As a Member of the European Union, SES Regulations are binding and directly applicable to Bulgaria.


For Bulgaria,
Name, title

Chapter 7 - Annual Report on the Application of FUA

7.1 National organisation and responsibilities at the 3 levels of FUA

7.1.1 At Strategic Airspace Management Level 1

<table>
<thead>
<tr>
<th>FUA Level 1 Implemented:</th>
<th>Y</th>
<th>High Level Airspace Policy Body:</th>
<th>Y</th>
<th>Airspace Management Board (AMB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible Use of Airspace (FUA) concept has been fully implemented in Bulgaria. The amended Order No.19 has been aligned with EC regulation 2150/2005. FUA levels 1/2/3 have been achieved. The FUA strategic Level is implemented by an Airspace Management Board.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measures established to ensure consistency between:</td>
<td></td>
<td>- ASM and ATFM:</td>
<td>Y</td>
<td>Ensured via flight planning, CFMU terminal, Airspace Use Plan (AUP) and Updated Airspace Use Plan (UUP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ASM and ATS:</td>
<td>Y</td>
<td>ATS units act accordingly to ASM/ATFM co-ordination</td>
</tr>
<tr>
<td>The State has notified the Commission the identified persons/organisations responsible for all the tasks listed in Art. 4.1 of the FUA Regulation:</td>
<td>Y</td>
<td>Date and Reference of the Communication:</td>
<td>2007 Annual report on the application of FUA in Bulgaria</td>
<td></td>
</tr>
</tbody>
</table>

The State has ensured that the following tasks related to ASM Level 1 are performed by the responsible body (referred to above):

- Regularly review and address users' requirements Y
- Approve activities which require airspace reservation or restriction Y
- Define temporary airspace structures and procedures to offer multiple airspace reservation and route options Y

AMB defines the limits of TSAs and CDRs.
- Establish criteria and procedures providing for the creation and use of adjustable lateral and vertical limits of the airspace

It is planned by 2010 to replace TSAs with TRAs and adopt the modular TRA activation in accordance with military requirements.

- Assess the national airspace structures and route network with the aim of planning for flexible airspace structures and procedures

Once per year, ATSA conducts an assessment of national Airspace structure and route network. The proposals are sent to the military authorities for approval in accordance with the provisions of regulation No.19. When the proposed modifications are agreed, the instruction No.24 is amended.

- Define specific conditions under which the responsibility for separation between civil and military flights rests on the ATS units or on the controlling military units

Planned for 2010 when TSAs will be transformed in TRAs, the modular TRA will be implemented and relevant instruction will be updated.

- Establish mechanisms to assess performance of FUA operations

ATSA annually assess the CDR utilisation rate and TSA activation rate.

- Based on the outcome of this assessment, periodically review and revise as necessary, airspace procedures

Adaptation of relevant regulations/instructions

- Establish mechanisms to archive data on the requests, allocation and actual use of airspace structures for further analysis and planning activities

The automated system (CFIS) is used to archive data concerning the airspace allocation and requests.

The State has abandoned application of permanent airspace restrictions: Prohibited and Danger areas are considered as permanent airspace restrictions. There are no plans to abandon the application of prohibited and danger areas.

Changes since previous FUA Report: No Change

7.1.2 At Pre-tactical Airspace Management Level 2

|-------------|--------------|---|---------------------------------|----|--------------------------|---|

The pre-tactical level has been implemented by an Airspace Management Cell.

The airspace is allocated in accordance with the conditions and procedures defined in Article 4.1:

- The established AMC (referred to above) is provided with adequate supporting systems to perform and communicate the pre-tactical airspace management tasks:

  - CFMU terminal and CFIS module

Changes since previous FUA Report: No Change

7.1.3 At Tactical Airspace Management Level 3

<table>
<thead>
<tr>
<th>FUA Level 3</th>
<th>Implemented:</th>
<th>Y</th>
</tr>
</thead>
</table>

The tactical level is implemented by the civil and military ATS authorities.

The State has ensured that the relevant ATS Units and controlling military units:

- establish coordination procedures and communication facilities to allow the real-time activation, deactivation or reallocation of airspace allocated at pre-tactical level:

  The co-ordination procedures are contained in the instruction No.25. The real time TSA activation and de-activation has been achieved while the real-time TSA re-allocation is planned for 2010.

- establish coordination procedures to ensure the timely and effective exchange of any modification of planned airspace reservations and the adequate notification to all affected users:

  Instruction No.25 defines the co-ordination procedure for the modifications of planned airspace reservations. The
notification is done by phone.

- establish coordination procedures and supporting systems to ensure safety when managing interactions between civil and military flights: Y

Military ATS unit integrated in CNATCC ensure the safety of Air Traffic management between civil and military flights by using the same ATS/COM system as civilian ATCOs.

- establish coordination procedures to permit direct communication of relevant information to resolve specific traffic situations where civil and military controllers are providing services in the same airspace: Y

Specifically:

- Position of aircraft Y Direct voice communication is ensured between CNATCC and Military Airbases.
  Direct voice Communication between Military and Civil ATS units is not established.
  Common National Air Traffic Control Centre (CNATCC) provides the capability for voice and data exchange between Military and Civil ATS units, but the co-ordination procedures are yet not established.
  The automatic data exchange of aircraft position is done by feeding the Surveillance and FP data to the military ATS units.

- Flight intention of aircraft Y Military ATS units within CNATCC are equipped with full view of aircraft planned trajectory as well as with the advanced features of crossing intention and crossing request

All airspace reservations are released as soon as activities having caused their establishment cease: Y

The Instruction No.25 defines the modality that the military airbases notifies the airspace co-ordination centre concerning the release of airspace reservations and this centre notify all airspace users

Changes since previous FUA Report: CFIS module concerning the pre-tactical airspace tasks and archiving of airspace request and allocations has been operationally deployed.

7.2 Cooperation between Member States at the 3 levels of FUA

7.2.1 At Strategic Airspace Management Level 1

The State coordinates its airspace management policy with the respective States to jointly address the use of cross-border airspace structures: N No OPS needs exist

Type(s) of cross-border airspace use is applied in the State:

<table>
<thead>
<tr>
<th>Type(s) of cross-border airspace use</th>
<th>N</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-border area</td>
<td>N</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Shared reserved airspace (TRA and TSA)</td>
<td>N</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Conditional routes</td>
<td>N</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

The State has established with neighbouring States one common set of standards for separations between civil and military flights for cross-border activities: N Not Planned

Changes since previous FUA Report: No Change

7.2.2 At Pre-tactical Airspace Management Level 2

The State has established a joint or multinational AMC with neighbouring States: N No OPS needs exist

Changes since previous FUA Report: No Change
7.2.3 At Tactical Airspace Management Level 3

The State has established a common set of procedures to manage specific traffic situations and/or to enhance the real-time airspace management between civil and military units involved in or concerned with cross-border activities:

| Changes since previous FUA Report: | No Change |

7.3 Safety assessment

The State has established a safety management process to conduct all safety assessment activities before the introduction of any changes to the operations of the FUA:

| | Defined in the Safety manual and Safety Procedures in case of major changes of ATM system (including FUA). Due to the fact that no major changes of FUA application have been initiated till now, the Safety Assessment concerning FUA application in Bulgaria has not been conducted. |

7.4 Performance assessment

<table>
<thead>
<tr>
<th>Evaluation of the functioning of agreements, procedures and supporting systems established at the 3 levels</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>N</td>
</tr>
<tr>
<td>Airspace capacity</td>
<td>N</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Y CDR/TSA utilisation rate</td>
</tr>
<tr>
<td>Flexibility of aircraft operations of all users</td>
<td>N</td>
</tr>
</tbody>
</table>

7.5 Compliance monitoring

The State is fully compliant with the FUA Regulation (EC Regulation 2150/2005):

| N |

In order to achieve a full compliance with the FUA regulation, there is a need for a revision of Regulation No.19 planned for 2009.

The major areas of improvements are:

- The Strategic airspace management is not fully covered by the existing Regulation No.19
- The provisions concerning the Safety assessment, hazard identification and risk/assessment mitigation before an introduction of change in FUA structure are not yet established in the Regulation No.19
- The provisions concerning the direct communication between Civil and Military ATS units to be established
- FUA compliance monitoring mechanism to be established.

The State has established the following FUA compliance monitoring processes:

<table>
<thead>
<tr>
<th>Inspections</th>
<th>Periodicity</th>
<th>Outcome sent to EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveys</td>
<td>Periodicity</td>
<td>Outcome sent to EC</td>
</tr>
<tr>
<td>Safety Audits</td>
<td>Periodicity</td>
<td>Outcome sent to EC</td>
</tr>
</tbody>
</table>

Additional comments: To be part of on-going safety audit. The outcome of FUA compliance monitoring to be communicated to EC at the later stage.
### 7.6 Problems encountered and need for changes

<table>
<thead>
<tr>
<th>Problems encountered in the implementation of the FUA regulation and need for changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The DCMAC report related to the FUA application in Bulgaria has been delivered. This report addresses the required modifications in the national legislation in order to achieve a full compliance with EC regulations. The recommendations of this report are required to be reflected in the modifications of Regulation No.19 and Instructions No 24/25</td>
</tr>
</tbody>
</table>