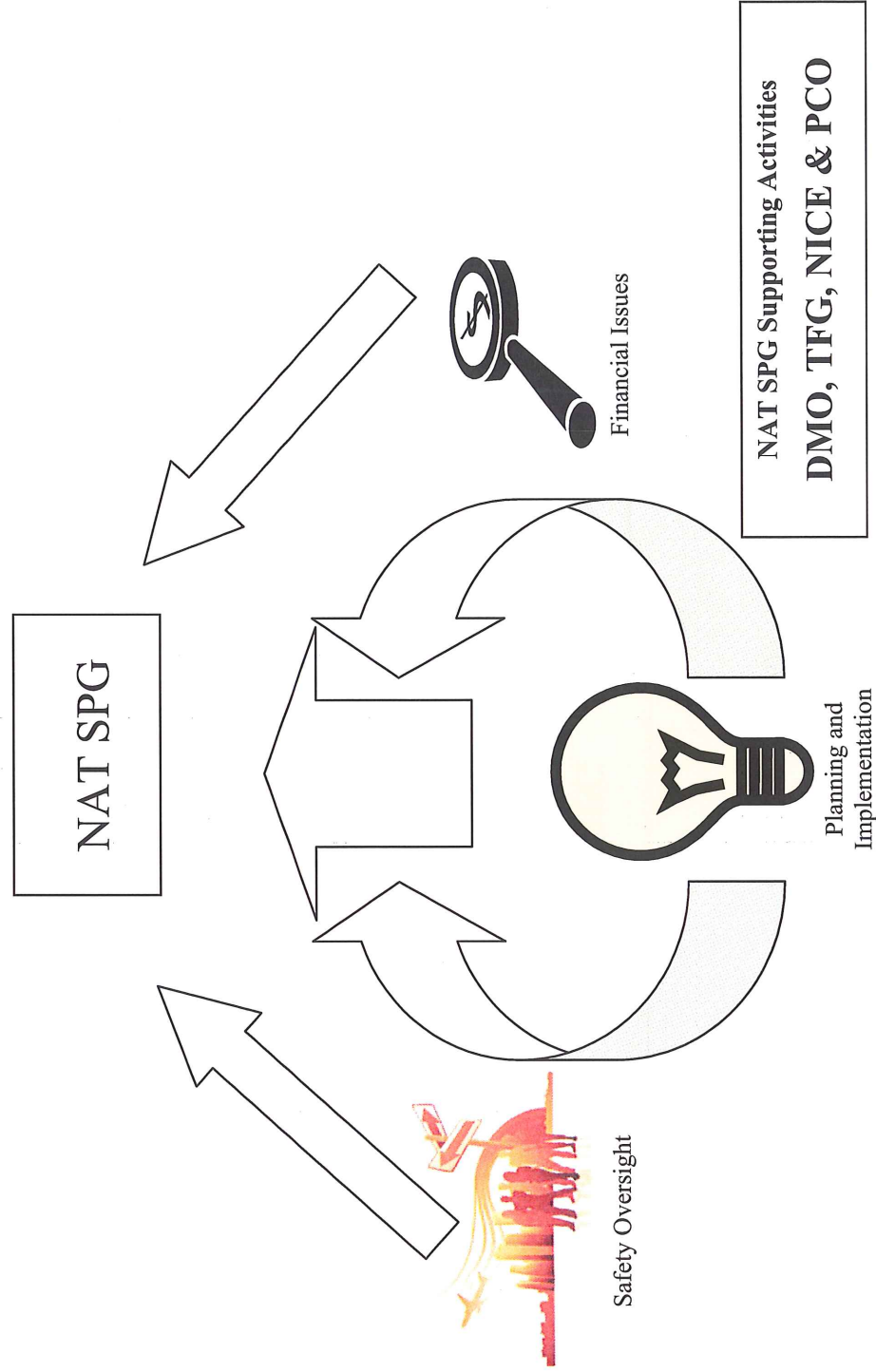
(Paragraph 4.2 refers)



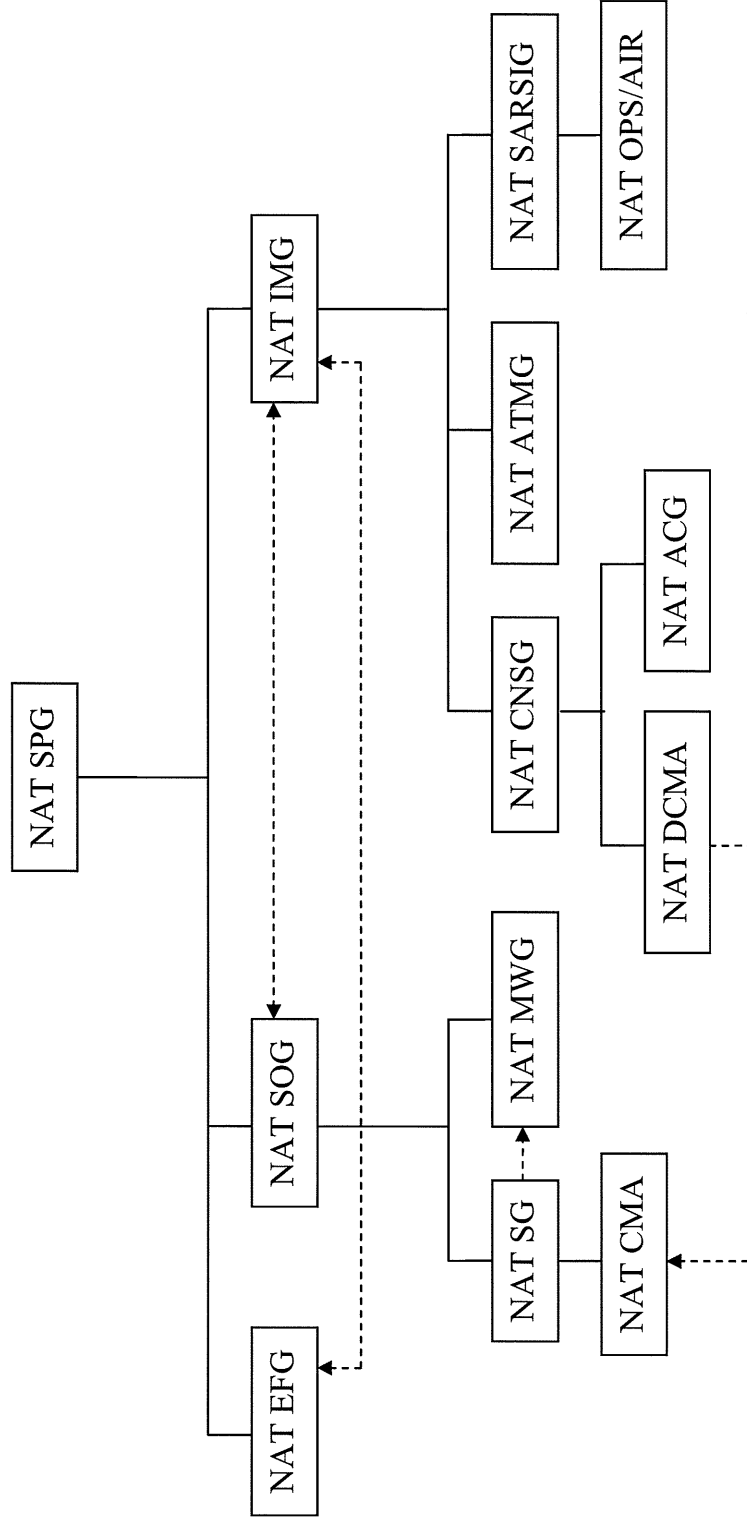
## APPENDIX E – PROPOSED NAT SPG STRUCTURE

*(Paragraph 4.3 refers)*

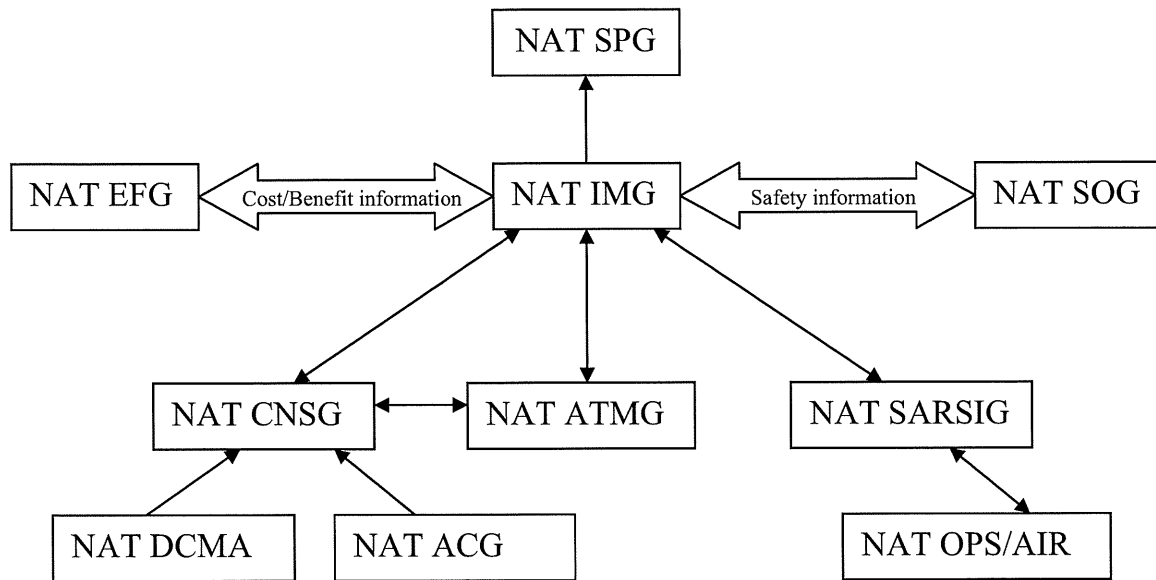
Proposed NAT SPG operating concept



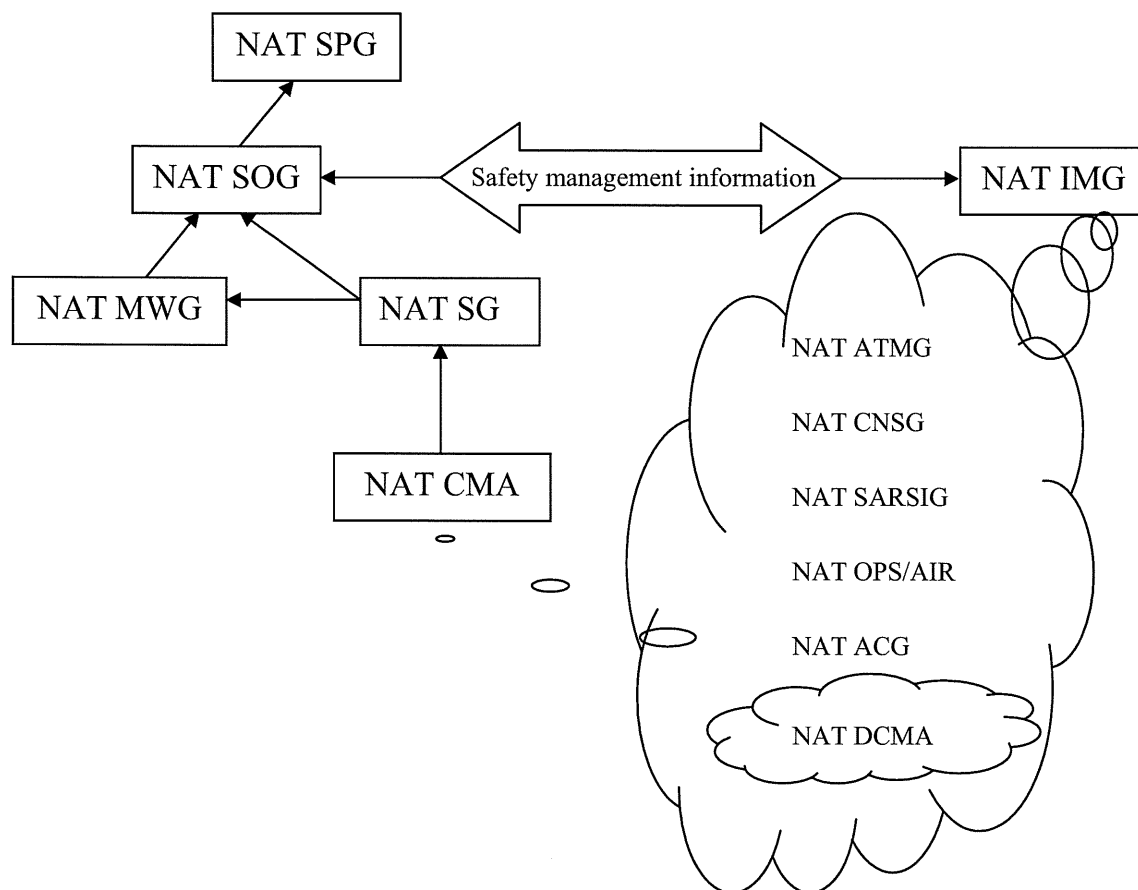
**Proposed NAT SPG organizational diagram**  
*(Paragraph 4.4 refers)*



The proposed workflow for the NAT Safety Oversight Group (NAT SOG) is provided at page E-2.  
 The proposed workflow for the NAT Implementation Management Group (NAT IMG) is provided at page E-1.

**APPENDIX F – PROPOSED WORK FLOWS***(Paragraph 4.4 refers)***PROPOSED WORK FLOW OF THE NAT IMPLEMENTATION MANAGEMENT GROUP  
(NAT IMG)**



**PROPOSED WORK FLOW OF THE NAT SAFETY OVERSIGHT GROUP****(NAT SOG)***(Paragraph 4.10 refers)*

**APPENDIX G – NAT SPG PROPOSED DRAFT AGENDA***(Paragraph 5.1 refers)***NORTH ATLANTIC SYSTEMS PLANNING GROUP (NAT SPG)  
FORTY-FIFTH MEETING***(Paris, 23 to 26 June 2009)***PROVISIONAL AGENDA**

- Agenda Item 1:**        Developments
- 1.1    ICAO Panels and Committees
  - 1.2    Adjacent Regions
  - 1.3    NAT provider States
  - 1.4    Technology
  - 1.5    Progress on past Conclusions
- Agenda Item 2:**        Planning and implementation
- 2.1    NAT TFG (shorter report to NAT SPG)
  - 2.2    IMG
  - 2.3    EFG
  - 2.4    Other issues
- Agenda Item 3:**        Air navigation system review
- 3.1    SOG
- Agenda Item 4:**        Support services
- 4.1    DMO
  - 4.2    NICE
  - 4.3    PCO
- Agenda Item 5:**        Any other business
- 5.1    Working methods of the NAT SPG
  - 5.2    Next meeting

– END –