
NORTH ATLANTIC TREATY
ORGANISATION



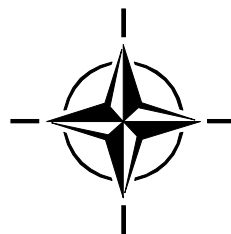
RESEARCH AND TECHNOLOGY
ORGANISATION



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RTO NEW MEMBER WELCOME BOOKLET

For RTB Members, National Coordinators and RTO Panel/Group Members



August 2011



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INTRODUCTION

We'd like to welcome you as a new member of the Research & Technology Organisation (RTO) Community.

The RTO is a very dynamic network of scientists and researchers and your participation is an important part of making this network effective for NATO and the Nations.

The RTO mission is to conduct and promote co-operative research and information exchange within NATO and with its "Partners".

This Welcome Booklet is intended to provide new members of the Research & Technology Board (RTB) and RTO Panels/Group with a basic understanding of the RTO and their role as an RTB Member, a National Coordinator or an RTO Panel/Group Member.

The information contained in this Booklet was principally derived from the Official RTO Operating Procedures.

For more detailed information on any of the topics in this Booklet, readers should either consult a member of the Research & Technology Agency (RTA) Staff or the RTO Operating Procedures which are accessible from the RTO Website www.rto.nato.int. Here, you will need a login and password – after you logged on, click on "My SharePoint Workspaces" (menu under Logged on), then on "MyRTO Common Area" in the SharePoint Site List, and finally on "RTO Common Documents" in the left column.



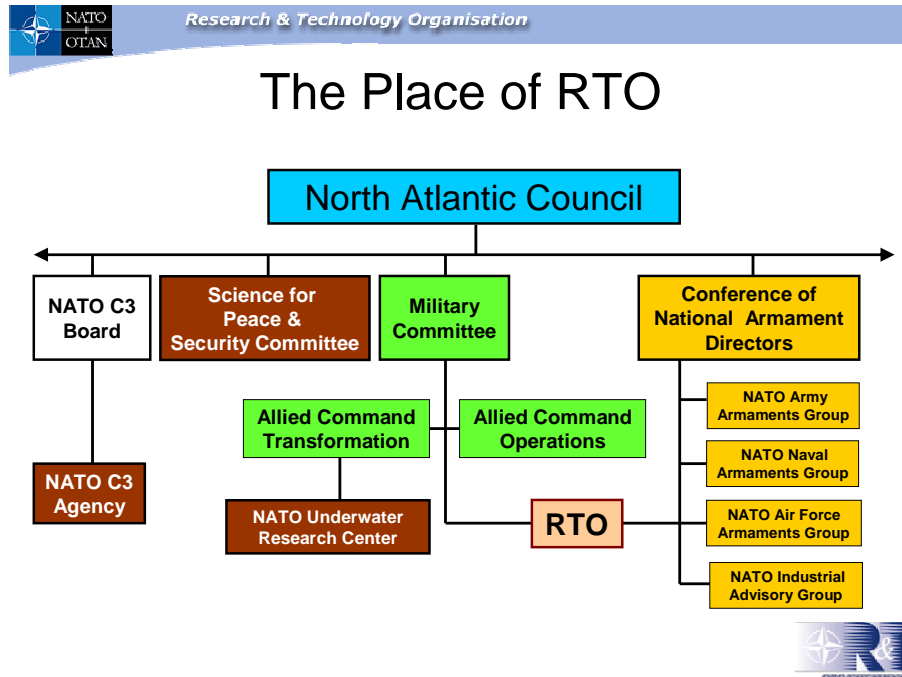
1. THE RESEARCH AND TECHNOLOGY ORGANISATION

The Research & Technology Organisation (RTO) was formed in 1998 by the merger of the Advisory Group for Aerospace Research and Development (AGARD) and the Defence Research Group (DRG).

1.1. Its Place in NATO

The RTO is a NATO Organisation under North Atlantic Council (NAC) authority through the Military Committee (MC) and the Conference of National Armaments Directors (CNAD).

It interacts with many other NATO bodies as highlighted on this chart:



This interaction is in particular governed by the need for the RTO Community to comply with the second goal of the 2005 NATO R&T Strategy which is to “Establish Effective NATO R&T Coordination” across the Alliance in order to achieve “common focus, synthesis of activity and hence, enhanced effectiveness”.

Coordination is first performed during R&T Coordination Group (RTCG) meetings lead by the RTB Chairman and comprising representatives from all bodies represented on that chart apart from the NAC.

Coordination is also achieved through the ex-officio membership of most of those bodies to the RTO structure as well as by the reciprocal participation of RTO representatives (in particular the RTB Chairman and RTA Director) to those bodies’ meetings.

Internally now, the RTO comprises the Research & Technology Board (RTB), the Research & Technology Agency (RTA), Technical Panels and the NATO Modelling & Simulation Group (NMSG).

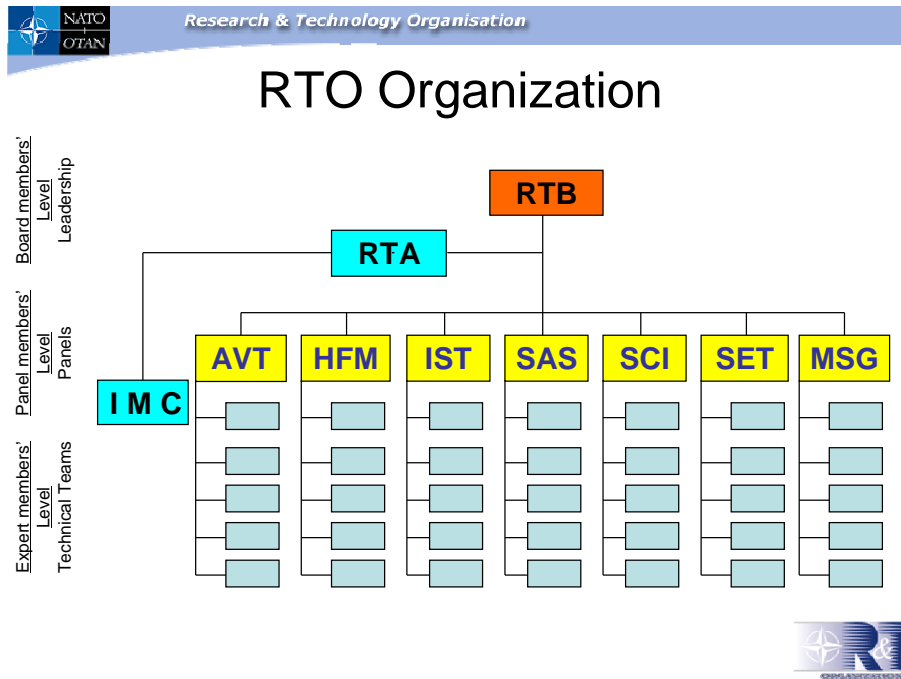
1.2. Its Purpose, Mission, and Mode of Operation

The RTO purpose and mission are:

- to conduct and promote co-operative research¹ and information exchange,
- to support the development and effective use of national defence R&T, and thus to maintain a technological lead within the Alliance,
- to meet the military needs of the Alliance, and,
- to provide advice to NATO and national decision makers.

The RTO operates at three levels:

- The Research & Technology Board (RTB), level 1
- Technical Panels and NMSG, level 2
- Technical Teams, level 3



1.3. Its Products

The RTO provides to NATO four basic products:

- o A network of thousands of experts which benefit to each member of the Community and through them to all member Nations;
- o The research/analysis results as well as proposed NATO standards provided in the technical papers and final reports of our many activities which are published by the RTA and posted on the RTO Web site;
- o The results from technology demonstrations, experiments and field trials performed within our Panels/Group in conjunction with other NATO bodies and the respective participating nations;

¹ The core of RTO's work is its Technical Programme which consists of Technical Teams (see paragraph 5).

- Many educational opportunities, provided through symposia, lecture series and technical courses organised by the Panels and the NMSG.

1.4. The Research & Technology Agency (RTA)

The RTO is supported by an Executive Agency, the Research & Technology Agency (RTA), located in Neuilly sur Seine near Paris, which facilitates collaborative research and associated advice by organising a wide range of symposia, studies, and other forums in which experts can meet and exchange knowledge as well as interface with national and NATO decision-makers.

The RTA is responsible for:

- supporting the RTB and in particular, assisting the RTB Chairman on the implementation and maintenance of the long-term NATO R&T Strategy as well as developing RTO policies and procedures,
- supporting the Panels/Group and the activities derived from these Panels/Group,
- coordinating activities between the Panels/Group and Inter-Panel activities,
- integrating information management systems into the RTO and RTA operations,
- executing the RTO Support Programme as well as the RTO Consultant and Exchange Programme,
- managing the RTO budget in accordance with the NATO Financial Regulations,
- facilitating collaborations between RTO and other NATO bodies such as the Military Committee, Conference of National Armaments Directors (CNAD), Allied Command Transformation, CNAD Main Armament Groups, NIAG, NC3A, NURC, and Science for Peace and Security Committee.



2. THE RESEARCH AND TECHNOLOGY BOARD (LEVEL 1)

The RTB constitutes the highest authority within the Research & Technology Organisation (RTO). It is the policy body tasked by the North Atlantic Council (NAC), through the Conference of National Armament Directors (CNAD) and the Military Committee (MC), to carry out the mission of the RTO.

Working in concert with other NATO defence R&T bodies, it serves as the single integrating body within NATO for the coordination of defence research and technology.

The Chairman of the RTB is elected by the Principal Board National Members from nominations submitted by the nations.

2.1. Membership

The RTB consists of up to three *Board National Members* from each participating NATO nation who must be chosen by their government from government, industry or academia.

Typically, Board Members are senior science and technology executives at the deputy under-secretary, deputy assistant secretary or deputy administrator level.

One *Principal Board National Member* who shall have voting authority will be designated by each nation.

After notification to the RTB Chairman and the Research & Technology Agency (RTA) Director, this voting right may be delegated to one of the other Board National Members for a Plenary Session and/or an Executive Session that the Principal Board National Member is unable to attend.

The RTB also has ex-officio members:

- Two RTB Co-Vice-Chairmen, one each appointed by the MC and the CNAD, in consultation with the Secretary General;
- Representation from the NATO Strategic Commanders (SCs), as well as the Directors or other appropriate representation from relevant NATO agencies and bodies. This representation varies according to the sessions of the RTB.

2.2. Responsibilities

2.2.1. RTB Responsibilities

The main responsibilities of the RTB are to:

- a. Maintain the long-term NATO R&T Strategy in collaboration with other NATO defence R&T bodies;
- b. Establish guidelines for future RTO Technical Programmes through a long-term RTO Rolling Plan based on the long-term NATO R&T Strategy, operational requirements of the NATO Strategic Commanders (SCs) and the needs of the nations. This document describes priorities and projected actions needed for formulation of the R&T programme;
- c. Establish appropriate Panel level RTO bodies, subject to CNAD and MC approval, and set policy for the establishment, management and disbandment of Technical Teams;
- d. Review and endorse the yearly RTO Technical Programme and Budget and submit recommendations to the CNAD and the MC for their respective approval of the technical and financial content;
- e. Provide an annual report to the NAC via the CNAD and MC;
- f. Nominate the RTA Director subject to CNAD and MC approval;
- g. Decide on the proposals of the RTA Director regarding the provision of:
 - (1) International Military Personnel (IMP);
 - (2) Qualified Voluntary National Contributions (VNCs) to the RTA staff for the conduct of specific tasks within a limited and clearly identified time frame;
- h. Establish guidelines for the RTO publication policy;
- i. Establish guidelines for the RTO cooperation with non-NATO nations;
- j. Select recipients of the Von Kármán Medal and RTO Scientific Achievement Award;
- k. Approve the Operating Procedures for the RTO.

2.2.2. RTB Members' Responsibilities

Further to his/her duty of contributing to the satisfaction of the responsibilities of the RTB, the Principal Board National Member has to ensure the administrative coordination of the RTO activities for his/her nation with the assistance of his/her National Coordinator.

The specific duties of the National Coordinators are defined by their Principal Board National Member.

However, as a minimum, the National Coordinators should be responsible for the activities listed at [paragraph 3.1](#) to ensure consistency across the RTO.

2.3. RTB Meetings

The RTB normally meets in three different types of sessions each year: Strategic Planning Sessions, Executive Sessions and Plenary Sessions. Unless precluded by unusual events, the sessions are

scheduled in March (Strategic Planning Session and Execution Session) and September (Plenary Session and Executive Session) - each year to allow timely preparation of reports to the CNAD and appropriate meetings of the Military Committee.

2.3.1. RTB Spring Meetings

RTB Spring Meetings consists of 2 events, both held at RTA HQ:

- a three-day Strategic Planning Session preceded with an Inter-Panel Meeting (IPM), and,
- a two-day Executive Session preceded with a National Coordinator Meeting (NCM).

2.3.1.1. Strategic Planning Session

The RTB Strategic Planning Session addresses all issues in the field of the mid-term (i.e. Year+2 through Year+5) planning of the RTO Technical Programme. Nations are represented by a maximum of two Board Members designated by the Principal Board National Member and generally not participants in the RTB Executive Session.

Specifically, the RTB Strategic Planning Session:

- a. Reviews the long-term NATO R&T Strategy – its ambitions, its scope and its linkages;
- b. Reviews relevancy and priorities of the overall RTO Technical Programme, taking into consideration the military long-term capability requirements, other customers' needs, emerging technologies and the results of the LTSS (Long-Term Scientific Studies);
- c. Ensures that the Panels'/NMSG's mid-term (i.e. Year+2 through Year+5) projected programme demonstrate consistency with the NATO R&T Strategy;
- d. Establishes guidelines for future RTO Technical Programmes through a long-term RTO Rolling Plan based on the NATO R&T Strategy, operational requirements of the NATO Strategic Commanders (SCs), the needs of the nations, and relevant lessons learned extracted from the results of the completed Technical Team activities of the RTO Panels and NMSG;
- e. Reviews the proposed RTO Technical Programme and Budget (called the “Blue Book”) for the following year from the technical point of view;
- f. Proposes the establishment of new Panel level RTO bodies or the modification of the Terms of Reference of the existing ones, if deemed necessary.

2.3.1.2. Inter Panel Meeting

Many technical activities require cooperation and coordination between the Panels/Group due to the interrelationship of the Panels/Group. Therefore, inter-Panel coordination is needed. The Inter-Panel Meeting (IPM) is designed to manage this coordination effort.

The Inter-Panel Meeting (IPM) is, in principle, an advisory body. The IPM also provides a means of communication between the Panels/Group and other R&T stakeholders to assist in the coordination of activities within the NATO R&T Community.

2.3.1.3. Executive Session

The RTB Executive Session addresses all issues requiring formal action by the Board (in particular any problem - e.g. implementation and resource problems - arising in the field of the RTO Technical Programme) in the intervals between the RTB Plenary Sessions. Nations are represented by the Principal Board National Members only (one supporting staff member per nation (preferably the National Coordinator) may attend the Session as an observer).

Specifically, the RTB Executive Session performs the following tasks:

- a. Each year, reviewing and endorsing the proposed RTO Technical Programme and Budget (called the “Blue Book” in March, and the “White Book” in September) for the following year from both the technical and financial points of view. The RTB Executive Session submits the “White Book” to the CNAD and the Military Committee for their respective approval;
- b. Ensuring that the proposed RTO Technical Programme and Budget for the following year demonstrates coherence with the NATO R&T Strategy and responsiveness to political guidance;
- c. Monitoring on-going programmes and approving adjustments as required;
- d. Preparing, with the support of the RTA, the annual report to the NAC via the CNAD and Military Committee;
- e. Reviewing and endorsing conclusions and recommendations of all completed Technical Team activities of the RTO Panels and NMSG which are to be briefed to higher level NATO bodies and nations;
- f. Reviewing the RTO structure and organisation, taking into consideration the recommendations of the RTB Strategic Planning Session, Panels and NMSG;
- g. Establishing and reviewing guidelines for the RTO cooperation with non-NATO nations;
- h. Approving modifications to the Operating Procedures for the RTO (RTO policy and procedure guidelines).

Decisions taken by the RTB Executive Session are reported at the RTB Plenary Session in the fall.

2.3.1.4. National Coordinators Meeting

The National Coordinators Meeting, which consists of the National Coordinator (NC) of each NATO nation, appropriate RTA executive staff and invited guests (e.g. Panel/NMSG Chairmen), is the main venue for RTA – National Coordinators interaction. It mainly serves the purpose of effective RTO meeting planning and information of the NCs on RTO business, supporting tools and associated procedures.

2.3.2. RTB Fall Meetings

The RTB Fall Meeting is a large-scale (about 150 participants), four-day event. This meeting is hosted in sequence by NATO nations. The four days normally comprise:

- half a day devoted to an Inter-Panel Meeting (IPM);
- half a day devoted to a National Coordinators Meeting (NCM);
- two days devoted to an RTB Plenary Session,
- one day devoted to an RTB Executive Session.

The organisation of the RTB Fall Meetings is the responsibility of both the hosting Nation and the RTA. The Host Nation’s National Coordinator is responsible for the local coordination of the meeting, but may designate a Local Coordinator if desired. No registration fees should be charged; commercial marketing presentations and displays are not allowed.

The Plenary Session receives at least: a report from the RTB Chairman on the decisions taken at the Spring Executive Session, which includes the approved recommendations from the Strategic Planning Session; Panel/Group presentations selected by the RTB Chairman, considering

recommendations for endorsement or approval; and, presentations from other NATO bodies (Commands, Staffs, Agencies, Armaments Groups, etc.). Usually a specific part is devoted to discussion and coordination of joint endeavours with non-NATO nations.

2.4. RTO Technical Programme and Budget

The proposed RTO Technical Programme and Budget (also called “the Blue Book”) is prepared by the RTA based on proposals from the RTO Panels/Group (proposed Technical Teams), and requests from Board Members relative to the RTO Consultant and Exchange Programme and support programmes for NATO nations with special needs. These programmes might include support for nations participating in NATO’s Euro-Atlantic Partnership (EAP) that is an enhanced Partnership for Peace Programme and for which funding is provided through a special PfP budget kept by the NATO International Military Staff.

At the Spring RTB Executive Session, the RTB reviews the proposed RTO Technical Programme and Budget for the following year from both the technical and financial points of view.

Upon endorsement by the RTB, the RTO Technical Programme and Budget (then called “the White Book”) is transmitted to the CNAD and Military Committee for review. The CNAD and Military Committee approve the technical content of the proposed RTO Technical Programme and Budget. It is then submitted to the Civil Budget Committee (CBC) and the Military Budget Committee (MBC) for review of the shared resource requirements.

2.5. The RTO Rolling Plan

One of many responsibilities of the RTB is to establish a long-term R&T Rolling Plan, based upon the NATO R&T Strategy, operational requirements of the NATO Strategic Commanders (SCs), the needs of the nations, and relevant lessons learned extracted from the results of the completed Technical Team activities of the RTO Panels and the NMSG. This Plan takes into account the emergence of new technologies as they are reported to the RTB.

The ‘rolling’ nature of the plan refers to the periodic revision of RTO objectives based on changing requirements and new developments in technology.

This document describes priorities and projected actions needed for the formulation of the RTO Technical Programme. It allows the RTB to provide the Panels, the NMSG and the RTA Director with direction consistent with the NATO R&T Strategy and policy guidance from the CNAD and the MC.

2.6. RTB Silence Procedure

To allow time for presentation and discussion of important and relevant technical issues, some of the more formal business of the RTB is handled on the basis of advance documentation and silence procedure.

Items for approval under silence procedure are sent to the Principal Board National Members by e-mail with copies to other Board Members and National Coordinators. Principal Board National Members are asked to provide the RTA with a note of receipt of the e-mailed document. If a nation requests a paper copy, the RTA will send them one.

Should silence be broken the matter will be tabled for consideration at the next Executive Session if subsequent discussions did not resolve the issue. In any case, the resulting decision for each item will be reflected in the decision sheet of the following Executive Session.



3. NATIONAL COORDINATORS

Each participating NATO nation has to appoint a National Coordinator to facilitate the nation's participation in the RTO and in particular assist the national RTB delegation.

3.1. Duties of National Coordinators

The specific duties of National Coordinators are defined by their Principal Board National Member. However, as a minimum, the National Coordinators should be responsible for the activities listed below to ensure consistency across the RTO:

- a. Coordination of RTO activities with their Board National Members, and in particular their Principal Board National Member;
- b. Coordination of RTO Panel/Group activities with their Panel/Group National Members, and in particular their Principal Panel/Group National Members;
- c. Coordination with the RTA Director and staff (see paragraph 3.2);
- d. Administrative arrangements, through their designated Local Coordinators, for RTO meetings hosted by their nation (suitable meeting facilities, provisions for necessary support, security measures, suitable hotel accommodations, local transportation, public relations activities, technical visits, official entertainment, etc.);
- e. Administrative arrangements for participation of their nationals in RTO activities (enrolment, appointment letters, security matters and clearances, funding of travel, etc.);
- f. Administration of their nation's participation in the Consultant and Exchange Programme and the Support Programme sponsored by the RTO;
- g. Coordination of matters concerning RTO publications with the National Distribution Centre(s) in their nation;
- h. Coordination of matters concerning Partner and Contact Country nationals' participation to RTO activities hosted by their nation;
- i. Coordination of RTO public relations matters (promoting RTO activities and advertising meetings, contacts with university departments liaison with scientific societies, liaison with national representatives to the Conference of National Armaments Directors (CNAD) and other NATO bodies), in close cooperation with their Board National Members, Panel/Group National Members and the RTA staff;
- j. Participation in the National Coordinators Meetings;
- k. Participation in the Inter-Panel Meetings (IPM), as required.

3.2. Relations with the RTA

Coordination with the RTA Director is necessary for policy matters of interest to their Board National Members, status of Panel/Group membership and for information on the nomination of Voluntary National Contributions to the RTA staff.

Coordination with the Head of the Operations and Coordination Division (OCD) is necessary regarding: the planning of future meetings (National Coordinators may indicate each year before the Spring RTB Executive Session the types and number of activities their nation can afford to organise in the year Y+1); arrangements (through Local Coordinators) for RTO meetings; administration of the RTO Consultant and Exchange Programme; and, administration of the RTO Support Programme.

Coordination with the RTA Budget and Finance Branch (BUDFIN) is necessary for issues of a financial nature.

Coordination with Panel Executives/MSCO is necessary for activities of each Panel/NMSG and in particular for details of the organisation of Panel/NMSG meetings and RTO Support Programme activities.



4. RTO PANELS AND NMSG (LEVEL 2)

Scientific and technical bodies, composed of experts appointed by the member nations and NATO staffs, constitute the Panel level RTO bodies for integrating R&T information exchange and cooperative R&T activities.

These Panel level RTO bodies are formed and governed by the RTB, as approved by the CNAD and Military Committee. They are responsible for planning, initiating and managing technical activities, and for ensuring the provision of national resources.

Each Panel/Group is chaired by a person elected from among the Panel/Group Members for a nominal two-year term.

The current Panel level RTO structure consists of the six Panels and one Group listed below:

– **Applied Vehicle Technology Panel (AVT)**

The mission of the AVT Panel is to improve the performance, affordability, and safety of vehicle, platform, propulsion and power systems through the advancement of appropriate technologies.

– **Human Factors and Medicine Panel (HFM)**

The mission of the HFM Panel is to provide the science and technology base for optimising health, human protection, well being and performance of the human in operational environments with consideration of affordability. This involves understanding and ensuring the physical, physiological, psychological and cognitive compatibility among military personnel, technological systems, missions, and environments.

– **Information Systems Technology Panel (IST)**

The mission of the IST Panel is, with respect to Information Systems Technology, to advance and exchange techniques and technologies to provide timely, affordable, dependable, secure and relevant information to war fighters, planners and strategists; as well as to advance and exchange techniques and enabling technologies for modelling, simulation, and training.

– **System Analysis and Studies Panel (SAS)**

The mission of the SAS Panel is to conduct studies and analyses of an operational and technological nature and to promote the exchange and development of methods and tools for Operational Analysis (OA) as applied to defence problems.

– **Systems Concepts and Integration Panel (SCI)**

The mission of the SCI Panel is to advance knowledge concerning advanced system concepts, integration, engineering techniques and technologies across the spectrum of platforms and operating environments to assure cost-effective mission area capabilities. Integrated defence systems, including air, land, sea, and space systems (manned and unmanned), and associated weapon and countermeasure integration are covered.

– Sensors and Electronics Technology Panel (SET)

The mission of the SET Panel is to advance technology in affordable electronics and active / passive sensors as they pertain to Reconnaissance, Surveillance and Target Acquisition (RSTA), Electronic Warfare (EW), communications and navigation, and to enhance sensor capabilities through multi-sensor integration / fusion.

– NATO Modelling and Simulation Group (NMSG)

The mission of the NATO Modelling and Simulation (M&S) Group (NMSG) is to promote cooperation among Alliance bodies, NATO member nations and Partner nations to maximise the effective utilisation of M&S. Primary mission areas include: M&S standardisation, education, and associated science and technology. The activities of the Group are governed by an Action Plan derived from the NATO M&S Master Plan. The Group will provide M&S expertise in support of the tasks and projects within the RTO and from other NATO bodies.

4.1. Panel/Group Membership

4.1.1. National Representatives

Each Panel/Group will consist of up to three *Panel/Group National Members* from each participating NATO nation who must be chosen by their government from government, industry or academia.

Panel/Group Members are appointed by the Principal Board Member of their respective participating NATO nation. Panel/Group Members are expected to have a high degree of technical affinity relevant to the fields of interest of the Panel/Group as indicated in the Panel/Group's Terms of Reference, with an awareness of current technology issues and military needs in their area of expertise. Panel/Group Members are also expected to have a substantial level of national authority and, in particular, should be able to arrange for the resourcing of national experts to the Technical Teams. They should be able to enter into commitments in Panel/Group meetings that they will be able to implement nationally.

One *Principal Panel/Group National Member* who shall have voting authority will be designated by each nation. After notification to the Panel/Group Chairman and the Executive, this voting right may be delegated to one of the other Panel/Group National Members for a meeting that the Principal Member is unable to attend.

4.1.2. Members at Large

World-class experts drawn from academia, industry or government from the nations may be nominated to join a Panel/Group as Members at Large to bring into the Panel/Group a specific level of expertise. The nomination and selection of such members should consider Panel/Group needs and not the national origin of the candidates. The actual selection of each Member at Large is subject to the approval of the Principal Board Member from the nation of the candidate Member at Large. Members at large have no voting rights.

When making the appointments of Panel/Group National Members and Members at Large, the nations must ensure that members will have travel funding available and sufficient time to perform all their duties.

4.1.3. Ex-Officio Members

Ex-officio members from other NATO bodies (operational and scientific) may also participate in the activities of the Panels/Group, but will not be counted as part of the standing membership from the nations and shall not be elected as Panel/Group Chairman or Vice-Chairman. Ex-officio members have no voting rights.

4.2. Responsibilities

4.2.1. Panel/Group Responsibilities

The specific cooperative technical work of the Panels/Group is carried out by Technical Teams made up of national experts.

Panels/Group will define priorities, establish and propose technical programmes, and guide and coordinate the work of its Technical Teams.

Panels/Group shall recommend a lead nation for each Technical Team and assign a Panel/Group Member to mentor each Technical Team to enhance its connectivity to the Panel/Group.

Panels/Group shall organise and manage their own informal, internal working structure to provide focus on specific topics, develop proposed technical activities, and review progress of their Technical Teams.

Technology Watch shall be performed by the Panels/Group as part of their normal business

Panels/Group shall provide written annual reports of their activities.

4.2.2. Panel/Group Members' Responsibilities

Further to his/her duty of contributing to the satisfaction of the responsibilities of the Panel/Group, the Principal Panel/Group National Member ensures the administrative coordination of Panel/Group activities for the nation, in close collaboration with his/her National Coordinator.

4.3. Panel/Group Business Meetings

Panels/Group normally meet twice a year (in spring and fall) during Panel (Group) Business Meetings (PBMs) which are medium-scale, two-to-three day events.

Consideration should be given to holding Panel/Group Business Meetings in conjunction (i.e., same week and same location) with a main Panel/Group event (e.g., a symposium) to conserve resources.



5. RTO TECHNICAL TEAMS (LEVEL 3)

The RTO Technical Teams are sponsored by the Panels/Group. They are temporary groups assigned by the Panels/Group to perform specific tasks that may range from studying scientific, technological or operational issues to organising activities such as symposia, lectures and experiments. A Technical Team may originate from an Exploratory Team.

The Technical Teams are made up of national experts. Technical Team members from NATO nations are appointed by the Principal Panel/Group (or Board) Members of their respective participating NATO nation. In each Technical Team, there must be a minimum of four nations represented and a lead nation should be identified. Technical Teams shall be limited in duration to a maximum of three years unless specifically extended by the RTB.

Technical Teams may encompass the following:

– RTO Symposium (RSY)

A RTO Symposium (RSY) technical team activity aims at promoting exchange of state-of-the-art knowledge among a wide audience on an important scientific or applied topic. The prime purpose of a RSY is to enhance the capability of the NATO R&T community to respond adequately to the military requirements of NATO. A RSY is a large-scale (100+ participants), three-to-four day event. Communications are primarily via invited Keynote Addresses and via oral and poster presentations of

submitted papers, screened and selected for presentation by the Programme Committee as generated from a Call for Papers. A RSY results in a RTO publication (Meeting Proceedings).

– **RTO Specialists' Meeting (RSM)**

A RTO Specialists' Meeting (RSM) technical team activity aims at promoting exchange of state-of-the-art knowledge among an audience of specialists with invited speakers on an important scientific or applied topic. The prime purpose of a RSM is to enhance the capability of the NATO R&T community to respond adequately to the military requirements of NATO. A RSM is a medium-scale (usually less than 100 participants), two to three-day event. Communications are primarily via invited Keynote Addresses and via oral presentations of authors invited by the Programme Committee. RSMs should include a roundtable discussion. A RSM results in a RTO publication (Meeting Proceedings).

– **RTO Workshop (RWS)**

A RTO Workshop (RWS) technical team activity aims at facilitating intensive information exchange and focussed discussion on a specific topic among a limited number of invited experts. The prime purpose of a RWS is to enhance the capability of the NATO R&T community to respond adequately to the military requirements of NATO. A RWS (generally not more than 30 participants) is a two to three-day event with no prescribed format. A RWS results in a RTO publication (Meeting Proceedings).

– **RTO Task Group (RTG)**

A RTO Task Group (RTG) technical team activity aims at allowing researchers in different nations to work together in order to solve a particular research and technology problem. RTGs are sponsored by the Panel/Group to meet the needs of NATO. RTGs are chartered for a maximum of three years. The findings will be documented in a RTO publication (Technical Report or Technical Memoranda).

– **RTO Cooperative Demonstration of Technology (CDT)**

The overall objective of an RTO CDT is to demonstrate, either the ability of emerging technologies, or the applicability of known civilian technologies in a military environment. By demonstrating new technologies in a military environment they can be assessed for their future applicability to meet war fighter needs. Additionally, CDTs are a tool which can identify technical and programming uncertainties related to a new technology, as well as potential solutions to address those uncertainties.

– **Long-Term Scientific Study (LTSS)**

A Long-Term Scientific Study (LTSS) technical team activity is sponsored by the SAS Panel and provides recommendations to NATO and National Authorities. It assesses the impact on military operations that might be expected to come from developments in science and technology over both the medium and long term (typically 10-20 years). This would include how emerging technologies, systems and methods may affect tactical concepts and doctrines. Reciprocally, recommendations could be provided on how the evolution of the military doctrine should influence the Research and Technology priorities.

Among the activities conducted during an LTSS, a brainstorming meeting, called Multinational Exercise (MNE), is organised; its description is given hereafter. A Long-Term Scientific Study results in a RTO publication (Technical Report or Technical Memorandum) and in presentations to various NATO or National Authorities.

– **Multinational Exercise (MNE)**

A Multinational Exercise (MNE) provides a Long-Term Scientific Study (LTSS) with the real content of its final products (Reports and presentations). It is obtained by means of a very specific – and somehow artificial - brainstorming, where all details have been optimised during years, starting from the initial intuition of Dr. Von Kármán.

Multinational Exercises normally have a duration of two weeks in suitable NATO or national accommodation. The number of participants depends on the number of scientific/operational fields involved, of the structure of the Working Paper, and on the number/type of participating nations.

– **Military Application Study (MAS)**

A Military Application Study (MAS) technical team is a short-term rapid reaction study, supported by the RTA SAS Panel Executive, which assesses the application of technology to operational procedures to solve operational and equipment deficiencies. Typically the team will take a system approach to a broad problem area rather than focus on a narrow technical deficiency. These studies are scheduled to complete in about one year and will draw on a wide range of operational, analytical, technical and industrial expertise. A MAS results in a RTO publication (Technical Report or Technical Memorandum), in a Detailed Presentation to the SAS Panel and in a Short Presentation to the RTB for approval of further presentation.

– **RTO Lecture Series (RLS)**

A RTO Lecture Series (RLS) technical team activity aims at disseminating state-of-the-art scientific knowledge among junior and mid-level specialists, scientists and engineers to meet the needs of NATO. A RLS is a two-day educational event that is normally organised at three different locations. RLSs can include a roundtable discussion. RLSs are combined with a RTO publication (Educational Notes), which will be made available before the first RLS session.

– **RTO Technical Course (RTC)**

A RTO Technical Course (RTC) is an educational technical team activity aimed at transferring practical knowledge and recent field developments through on-site instructor training to meet the needs of NATO. The course content can be drawn from new material, refresher material, Technical Team findings/results, and other topics from existing pre-packaged instruction material. The material is tailored to a specific/specialised audience and is generally more operational in nature than for a RTO Lecture Series (RLS). A RTC can be offered up to a maximum of four times lasting from one to three days. In contrast with RLSs, an RTO publication is not always provided for a RTC.

– **RTO AGARDograph**

An AGARDograph (Advanced Guidance for Alliance Research and Development-AGARD) pertains to a single, clearly defined technical subject (e.g. Flight Test Measurement Techniques for Laminar Flow, Electronic Warfare Test and Evaluation, etc.) and comprises material generally agreed to be of lasting interest and value to the technical and warfighter communities represented throughout NATO. The AG material may be the work of a single author or be the coordinated and edited contributions of several authors. An AG team is chartered for a maximum of three years resulting in a deliverable AGARDograph.

5.1. Venues

Each year the RTA defines a calendar of RTO meetings for the coming year. References to the meetings of the following teams: RTO Task Groups, Long Term Scientific Studies, Military Application Studies, and AGARDographs are not included in the calendar of RTO meetings.

The RTA coordinates with the nations and the Panels/Group for selection of locations and dates for RTO meetings. As meetings require a great deal of national resources, the desires of the nations as to what they want to sponsor must be a major consideration in developing the RTO meeting schedule. But it is also important to ensure the nations receive a reasonably equitable share (based of course on their requests but also on their economical strength) of the various types of meetings.

The cost of the meetings is shared between the Host Nation, the RTA and the participants following the principles stated in [paragraph 5.2](#).

Symposia and Specialists' Meetings may be co-organised with government, academia and/or industry.

If RTO is the main contributor to the organisation of the meeting, the RTO rules shall apply. Otherwise, as a minimum, the RTO co-sponsorship shall be conditioned to the agreement that RTO guests from all NATO and Partner nations have free access to the meeting.

5.2. Cost Responsibilities

The Host Nation is the major contributor to the costs associated with the support of the technical activity. The RTA contributes mainly through designated staff members.

Participants are responsible for their own transportation to and from the location to include airfare and tax service, hotel accommodations and fees, meals, and coffee breaks. No registration fees, no participation in the renting of the meeting rooms, and no cost for technical visits should be charged to participants. To avoid any misunderstanding, tickets may be issued for the management of meals and coffee breaks organised by the Host Nation.

Moreover, it is customary that reasonably priced hotels and meals are offered to meeting participants. Each year, the Office of the RTA Director will issue a letter indicating to the National Coordinators the maximum rates per night per person for single rooms and breakfast that should be offered to participants. These rates should be 60% of the current NATO per diem.



6. RTO FUNDING SUPPORT PROGRAMS

Funding for the participation of Technical Team members in RTO activities is the responsibility of the nations. However, there are programs available that may allow an individual or Technical Teams to receive a limited amount of NATO funding: the RTO Consultant and Exchange Programme and the RTO Support Programme.

6.1. RTO Consultant & Exchange Program

In carrying out the RTO Technical Programme, Board Members and RTO Panels/Group may request the use of individual *consultants*. Panel/Group Technical Teams can also make use of individual consultants to support specific projects (e.g.: RTO Technical Courses, Lecture Series).

6.1.1. Procedures

Before contracting for the services of a consultant, it is necessary to make sure that he/she is available and interested. If the potential consultant accepts the mission, he/she will need to obtain an authorization from his/her National Authorities through the office of the National Coordinator for RTO. For four nations and entities (DEU, GBR, USA and NASA), in accordance with their requirements for clearance of consultants, a letter will be forwarded to the National Coordinator to request the authorization to use the service of the potential consultant.

To start the process then, the requesting authority (Board Member, Panel/Group Chairman, Panel/Group Member mentor of an activity, or National Coordinator) has to forward a completed *Consultant Request Form* to the RTA. RTA in due time will issue contracts.

6.2. RTO Support Program

The RTO Support Programme benefits the following Supported Nations: Bulgaria, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Romania, Slovakia, Slovenia and Turkey.

It includes:

- *Support Projects* (cooperative activities); and,
- Financial support (travel expenses and per-diem) for the attendance of Panel/Group Members and experts from the Supported Nations at Panel/Group Business Meetings and Technical Team activities.

As far as the Support Projects are concerned, the financial support provides travel expenses and per-diem for scientists, technicians or engineers who need to travel in order to accomplish the objectives of the Support Project. Financial support for purchasing hardware or software is also possible; it is limited to 25% of the project cost.

The RTA Operations and Coordination Division (OCD) is responsible for the coordination of the overall RTO Support Programme. The RTA OCD will organise, when desirable, informal meetings with Board Members and National Coordinators of the Supported Nations during the week of the RTB Executive Sessions to discuss various Support Projects if so required. The RTA Panel/Group Executives are responsible for the follow-up of the Support Projects sponsored by their Panels/Group.

The Principal Board National Members of the Supported Nations is responsible for:

- Controlling the Support Programme budget of his/her nation;
- Seeing that tasks are properly presented, conducted, and completed in the best interest of the Supported Nation.

6.2.1. Procedures for Support Projects

Any national of a Supported Nation can apply for an RTO Support Project and must first find and agree with another NATO nation (Supporting Nation) on a project thought to contribute to advancing the technological capability of the Supported Nation. It is possible to collaborate with more than one national from a Supporting Nation, or with more than one Supporting Nation. The Panel/Group as well as the RTA may be asked for support in finding Supporting Nations.

The project designer completes a Proposal Form with the national(s) of the Supporting Nation(s) and sends it to his Principal Panel/Group National Member, with a copy to the Panel/Group Executive. A Project Director must be designated.

At the Fall Panel/Group Business Meetings, the Principal Panel/Group National Members from the Supported Nations propose the new Support Projects, highlighting the proposed participating establishments from both Supported and Supporting Nations.

The Panel/Group verifies the technical value of the proposed Support Projects and the potential Supporting Nation(s) confirm their participation. The Panel/Group endorses the selected Support Projects.

The RTA Deputy Director, on behalf of the RTA Director and upon the recommendation of the Panel/Group, asks the Principal Board National Member(s) of the potential Supporting Nation(s) for official agreement on each Support Project and the participation of the establishments identified by the Panel/Group. He informs the Principal Board National Member, the Principal Panel/Group National Member concerned and the National Coordinator of the Supported Nation when agreement has been reached with the Supporting Nation(s) on the Support Project.

Then contracts will be issued by the RTA in due time.



7. RTO PUBLICATIONS AND THEIR DISTRIBUTION

It is important that the achieved results of the research resulting from the scientific and technical activities of the RTO reach the NATO nations. RTO's publication efforts are therefore aimed to give their publications the widest possible dissemination within proper security and commercial constraints in a timely, easy to use way, and in the most economical manner.

To facilitate this, the RTA has developed on-line tools to ease the access to this information through its website (www.rto.nato.int). Such an approach can only be truly effective, however, when combined with efforts at the national level. It is therefore necessary to create an internal network that allows for an additional distribution of the RTO information in a more targeted manner.

For decades, this role has been undertaken by the National Distribution Centres (NDC) who have proved to be very effective in the dissemination within their countries of the scientific publications. Additionally, the NDCs have played a role in the promotion of RTO activities, as such becoming a focal point for all RTO information distribution. While the creation of an NDC is not a requirement, it is highly recommended that each nation participating in the activities of the RTO establishes such a Centre to assist the National Coordinator who has the overall responsibility for the handling of RTO publications at national level.

It is important to note that an NDC does not have to be a dedicated organisation though many nations delegate this responsibility to large libraries, even national libraries, or more typically information centres within the defence domain (e.g. the Defence Technical Information Centre [DTIC] in the US, the FIZBW in Germany). A full listing of current NDC can be found on the RTO Website.

