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# Implementing NATO Recognition of Airworthiness Authorities

Briefing to  
**EDA's MILITARY AIRWORTHINESS  
CONFERENCE**  
Madrid, 26-27 Sep 2018



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## Overview



- **NATO Airworthiness Policy (NAWP)**
- **NAWP Implementation Roadmap**
  - **NATO Recognition Process (NRP)**
  - **Pilot Project**
  - **Action Plan**
- **Optimization of Recognition Processes**



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# NATO Airworthiness Policy (NAWP)



## Main principles:

### ■ Applicability (para 7):

- all aeronautical products, parts and appliances
- owned, leased, rented or chartered

- by NATO



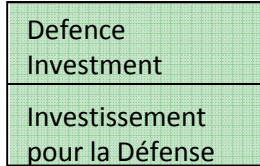
- by Member, non-Member, or Partner Nations and operated on behalf of NATO



👉 **Out of the scope:** all aspects of flight operations, such as operational procedures, flight standards, operator training, aircrew qualification and licensing, and aerospace control operations (para 8)

### ■ Aircraft certification is a sovereign responsibility (para 3)

👉 **The NATO Airworthiness Executive (NAE) required by the NAWP is not an Airworthiness Authority**



## NATO Airworthiness Policy (NAWP)

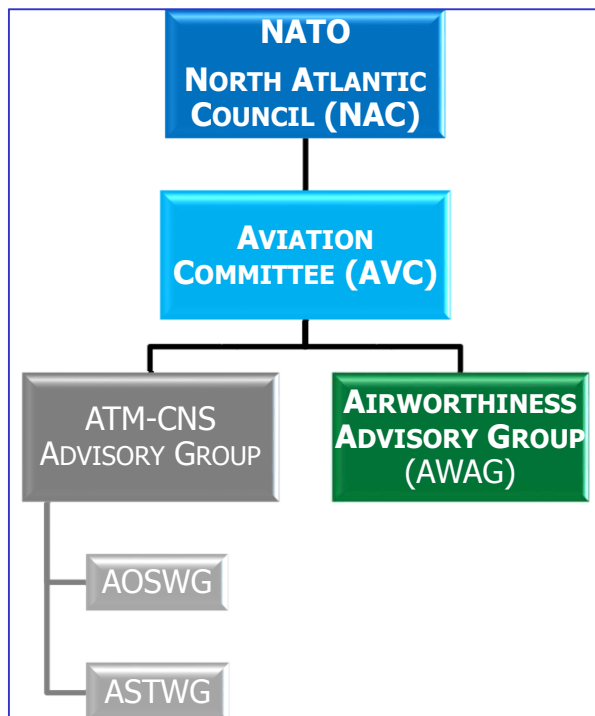


### Main principles:

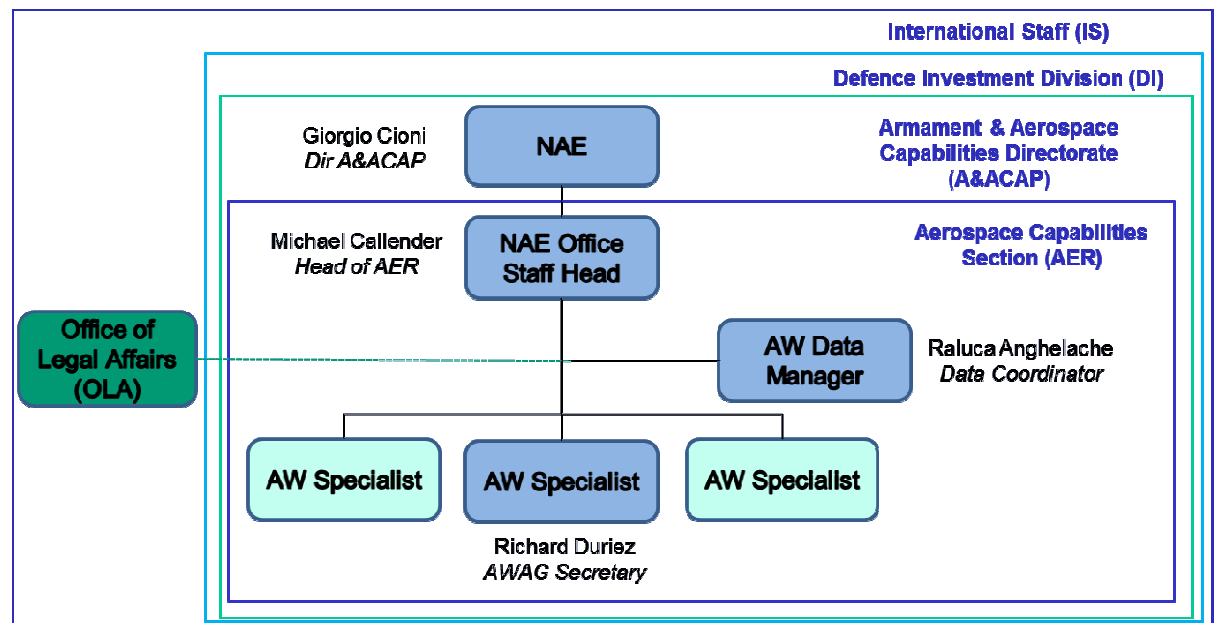
- All aeronautical products, parts and appliances provided on behalf of NATO shall be (para 9):
  - **certified as airworthy** by a [NATO Recognized Airworthiness Authority](#);
  - properly **controlled** in accordance with **approved continued airworthiness provisions**;
  - **operated** and **maintained** in accordance with **approved continuing airworthiness provisions**.
    - ↪ Ensure airworthiness related materiel **risk process** exists (para 12)
- All work associated with the airworthiness process shall be performed by **authorized individuals** employing **approved processes** within **organizations accredited/approved** by a [NATO Recognized Airworthiness Authority](#) (para 10)

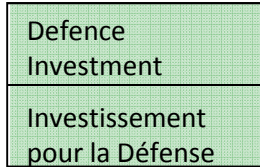
- NAWP: approved by the NAC on 18 JUL 2013
  - ↳ The NAE shall provide an Implementation Plan (IP) to be approved by the NAC before the policy takes effect
- NAWP IP: approved by the NAC on 01 JUL 2016

NAWP IP ⇒ **AVC, AWAG**



NAWP IP ⇒ **NAE Staff**





## NAWP Implementation Roadmap



NAWP IP ⇒ develop and implement a NATO Recognition Process (**NRP**)

- **Draft NRP** approved by AVC on 12 APR 2017
  - experimental phase: validation against a Pilot Project
- **NRP** approved by AVC on 20 DEC 2017
  - Purpose: launch NRP with MAAs
- **Refined NRP** pending AWAG approval  
then to be submitted to AVC approval for late 2018
  - Together with **NRP Manual** comprising:
    - Guidance for the NRP
    - Templates
      - NATO Assessment Team (NAT) nomination package + Guidance
      - NATO Recognition Plan (**RP**)
      - NATO Assessment Report (**NAR**)
      - NATO Recognition Certificate (**NRC**)

# NATO Recognition Process (**NRP**)

**NATO Assessment Team (**NAT**):**  
SMEs nominated by NATO MAAs ( $\geq 2$ )  
+ 1 NAE Staff AW Spec

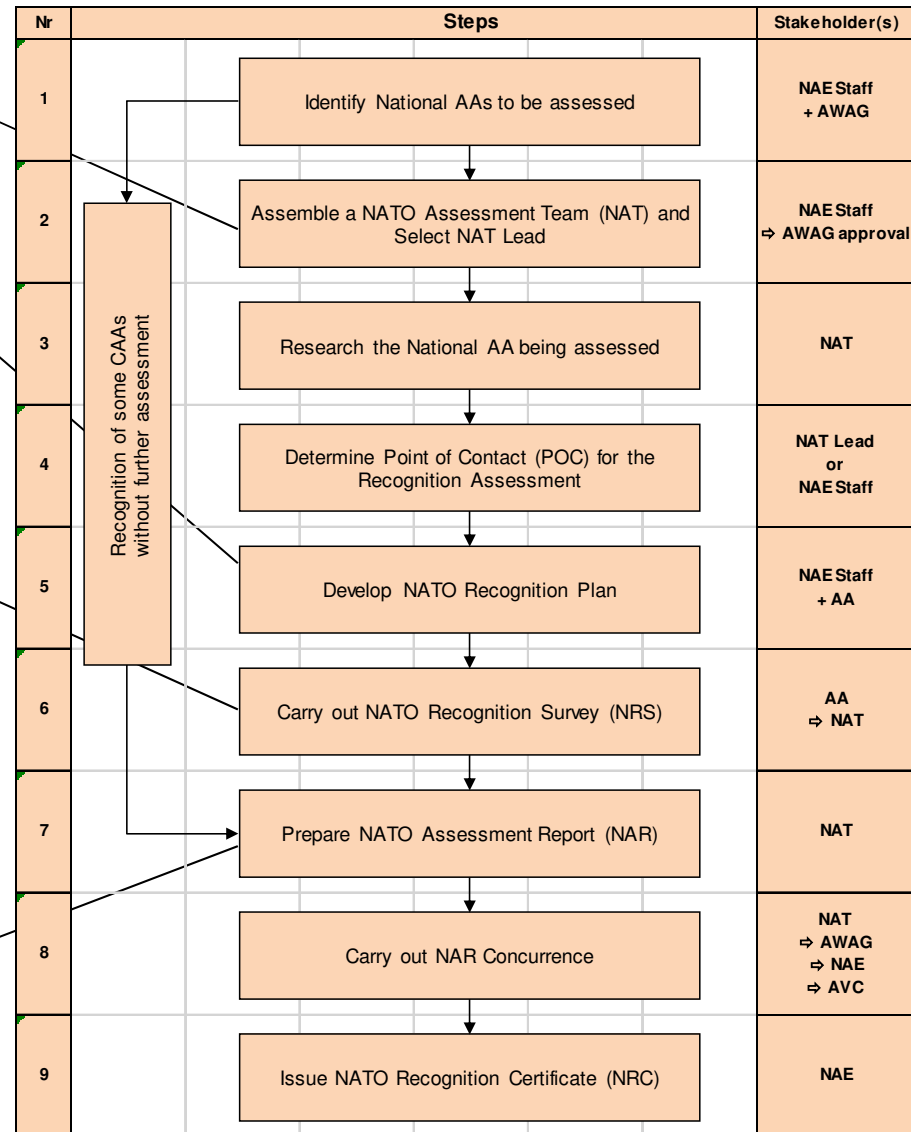
**NATO Recognition Plan (**RP**)**  
➤ similar to Recognition Agreement  
(RA) in EMAD R

**NATO Recognition Survey (**NRS**)**

1. Airworthiness System Overview
2. MARQ (from EMAD R)
3. Additional information  
(e.g. extent recognitions  
by NMAAs)

**NATO Assessment Report (**NAR**)**

- Summarize the assessment iaw the  
MARQ structure
- Identify MARQ Safety Goals not met  
by the Airworthiness System
- Recommendation for
  - NATO Recognition or
  - Conditional NATO Recognition





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## Pilot Project



- Draft NRP: successfully tested against the assessment of MAA-NLD  in 2017
- AWAG Recommendation: [NATO Recognition](#)
- AVC approval: 10 JAN 2018
- The NAE delivered the [NRC](#) to the Director of MAA-NLD during the AVC HoD meeting in NL on 17 MAY 2018
- Feedback from the Director of MAA-NLD:
  - positive experience from the NRP for both parties
  - professionalism of the NAT
  - encouraged the other MAAs to volunteer for the NRP and perhaps provide NAT nominees







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# NAWP Implementation Roadmap



NAWP IP ⇒ develop and maintain an Action Plan (**AP**)

Deliverable	Achievement	Status
A. Deliver an <b>AP</b> on an annual basis, to detail the different steps, timelines and milestones to achieve the objectives of the NAWP	<ul style="list-style-type: none"> <li>Initial AP: 12 APR 2017</li> <li>2018 update: 09 MAY 2018</li> </ul>	✓
B. Approval of AWAG Chairman and Vice-Chairman nominees	<ul style="list-style-type: none"> <li>Approval: 11 NOV 2016</li> </ul>	✓
C. Request AWAG members to nominate SMEs as potential members of NATO Assessment Teams ( <b>NATs</b> )	<ul style="list-style-type: none"> <li>2017: 9 Nominees</li> <li>2018: 17 Nominees</li> </ul>	✓
D. Complete the NRP with the supporting templates for: <ul style="list-style-type: none"> <li>- NAT member selection,</li> <li>- NATO Recognition Plan (<b>RP</b>),</li> <li>- NATO Recognition Survey (<b>NRS</b>),</li> <li>- NATO Assessment Report (<b>NAR</b>) and</li> <li>- NATO Recognition Certificate (<b>NRC</b>)</li> </ul> ⇒ <b>Appendices of the NRP Manual</b>	<ul style="list-style-type: none"> <li>REV 3 of draft NRP Manual published on 31 AUG 2018, pending AWAG approval</li> </ul>	✓










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# NAWP Implementation Roadmap



NAWP IP ⇒ develop and maintain an Action Plan (**AP**)

Deliverable	Achievement	Status
E. Launch Recognition of MAAs responsible for NATO Affiliated assets	<ul style="list-style-type: none"> <li>Launched with IT DAAA in FEB 2018  </li> </ul>	✓
F. Launch Recognition of MAAs responsible for NATO Allies assets	<ul style="list-style-type: none"> <li>Launched experimentally with MAA-NLD in JAN 2017  </li> <li>Launched with FR DSAÉ and DGA in DEC 2017   </li> </ul>	✓
G. Launch Recognition of Partner (and non-Partner) Nations	<ul style="list-style-type: none"> <li>Not started yet</li> </ul>	
H. Launch Recognition of other States	<ul style="list-style-type: none"> <li>Not started yet</li> </ul>	
I. Recognition of AAs (issuance of a NRC to an AA as soon as NRP is completed)	<ul style="list-style-type: none"> <li>First NRC (NL) issued on 10 JAN 2018</li> </ul>	1













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# NAWP Implementation Roadmap



## Status of the 2018 update of the Action Plan:

	NRP Steps	1	2	3	4	5	6	7	8	9	
AP Priorities	AA	Identify National AAs	Assemble a NAT	Research the AA	Determine POC for the RP	Develop RP	Carry out the NRS	Prepare NAR	Carry out NAR concurrence	Issue NRC	Comments
P1	 DAAA	✓	✓	✓	✓	✓	✓	✓	In progress		<ul style="list-style-type: none"> <li>MAA responsible for AGS</li> <li>NAR submitted for AWAG approval               <ul style="list-style-type: none"> <li>NAT Recommendation: <a href="#">NATO Recognition</a></li> <li>To be approved by AVC before late 2018</li> </ul> </li> </ul> 
P2	 NAPMA + HQ NAEW&CF	✓	In progress		✓						<ul style="list-style-type: none"> <li>Entities responsible for NE-3A</li> <li>Step 6 NRS starting 2018/Q4 or 2019/Q1 (TBC)</li> </ul> 
P3	 HUN MoD SAD	✓	In progress		✓						<ul style="list-style-type: none"> <li>MAA responsible for C-17</li> <li>Step 6 NRS starting 2018/Q4 or 2019/Q1</li> </ul> 
P4	 DSAÉ + DGA	✓	✓	✓	✓	✓	✓	✓	In progress		<ul style="list-style-type: none"> <li>NAR submitted for AWAG approval               <ul style="list-style-type: none"> <li>NAT Recommendation: <a href="#">NATO Recognition</a></li> <li>To be approved by AVC before late 2018</li> </ul> </li> </ul>
P5	 CA MAA	✓	✓	✓	✓	✓	In progress				<ul style="list-style-type: none"> <li>Step 6 NRS: 2018/Q2-Q4</li> </ul>
P6	 NDMA/ASD	✓	✓	✓	✓	✓	In progress				<ul style="list-style-type: none"> <li>Step 6 NRS: 2018/Q2-Q4</li> </ul>
P7	 DGAM	✓	In progress		✓						<ul style="list-style-type: none"> <li>Step 6 NRS starting 2018/Q4 or 2019/Q1</li> </ul>

👉 Identify potential MAAs for the 2019 update of the Action Plan



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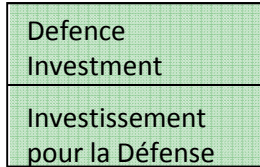
## Optimization of Recognition Processes



Some types of recognition:

US NAC	EUMAAC WS	NATO
<b>Tier 1</b> Full compliance with the provisions of DOD Directive 5030.61, DoD Airworthiness Policy, regarding operations on foreign aircraft	<b>Step 1</b> General Recognition between NMAAs	<b>NRP</b> Full compliance with the NAWP
<b>Tier 2</b> Product-specific and facility/organization-specific maintenance and overhaul (M&O) recognition	<b>Step 2</b> Project related recognition (for the purpose of reusing artefacts)	
<b>Tier 3</b> Product-specific design approval recognition		

**There is room for optimization of the various  
recognition activities with MAAs at first level.  
It is essential to cope with scarce expert resources.**



## Optimization of Recognition Processes



Some proposals:

- **Proposal 1**: instead of several on-site visits, the assessed MAA could invite (where applicable) US MAAs, EUMAAC MAAs and NATO to a **joint on-site visit common for Tier 1/Step 1/NRP**
  - Additional days or separate visit for Tier 2 & 3/Step 2
- **Proposal 2**: **standardized recognition report in English**
  - Part 1: applicable to Tier 1/Step 1/NRP
    - ☞ NATO Assessment Report (NAR) template is an option
  - Part 2: applicable to Tier 2 & 3/Step 2
- **Proposal 3**: in case of joint on-site visit, **SMEs participating both as National SMEs and as NAT Members**



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Q & A



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