Risk Intelligence Analyst

Position Detail			
Reports To	Risk Intelligence Lead	**Group**	Network Performance and Optimisation, Service Delivery
Classification	ASA6	**Location**	Canberra
Reports – Direct Total	0		

Organisational Environment

Airservices is a government owned organisation providing safe, secure, efficient, and environmentally responsible services to the aviation industry.

Each year we manage over four million aircraft movements carrying more than 156 million passengers and provide air navigation services across 11 per cent of the world's airspace.

Airservices has two major operating centres in Melbourne and Brisbane and a corporate office in Canberra. We operate 29 air traffic towers at international and regional airports and provide aviation rescue firefighting services at 27 Australian airports.

We are committed to continuing to improve our business by providing our customers with services they value and embedding new ways of working and technology investments to further innovate and optimise.

Primary Purpose of Position

The role is to assist the Risk Intelligence team, within Network Performance and Optimisation (NP & O), to analysis and quantify risk to support all Airservices, with particular emphasis on airspace risk. Risk Intelligence also runs the Australian Airspace Monitoring Agency (AAMA), assessing airspace risk and coordinating this with other international monitoring agencies.

The role will involve data wrangling, analysis, programming, mathematics, machine learning, modelling, simulation, reporting, automation, graphing and statistics. It will also require you to learn and appreciate the context and systems underneath the data and analysis.

The role may also support Airservices in the analysis of other areas of the business.

The role will support the Risk Intelligence team functions which include:
- undertaking regular and on-request analysis and of our safety and risk performance
- driving the improvement of our end-to-end analysis process, from data collection to analysis and reporting, as well as documentation and governance.

The day-to-day activities of the role include:
- liaising with stakeholders
- writing Python code to extract data, do complex analysis or simulations, and interpret results
- write reports on the analysis suitable for technical and non-technical audiences
- develop new capabilities along with associated Python code and documentation.

Accountabilities and Responsibilities

Position Specific

- Perform data extraction and wrangling using large and complex data sets.
- Conduct data quality/integrity checks.
- Undertake complex analysis and visualisation of the trends, patterns, influencing factors and risk pictures of Airservices performance.
- Develop metrics and performance measures.
- Document the process/methodologies applied in conducting analysis and results which can be easily understood by managers and domain specialists.
- Conduct validation checks of own work, or as part of expert peer review.
- Prepare scheduled and ad hoc performance reports which are of high quality tailored to the types of targets audience.
- Recommend and apply advanced data analytics techniques and tools to continually improve the efficiency and effectiveness of analyzing safety and risk data.
- Self-learn and develop new analytical skills and broader aviation concepts.

People

- Maintain an effective working relationship with other Airservices staff and managers to ensure that there is effective coordination of all activities in support of organisational objectives.

Compliance, Systems and Reporting

- Support continuous improvement focused on enhancing safety, decreasing cost, and driving action to improve existing systems and processes, using appropriate methods to implement solutions and measure impact.

Safety

- Demonstrate safety behaviours consistent with enterprise strategies.

Key Performance Indicators

Efficient, Effective and Accountable

- High level of satisfaction from internal partners and customers as measured by feedback.
- Delivery of validated data analyses and reports that meet requirements and are within required timeframes.

Safety

- Compliance with safety, risk, environmental and any other standards.

Key Relationships

Primarily with managers and staff within NP & O (Service Delivery) as well as staff in Safety, Security and Assurance. Additional support to all areas of Airservices related to the context and provision of complex analyses, reporting and advice on Airservices performance.

Skills, Competencies and Qualifications

Qualifications and experience

1. Tertiary qualifications in computing, science, engineering, mathematics, statistics, or a related quantitative discipline

2. Either three or more years of relevant experience, or a relevant postgraduate qualification (PhD or Masters)

Analytic skills

3. Demonstrated experience in programming in a scripted language (such as Python, Matlab, R or a similar language) in the areas of numerical, scientific or data analysis, and modelling.

4. Familiarisation with data exploration, data wrangling and data visualisation techniques and tools.

Communication skills

5. Strong English-language written and oral communications skills to enable a diverse audience to easily understand the methodologies, models, and results of data analysis.

Work skills

6. Ability to work autonomously and collaboratively as part of cross-functional teams.

7. Ability to deliver quality and timely work outputs within a fast-paced and complex organisational setting.

8. Ability to identify, and then self-learn, new areas.

Performance Standards and Behaviours

As a member of Airservices, you will consistently demonstrate performance standards and behaviours that meet our Code of Conduct and our Values. This includes:

- Treating everyone with dignity, respect, and courtesy

- Acting with honesty and integrity

- Acting ethically and with care and diligence

- Complying with all Airservices' policies and procedures, and applicable Australian laws

- Disclosing and taking reasonable steps to avoid any actual, potential, or perceived conflict of interest

- Behaving in a way that upholds our vision, mission, and values, and promotes the good reputation of Airservices.