



ICAO

# Doc 9643

## Manual on Simultaneous Operations on Parallel or Near-Parallel Instrument Runways (SOIR)

Second Edition, 2020



Approved by and published under the authority of the Secretary General

INTERNATIONAL CIVIL AVIATION ORGANIZATION

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## AMENDMENTS

Amendments are announced in the supplements to the *Products and Services Catalogue*; the Catalogue and its supplements are available on the ICAO website at [www.icao.int](http://www.icao.int). The space below is provided to keep a record of such amendments.

## RECORD OF AMENDMENTS AND CORRIGENDA

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## FOREWORD

In the 1980s, ICAO invited States and selected international organizations to provide information on current practices and related questions with respect to minimum distances between parallel runways for simultaneous use under instrument flight rules (IFR). The result of this work was the publication of provisions for parallel operations in 1995. The first edition of the Manual on Simultaneous Operations on Parallel or Near-Parallel Instrument Runways (SOIR), which provided guidance material for the implementation of SOIR including minimum distances between parallel instrument runway operations, was published in 2004. While still in use today, those guidelines addressed the operations and technologies of the period to best support the growth air traffic was experiencing.

Today, enabling safe capacity growth remains key, but simultaneously, environmental stewardship has to be managed. Fortunately, new concepts, such as performance-based navigation and new technologies to support air traffic services (ATS) surveillance can be applied to SOIR. These modern capabilities provide more flexible approach procedure design options for SOIR, making SOIR applicable to more runway pairs. Improved navigation, surveillance and automation capability has enabled safe reductions in separation minima during SOIR for many locations. In addition, the flexibility and reduced separations offer improved capacity while also addressing many of the environmental and efficiency challenges at major airports around the globe.

The second edition of the SOIR leverages that work and the experiences of many States in applying both traditional and new practices, and complements the 2018 publication of simultaneous approach separation Standards in the Procedures for Air Navigation Services — Air Traffic Management (PANS-ATM, Doc 4444). This manual expands on these guidelines by providing details on the operation and implementation of these Standards.

This manual is intended to be a living document. Periodic amendments or new editions will be published on the basis of experience gained and of comments and suggestions received from users of this manual. Readers are therefore invited to address their comments, views and suggestions to:

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