<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS-B</td>
<td>Automatic Dependent Surveillance – Broadcast</td>
</tr>
<tr>
<td>AMSA</td>
<td>Australian Maritime Safety Authority</td>
</tr>
<tr>
<td>ATSB</td>
<td>Australian Transport Safety Bureau</td>
</tr>
<tr>
<td>AusAID</td>
<td>Australian Agency for International Development (now known as DFAT)</td>
</tr>
<tr>
<td>BASARNAS</td>
<td>Badan SAR Nasional - Indonesia’s national search and rescue agency</td>
</tr>
<tr>
<td>BPPTL</td>
<td>Balai Pendidikan dan Pelatihan Transportasi Laut – a maritime training college of DGST</td>
</tr>
<tr>
<td>CASA</td>
<td>Australian Civil Aviation Safety Authority</td>
</tr>
<tr>
<td>DAC</td>
<td>Development Assistance Committee (of the OECD)</td>
</tr>
<tr>
<td>DFAT</td>
<td>Australian Department for Foreign Affairs and Trade</td>
</tr>
<tr>
<td>DGCA</td>
<td>Directorate-General Civil Aviation (in the Indonesian MOT)</td>
</tr>
<tr>
<td>DGLT</td>
<td>Directorate-General Land Transport (in the Indonesian MOT)</td>
</tr>
<tr>
<td>DGST</td>
<td>Directorate-General Sea Transport (in the Indonesian MOT)</td>
</tr>
<tr>
<td>DIT</td>
<td>Australian Department of Infrastructure and Transport (Infrastructure)</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Australian Department of Infrastructure and Regional Development</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organisation</td>
</tr>
<tr>
<td>IMO</td>
<td>International Maritime Organisation</td>
</tr>
<tr>
<td>ITSAP</td>
<td>Indonesia Transport Safety Assistance Package</td>
</tr>
<tr>
<td>KNKT</td>
<td>Komite Nasional Keselamatan Transportasi – Indonesia’s National Transport Safety Council (NTSC)</td>
</tr>
<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>MOT</td>
<td>Indonesian Ministry of Transportation</td>
</tr>
<tr>
<td>NCVS</td>
<td>Non-Convention Vessel Standards</td>
</tr>
<tr>
<td>NTSC</td>
<td>Indonesian National Transport Safety Council (KNKT)</td>
</tr>
<tr>
<td>ODA</td>
<td>Official Development Assistance</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PSCO</td>
<td>Port State Control Officer (responsible for inspecting incoming vessels for compliance with international conventions)</td>
</tr>
<tr>
<td>TOR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>VTSO</td>
<td>Vessel Traffic Service Officer</td>
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</tbody>
</table>
Executive Summary

This report presents the work of a Review of the performance of the Indonesia Transport Safety Assistance Package. The Review finds the program to be strategically relevant, to have been effective and to have had a positive impact, though with some sub-programs being more sustainable than others. The program is judged to be well-conceived, but inevitably there are opportunities to further refine it, especially if funding is constrained.

Background

The Indonesia Transport Safety Assistance Package (ITSAP) aims to facilitate improved transport safety in Indonesia. ITSAP is managed by the Department of Infrastructure and Regional Development (Infrastructure) and funded through Australian Government Official Development Assistance (ODA) and, therefore, forms part of the whole of government aid agenda.

The goal of ITSAP is to contribute to improved transport safety in Indonesia. More specifically, the purpose of ITSAP is to assist Indonesia to regulate and promote transport safety in accordance with applicable international standards and contemporary safety management practices, consistent with the priorities of the Indonesian Government. This will be done through providing technical assistance, capacity building, and advising on improved governance and safety management practices and procedures.

Assistance provided under the ITSAP program is delivered to Indonesian transport counterpart agencies by Infrastructure, the Australian Civil Aviation Safety Authority (CASA), Airservices Australia, the Australian Transport Safety Bureau (ATSB) and the Australian Maritime Safety Authority (AMSA). Projects are implemented by Indonesian agencies with support from their Australian counterparts.

More generally, ITSAP is intended to contribute to Indonesia’s medium term development strategy and Australia’s development policy of promoting prosperity, reducing poverty and enhancing stability. In addition to focusing on building capacity of public sector agencies in Indonesia, the interagency cooperation needed in the delivery of projects is intended to strengthen partnerships and sustainable linkages between Indonesia and Australia.

The ITSAP program commenced in 2007 and has been extended twice. Funding is due to expire on 30 June 2015. At the end of March 2015, 97 projects have been approved under ITSAP in the areas of air, sea and land transport with over 10,000 Indonesian transport officers receiving training through workshops, mentoring and officer exchange programs.

The Search and Rescue (SAR) Program, which is a particular focus of the current Review, is a whole-of-government initiative that commenced under ITSAP in 2007. The desired outcome of the Program has been to establish Indonesian commitment to and implementation of effective SAR response to maritime incidents, including those that involve coordinated activities by both Indonesia and Australia. The project is managed by Infrastructure under the ITSAP program and is delivered by AMSA.

Purpose of this Review

The purpose of the Review has been to “assess whether ITSAP and AMSA SAR activities have performed well and have resulted in the intended institutional and governance outcomes”. The SAR activities have been assessed for the period 2012-15 and other ITSAP activities for the 2014/15 financial year.

The Review has involved extensive consultation with representatives of all Australian and Indonesian Government agencies that have been involved in ITSAP and collection of information from them. The Review has also drawn on documents such as two previous reviews of the ITSAP program (in 2010 and 2012), budgets, engagement plans, outcomes briefs and project completion reports to interpret the ITSAP program and draw conclusions about its performance.

Findings of the Review

The Terms of Reference for the Review set out fourteen questions that were to be addressed. The questions and a summary of the findings are shown in the table on the next page.

The Review finds that the ITSAP program has been successful in providing support that is valued by participating Indonesian agencies, and which has resulted in changes being put into practice by them. Close relations have been developed between the Australian agencies and their Indonesian counterparts. These links support operational activities such as air navigation that involve daily cooperation between both countries, and also events such as search and rescue events and accident investigations that occur on an occasional basis. They also support the development of transport safety capacity in Indonesia and hence indirectly support its economic and social development.
<table>
<thead>
<tr>
<th>Review Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Have the ITSAP and AMSA SAR programs contributed to improving transport safety and search and rescue capability in Indonesia?</td>
<td>There is a strong alignment with Indonesian and Australian Government needs and priorities, with the potential for further refinement to more closely meet current Australian government priorities.</td>
</tr>
<tr>
<td>Q1. Do the programs meet the needs of our Indonesian counterparts, while aligning with Australian Government priorities?</td>
<td>While the Engagement Plans and Completion Reports provide few specific measures of program success, it is evident that the programs have supported greater capacity in the Indonesian Government to plan and implement actions to improve transport safety particularly in the aviation and maritime sectors.</td>
</tr>
<tr>
<td>Q2. Are they on track to achieve their end of component outcomes?</td>
<td>The sustainability of the programs varies between Indonesian Government agencies, generally being strongest in agencies with operational responsibilities and less strong in policy and regulatory agencies, particularly in the land transport sector.</td>
</tr>
<tr>
<td>Q3. How have the Programs ensured the delivery of sustainable outcomes for Indonesia?</td>
<td>The staff of Australian and Indonesian government agencies have a comfortable and accessible relationship. This has emerged from an original base with very limited links. Current relations allow for collaborative work to be undertaken whenever needed.</td>
</tr>
<tr>
<td>Q4. How were relationships managed to support program success?</td>
<td>Continuing and responsive communications over the duration of ITSAP. This has allowed accessible and collegial relationship. This has emerged from an original base with very limited links. Current relations allow for collaborative work to be undertaken whenever needed.</td>
</tr>
<tr>
<td>Q5. How were relationships managed to support program success?</td>
<td>There are a number of examples of changes that have resulted from ITSAP over the evaluation periods, including the capacity of BASARNAS to successfully manage the response to the AirAsia crash, the ability of the NTSC to investigate the crash, increasing competence in AirNav Indonesia, and development of a range of documents such as regulations and standard operating practices for use in safety investigation and in the aviation and maritime sectors.</td>
</tr>
<tr>
<td>Q6. Examples demonstrating key successes and how these were achieved i.e. what enabled these to happen?</td>
<td>Twenty-five projects were to have been undertaken in the assessment periods, with only one at risk of not being successfully completed and with no serious implementation issues for the remaining activities.</td>
</tr>
<tr>
<td>Q7. Examples of evidence of changes influenced by the programs being embedded into policy and practice.</td>
<td>There are a number of examples of changes that have resulted from ITSAP over the evaluation periods, including the capacity of BASARNAS to successfully manage the response to the AirAsia crash, the ability of the NTSC to investigate the crash, increasing competence in AirNav Indonesia, and development of a range of documents such as regulations and standard operating practices for use in safety investigation and in the aviation and maritime sectors.</td>
</tr>
<tr>
<td>Q8. How well were the ITSAP and AMSA SAR programs managed and what are the key lessons learned?</td>
<td>Flexibility has been addressed through measures such as annual reviews of programs, re-allocation of resources and refining of project activities, and re-scheduling of activities to accommodate agency and staffing needs.</td>
</tr>
<tr>
<td>Q9. How was program progress monitored and reported?</td>
<td>An appropriate set of documents are used to report on program progress, though monitoring has focussed on expenditure and activities for each project rather than outcomes. Routine reporting is onerous to prepare and interpret, and has been conducted only intermittently.</td>
</tr>
<tr>
<td>Q10. How was risk monitored and managed?</td>
<td>Australian agencies, through ongoing communications with their respective Indonesian partners and situational awareness, have identified risks and sought to mitigate them. Risks have mainly related to the availability of staff and tailoring activities to maximise their effectiveness.</td>
</tr>
<tr>
<td>Q11. How were relationships managed?</td>
<td>Relationships between staff in the corresponding agencies have been managed well through continuous and responsive communications over the duration of ITSAP. This has allowed accessible and collegial relations to be established.</td>
</tr>
<tr>
<td>Q12. How was risk monitored and managed?</td>
<td>Relationships between staff in the corresponding agencies have been managed well through continuous and responsive communications over the duration of ITSAP. This has allowed accessible and collegial relations to be established.</td>
</tr>
<tr>
<td>Q13. How were relationships managed?</td>
<td>Relationships between staff in the corresponding agencies have been managed well through continuous and responsive communications over the duration of ITSAP. This has allowed accessible and collegial relations to be established.</td>
</tr>
<tr>
<td>Q14. What key lessons were learned about the delivery approaches?</td>
<td>A range of delivery approaches have been used in ITSAP. The key lesson is to tailor the delivery method to the particular task. A number of more specific lessons are also identified.</td>
</tr>
</tbody>
</table>
Recommendations

The recommendations of the Review are:

1. The ITSAP program provides significant benefits and there is no need to fundamentally change the concept if it is continued.

2. If funding is constrained, emphasis should be given to projects that support operational matters that routinely or occasionally involve participation by both Indonesia and Australia and to projects with activities in localities in Indonesia where Australians are most at risk.

3. A stronger thematic approach should be taken to sub-programs to give them more coherence and to make them more outcome oriented.

4. An overview of the activities of other donors that may be related to ITSAP should be maintained to ensure coordination and complementarity are achieved where necessary.

5. Explicit consideration should be given to efficiency in project design to demonstrate that projects are as cost-effective as possible.

6. Lessons learned from past ITSAP projects should be built into future projects.

7. The relationships developed to date should be sustained and reinforced to further develop the technical capacity of Indonesian agencies and to support Australia’s interests.

8. The monitoring and evaluation framework for the program should be developed to more explicitly record and report the achievements of projects.

9. Consideration should be given to reducing the role and scale of the Project Review Group in favour of more formal coordination at the sub-program level.
Section 1: Introduction

The Review assesses the performance of activities being undertaken through the Indonesia Transport Safety Assistance Package and, in particular, the associated Search and Rescue Program. The results of the Review will be used to guide future decisions on the program.

1.1 Transport Safety in Indonesia

Safety is a serious concern for Indonesia. The World Health Organisation estimated that 37,400 people died in road crashes in Indonesia in 2009. In addition, there are many serious air incidents, with two incidents in the first quarter of 2015, five in 2014 (including one in which 162 people died), seven in 2013, three in 2012 (in which 56 people died) and seven in 2011 (with 51 deaths). There have been numerous deaths associated with sea transport. Given the number of Australians who live, work or holiday in Indonesia, it is inevitable that some of those who die in transport crashes will be Australians.

1.2 Indonesia Transport Safety Assistance Package

The Indonesia Transport Safety Assistance Package (ITSAP) program aims to facilitate improved transport safety in Indonesia. ITSAP is managed by Infrastructure and funded through Australian Government Official Development Assistance (ODA) and therefore forms part of the whole of government aid agenda.

The ITSAP program commenced in 2007 following a Garuda Air crash in Yogyakarta that raised concerns about air safety in Indonesia. It has been extended several times, with:

- an initial program of $23.9 million over three years, 2007-2010;
- an extension in May 2010 when the Australian Government committed a further $14.5 million to ITSAP over a four year period to June 2014; and
- in July 2014, the Australian Government provided an additional $4.6 million to extend ITSAP to 30 June 2015.

The goal of ITSAP is to contribute to improved transport safety in Indonesia. More specifically, the purpose of ITSAP has been to assist Indonesia to regulate and promote transport safety in accordance with applicable international standards and contemporary safety management practices consistent with the priorities of its national government. This has been done by providing technical assistance, capacity building, and advising on improved governance and safety management practices and procedures.

In seeking to facilitate Indonesia’s long-term self-sufficiency in transport safety, the assistance delivered under ITSAP aims to help Indonesia attain international compliance in aviation with the International Civil Aviation Organization (ICAO) and with the International Maritime Organization (IMO) in the maritime sector. For road safety the work is conducted within the framework of the Global Commitment to the Decade of Action for Road Safety 2011-2020.

Assistance provided under the ITSAP program is delivered to Indonesian transport counterpart agencies by Infrastructure, the Australian Civil Aviation Safety Authority (CASA), Airservices Australia (Airservices), the Australian Transport Safety Bureau (ATSB) and Australian Maritime Safety Authority (AMSA) – see Table 1 for the corresponding Indonesian agencies. Projects are implemented by Indonesian agencies with support from their Australian counterparts.

More generally, ITSAP is intended to contribute to Indonesia’s medium term development strategy and Australia’s development policy of promoting prosperity, reducing poverty and enhancing stability. In addition to focusing on building capacity of public sector agencies in Indonesia, the interagency cooperation needed in the delivery of projects is intended to strengthen partnerships and sustainable linkages between Indonesia and Australia.

At the end of March 2015, 97 projects had been approved under ITSAP in the areas of aviation, maritime and surface transport with over 10,000 Indonesian transport officers.

Table 1: Corresponding Agencies

<table>
<thead>
<tr>
<th>Australian Agency</th>
<th>Indonesian Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Infrastructure and Regional Development (Infrastructure)</td>
<td>Ministry of Transportation (MOT)</td>
</tr>
<tr>
<td>Australian Transport Safety Board (ATSB)</td>
<td>Directorate-General Land Transport (DGLT)</td>
</tr>
<tr>
<td>Civil Aviation Authority of Australia (CASA)</td>
<td>National Transportation Safety Committee (NTSC)</td>
</tr>
<tr>
<td>Airservices Australia (ASA)</td>
<td>Directorate-General Civil Aviation (DGCA)</td>
</tr>
<tr>
<td>Australian Maritime Safety Authority (AMSA)</td>
<td>AirNav Indonesia</td>
</tr>
<tr>
<td></td>
<td>National Search and Rescue Agency (BASARNAS)</td>
</tr>
</tbody>
</table>


2 Unless otherwise indicated, all dollar values are in Australian dollars in nominal values.
The Search and Rescue (SAR) Program, which is a particular focus of the current Review, is a whole-of-government initiative that commenced under ITSAP in 2007. The desired outcome of the Program has been to establish Indonesian commitment to and implementation of effective SAR responses to maritime incidents, including those that involve aircraft crashes at sea and coordinated activities by both Indonesia and Australia. AMSA manages the program and activity delivery, which is administered by Infrastructure within the framework of ITSAP. Staff of AMSA and Infrastructure located in Jakarta work closely to facilitate program delivery.

A second stream of activities to enhance search and rescue cooperation commenced in 2012 in response to heightened concerns about maritime safety. The program was led by the AMSA in partnership with the Indonesian National Search and Rescue Agency (BASARNAS). It was managed under the ITSAP program to ensure integration with other maritime safety assistance being provided through the program. The additional activities were funded through a grant of an additional $4.4 million committed by the Australian Government through its ODA program for the period 2012-14.

The SAR program comprises four components:

- an exchange of officers between BASARNAS and AMSA to promote the sharing of knowledge and expertise;
- assistance to provide an operational picture (using geographic information system picture displayed on computer equipment) to a BASARNAS Rescue Coordination Centre, which includes ship tracking information for the Indonesian search and rescue region;
- assistance to enhance maritime satellite communications to communicate with merchant vessels, including the transmission of distress broadcasts via Inmarsat satellite communications; and
- capacity building activities designed to enhance Indonesia’s SAR capability. Some of these activities will leverage the placement of AMSA officers in BASARNAS through workshops, meetings and discussions necessary to develop staff expertise.

Activities include:

- the conduct of additional advanced SAR exercises;
- regular SAR forums to enhance Indonesian technical understanding and promote best SAR practice;
- assistance for the development of standard operating procedures to enable better coordination and deployment of Indonesian assets during SAR operations;
- assistance for the development by BASARNAS of a distress beacon registration and regulatory framework; and
- assistance to run workshops and meetings to develop an enhanced memorandum of understanding between Indonesia and Australia to strengthen Indonesian SAR arrangements.

### 1.4 Purpose of this Review

The Terms of Reference (TOR – see Appendix A) for the current Review indicates that its purpose is to:

“assess whether ITSAP and AMSA SAR activities have performed well and have resulted in the intended institutional and governance outcomes”.

With regard to the work of the Review, Infrastructure indicated that:

- around half of the effort should be directed to each of the two elements, i.e. to the entire ITSAP program and to SAR projects;
- two previous reviews have assessed the performance of ITSAP for the period from its inception to mid-2012 (see Section 1.6 for more detail);
- the current review is to consider the SAR program for the three financial years 2012/13 to 2014/15, and all other ITSAP activity undertaken in the 2014/15 financial year; and
- the results of the Review will be used to guide decisions on a further continuation of the program beyond its current end date of 30 June 2015.

### 1.5 Approach of the Review

The work of the Review included four stages (see Appendix B for more detail):

- an Inception stage;
- a stage that involved consultation and collection of information in both Australia and Indonesia that enabled the Review questions set out in the TOR to be addressed;
- a subsequent stage to interpret the information and prepare a draft final report; and
- finalisation of the work of the Review.

In undertaking its work, the Review took account of the Detailed Description of Standards for Evaluation Reports set out in the TOR for the Review.

Extensive discussions were held with representatives of all Australian and Indonesian Government agencies that have been involved in ITSAP, with questionnaires described in Appendix B also completed by the agencies to provide formal, structured information. The information from both of these methods of information gathering were used, together with other information such as budgets, engagement plans and project completion reports, to interpret the ITSAP program and draw conclusions about its performance. A list of the people consulted is shown in Appendix C.

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3 Inmarsat is the International Maritime Organization approved satellite system for the transmission of maritime safety information.
1.6 Previous Reviews

Two previous reviews of the ITSAP program have been undertaken:

› an independent review for the period from the inception of the program to around mid-2010 (GHD 2010); and
› an internal review for the subsequent period to mid-2012 (DIT 2012).

The findings of these reviews are set out in Appendix D. In the 2012 Review, it was noted that of the fifteen recommendations in the 2010 Review, eight had been incorporated into the governance and processes of the program, with the remaining seven having been accepted by the ITSAP management team and being in the process of being incorporated into the program. The findings of the 2012 review are also reported to have been implemented other than the recommendation to streamline the Project Review Group.

1.7 Content of this Report

This report will be used as the basis for the final report of the Review. The structure of this report is:

› Section 2 describes and assesses the ITSAP program; and
› Section 3 sets out findings and recommendations.
Section 2: The ITSAP Program and Assessment

The ITSAP program has been successful in providing support that is valued by participating Indonesian agencies, and which has resulted in changes being put into practice by them. Close relations have been developed between the Australian agencies and their Indonesian counterparts. These links support operational activities such as air navigation that involve daily cooperation between both countries, and also events such as search and rescue operations and accident investigations that occur on an occasional basis. They also support the development of transport safety capacity in Indonesia and hence indirectly support its economic and social development.

2.1 The Program

The components of the ITSAP program that have been active in the period to be addressed by the current Review are shown in Table 2. More detail is provided for the SAR component of the program given its scale and the emphasis required to be given to it. The program includes 25 projects in 5 sub-programs. One project had not yet commenced at the end of March 2015, one had been fully completed and the remaining projects are ongoing.

Key projects activities in the SAR program over the period 2012-15 include:

- staff exchange to develop SAR capability of Indonesian staff, enhance the understanding of staff in each country about the SAR approach and practices in the other country and to develop relationships between staff both at an operational and supporting technical level;
- implementing tools that enhance coordination and communications for SAR operations, including E-Broadcast (to support communications with ships), operational surface picture (a national picture showing the location of vessels with overlap with neighbouring countries) and SARMAP (drift modelling software); and
- ongoing discussions through SAR forums, IMO sponsored workshops and other related SAR meetings that further enhance the cooperative relationship that has been between AMSA and BASARNAS.

Success in other ITSAP sub-programs in the first nine months of the 2014/15 financial year need to be seen in the context of prior activities. Key achievements in the current year are:

- ATSB-NTSC:
  - training and associated professional development for NTSC staff to undertake and report on investigations;
  - developing the capacity of NTSC to extract and interpret information from aviation data recorders.
- AMSA-DGST:
  - training to support the implementation of non-convention vessel standards (NCVS) that were developed in earlier activities;
  - initial work to develop a concept plan to improve operations and safety of the government-supported kapal perintis fleet;
  - training to support the capacity of Port State Control Officers (PSCOs) to inspect incoming international vessels for compliance with international conventions related to crew, ships and ship equipment; and
  - training and provision of materials to develop the capacity of BPPTL (a training college of MOT that is responsible for providing competency-based training to support DGST’s maritime transport management activities) to provide ongoing training for PSCOs and Vessel Traffic Service Officers (VTSOs).
- CASA-DGCA
  - training of DGCA staff and aviation industry personnel in mountainous flying and wildlife hazard management for aerodromes; and

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4 For clarity in this report:
- ITSAP is termed a program;
- activities related to an Australian agency (called a sector) are called a sub-program;
- sub-programs comprise a number of projects; and
- projects can involve activities such as providing technical support, training, out-placement, staff exchange, etc.
<table>
<thead>
<tr>
<th>Sector and Project(1)</th>
<th>Status at end-March 2015 (Completed /Active/Proposed)</th>
<th>Development functions served(2)</th>
<th>Other functions(2)</th>
<th>Budget FY2014-/15 ($’m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Technical support / Improved systems / Institutional capacity building / Improved governance / Mutual interest / Australian influence</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Australian Transport Safety Bureau (ATSB)</td>
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<td></td>
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<td>ATSB 26 – NTSC investigator training</td>
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<td>✓</td>
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<tr>
<td>Civil Aviation Safety Authority (CASA)</td>
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<td>CASA 13 – ADS-B implementation</td>
<td>P</td>
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<td>CASA 15 – Aerodrome Safety</td>
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<td>ASA 14 – Technology harmonisation</td>
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<td>Infrastructure</td>
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<td>A</td>
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<td>Australian Maritime Safety Authority (AMSA)</td>
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<tr>
<td>AMSA 27 – Search and Rescue</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>(a) Improved efficiency of the Indonesian BASARNAS SAR system</td>
<td>A</td>
<td>✓</td>
<td>✓</td>
<td>0.58</td>
</tr>
<tr>
<td>(b) Improved understanding of the Australian SAR system and arrangements</td>
<td>A</td>
<td></td>
<td></td>
<td>0.14</td>
</tr>
<tr>
<td>(c) An understanding of how BASARNAS SAR operations might be improved through adoption of new procedures and systems</td>
<td>A</td>
<td></td>
<td></td>
<td>0.09</td>
</tr>
<tr>
<td>(d) Increased BASARNAS capacity to coordinate search and rescue within the Indonesian SAR region</td>
<td>A</td>
<td></td>
<td></td>
<td>0.35</td>
</tr>
<tr>
<td>(e) Increased capacity to communicate with merchant vessels via satellite broadcasts</td>
<td>A</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>(f) Enhanced Indonesian SAR capability through development of a whole-of-government approach to the SAR system</td>
<td>A</td>
<td></td>
<td></td>
<td>0.90</td>
</tr>
<tr>
<td>(g) Enhanced understanding of SAR system components and function</td>
<td>A</td>
<td></td>
<td></td>
<td>0.26</td>
</tr>
</tbody>
</table>

(1) Covers the three financial year period 2012/13 to 2014/15 for the SAR program and 2014/15 for other components.
(2) See the discussion in Section 2.3 related to Question 1 for descriptions of the criteria, including the narrow definition for Institutional Capacity Building. Lighter ticks indicate a lesser level of influence.

Source: Infrastructure and Review

Table 2: Program Components Active in Review Period
development of the capacity of DGCA staff to draft new regulations governing aviation and related to airport privatisation.

Airservices Australia-AirNav Indonesia:

- continued exchange of air traffic controllers to develop mutual understanding and to assist AirNav Indonesia to improve air traffic control practices;
- development of standardised procedures for AirNav Indonesia, enhanced airspace boundary coordination with Australia and an ongoing program of capacity building; and
- assist with the preparation for and application of Automatic Dependent Surveillance – Broadcast (ADS-B), a new aircraft location and tracking system.

Infrastructure-DGLT:

- workshops to improve inter-agency coordination and to develop integrated road safety remediation schemes for four sites\(^5\); and
- assist with developing a safety management system to be implemented for buses in Indonesia.

2.2 Evidence to Support the Assessment

The assessment described in the next section has been based on the following:

- survey forms completed by each agency in Australia and by three of the agencies in Indonesia;
- case studies initially drafted by Australian agencies and edited by the Review; and
- discussions by the Review with all of the Australian and Indonesian agencies involved in ITSAP.

2.3 Review Questions

Table 2 is complemented by Table 3, which contains a summary of the findings that emerged from the research undertaken during the current Review. The information in these two tables is drawn on to answer the questions set out in the TOR, which are:

1. **Have the ITSAP and AMSA SAR programs contributed to improving transport safety and search and rescue capability in Indonesia?**

Q1. Do the programs meet the needs of our Indonesian counterparts, while aligning with Australian Government priorities?

Answer: There is a strong alignment with Indonesian and Australian Government needs and priorities, with the potential for further refinement to more closely meet current Australian government priorities.

ITSAP activities have been based on needs identified by staff in Indonesian government agencies and reviewed with the corresponding Australian partner agency. Accordingly, the program is judged to be well aligned with the needs of the Indonesian agencies. It may be inferred that it therefore also accords with the priorities of the Indonesian Government, which is further reinforced by the Government of Indonesia having signed an agreement with Australia for the program and the key staff in the Secretariat General for the Ministry of Transportation are members of the Project Review Group (PRG), which oversees the program.

The ITSAP program is provided under the auspices of Australia’s ODA program, which provides the principal benchmark for judging the extent to which the program meets the priorities of the Australian government. ITSAP has been undertaken under the direction of AusAID for most of its duration. During this period it needed to demonstrate that activities contributed to one or more of the five strategic goals of the Australian Aid program (i.e. saving lives, promoting opportunities for all, sustainable economic development, effective governance, and humanitarian and disaster response) and also to one of the Millennium Development Goals (which mainly relate to health, education, gender equality and environmental objectives).

The objectives of Australia’s aid program, which is now managed by the Department of Foreign Affairs and Trade (DFAT), have recently been modified, and are now to promote prosperity, reduce poverty and enhance stability\(^6\). These objectives are complemented by a performance framework that seeks enhanced accountability and effectiveness of Australian aid. DFAT sets out tests for the translation of priorities into practice:

- Test 1: Pursuing national interest and extending Australia’s influence
- Test 2: Impact on promoting growth and reducing poverty
- Test 3: Australia’s value-add and leverage
- Test 4: Making performance count

Infrastructure (2014) set out the purpose of ITSAP as being to provide “technical assistance, capacity building, and advising on improved governance and safety management practices and procedures”. From this, four discrete functions of the program are derived:

- technical support, such as advice on technical matters;
- improved systems within which work is undertaken;
- capacity building, which includes activities that change the ability of the agency to do its work irrespective of its technical expertise and its systems and within its current governance arrangements, for example training of trainers who are able to continue the training activities; and
- improved governance, which are activities related solely to improving the integrity and quality of authority, decision-making and accountability in an organisation.

\(^5\) In past of ITSAP implementation of these schemes were to be implemented with a grant from DGLT. In the 2014/15 financial year funding for implementation was to be provided by the Indonesian Infrastructure Initiative (INDII), a project also financed by DFAT as part of Australia’s ODA program to Indonesia.

### A. Program activities

<table>
<thead>
<tr>
<th>Australian Government Agency:</th>
<th>CASA</th>
<th>AMSA</th>
<th>ATSB</th>
<th>Airservices Australia</th>
<th>AMSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>Directorate-General Civil Aviation</td>
<td>Directorate-General Sea Transport</td>
<td>Directorate-General Land Transport</td>
<td>NTSC (National Transportation Safety Committee)</td>
<td>AirNav Indonesia</td>
</tr>
<tr>
<td>Indonesian Government Agency:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BASARNAS (National Search and Rescue Agency)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Overview

Responsible for overall program coordination. Includes location of an Infrastructure person in Jakarta.

- Extensive program to improve aerodrome safety management, aviation operations, enhance access to safety information, and support the introduction of new technology for aircraft monitoring and capacity for air navigation oversight. Activities include mentoring, provision of advice, workshops, supply of materials, preparation of manual of standards and staff exchange.
- Extensive program to improve safety associated with ships (in particular non-convention vessels and the *kapal perentis* fleet), shipping operations (primarily related to vessel traffic), port operations and to develop Indonesian training capacity. Activities include mentoring, provision of advice, workshops, drafting of decrees, standard operating procedures and other documents, supply of materials, ship surveys and training program.
- Limited program addressing integrated planning of identified road safety needs and development of safety management systems (SMS) for bus transport regulation. Activities include mentoring, provision of advice, preparation of materials and workshops.
- Program to develop the skills of investigators and to enhance the capacity for use of aviation data recorders. Activities include mentoring, provision of advice, training, training of trainers, and staff exchange.
- Extensive program to improve safety systems and air traffic control practices, facilitate the introduction of new technology, support improved management and administration and increase senior management engagement. Activities include mentoring, provision of technical advice, assistance for business planning and human resource management, workshops, and staff exchange training.
- Extensive program to develop improved awareness and knowledge, introduce enhanced technical systems (including drift software and ship location and communications systems) and improve response capability. Activities include mentoring, joint forums, training (including training of trainers), SAR exercises, and substantial staff exchange including location of a person in Jakarta.

#### Budget ($m)

<table>
<thead>
<tr>
<th>Australian Gov.</th>
<th>CASA</th>
<th>AMSA</th>
<th>ATSB</th>
<th>Airservices Australia</th>
<th>AMSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.44m (2014/15)</td>
<td>$1.55m (2014/15)</td>
<td>$0.18m (2014/15)</td>
<td>$0.80m (2014/15)</td>
<td>$0.85m (2014/15)</td>
<td>$4.42m (2012/13-2014/15)</td>
</tr>
</tbody>
</table>

### B. Roles in developing ITSAP program and projects

<table>
<thead>
<tr>
<th>Indonesian Gov.</th>
<th>Program coordination</th>
<th>Australian Gov.</th>
<th>Provided some additional suggestions to Indonesian government agencies for their consideration. Developed project proposals and optimised project activities based on Indonesian government agency needs and available funding.</th>
</tr>
</thead>
</table>

### C. Role of ITSAP activities in supporting desired outcomes

| Developing technical capacity and improving systems | No specific activities | Firm positive role, including upgraded capacity for aviation sector regulation and better trained inspectors. Ongoing challenge to develop necessary regulatory capacity, including ensuring that ICAO requirements are met. | Strong positive role, including improved capacity to regulate domestic shipping, better procedures and skills for vessel traffic management and enhanced pilotage skills. | Modest role, supporting case studies for improved road safety planning and potential for enhanced management of bus safety. | Strong positive role, including improved investigator capacity, laboratory services and management systems. | Strong positive role, including support for the adoption of new technology, introduction of new systems, better understanding of air traffic control issues, and to improved discipline in air traffic control. | Strong positive role, including improved capacity to use software and systems to support SAR activities and broader understanding of, and experience in, managing SAR events. |
| **Building institutional capacity and governance** | Strong positive role in supporting program coordination. | Strong positive role, including improved capacity by DGCA to regulate AirNav Indonesia and to promote enhanced aerodrome and aviation safety. | Strong positive role, including enhanced capacity by DGST to plan and implement new regulations, increased capacity of the agency’s training school to provide future programs and a disciplined approach to improved training outcomes through testing of trainees. | Limited evidence for sustainability of road safety planning, but improved DGLT capacity to develop and implement safety management system for buses. | Strong positive role, with evidence for sustainability of activities through training of trainers and enhanced NTSC capacity to conduct and report on investigations. | Strong positive role, through general support for a newly established agency, provision of advice on related matters, and specific support for stakeholder and human resource management. | Strong positive role, with evidence for sustainability through the application of enhanced skills and understanding by BASARNAS in SAR activities and a substantially improved capacity to manage SAR activities. |
| **Developing inter-agency communications and cooperation** | Strong positive role in supporting the program and maintaining links with the agencies involved in ITSAP. | Positive role to support DGCA to develop its capacity to undertake its new responsibilities, though with less need for operational interaction between DGCA and CASA than before the establishment of AirNav Indonesia. | Strong positive role, including the ability for the agencies to communicate as needed to resolve potential issues. AMSA and DGST have joint lead role or oil spill response activities for IMO. | No operational links between Infrastructure and DGLT, but ITSAP has supported open communications on technical matters, primarily with the Australian project consultant. | Strong positive role, with a high capacity to undertake joint activities, which have occurred on several occasions in the last year. | Strong positive role, with improved communications on operational matters which are continuous given the shared airspace boundary between Indonesia and Australia. | Strong positive role, with a high capacity to undertake coordinated activities, which have occurred on several occasions in the last year. |
| **Enhancing Australia’s role** | Strong positive role by maintaining a personable Australian representative to coordinate with Indonesian agencies. | Positive role, with CASA seen to support DGCA adapt to a new role with the creation of AirNav Indonesia. The revised institutional arrangements were based on the Australian model following a comparison with other countries and with implementation supported by Australian expertise. | Strong positive role, with AMSA playing a central role in assisting DGST to better manage its domestic shipping sector and making better use of vessel traffic infrastructure provided by others. Indonesia has assisted with Australia’s continued re-election to the IMO Council. | Positive role, with DGLT gaining support to undertake activities that complement INDII activities. | Strong positive role, with NTSC seeing Australia as a firm partner. NTSC has sought advice and support from ATSB including recovery and analysis of recordings of aviation incidents in Indonesia, | Good positive role, with AirNav Indonesia adopting features of ASA, seeking to be exposed to Australian practice, and willing and able to communicate directly with ASA. | Strong positive role, with BASARNAS using AMSA as a trusted source of support and also inviting AMSA to join its delegation to the ASEAN SAR Forum. |
### D. Other

**Specific achievements in assessment periods (2012/13-2014/15 for AMSA-BASARNAS sub-program and 2014/15 for other sub-programs)**

- **Project Review Group meeting in Jakarta.**
  - Completion and distribution of Aerodrome Manual of Standards, development of plan to transition from aeronautical information services to aeronautical information management approach in accordance with ICAO requirements, and development of improved understanding of aerodrome and aviation safety matters.

- **Concept plan for port operations and safety and for improving the kapal perintis fleet, further development and implementation of non-convention vessel standards including conducting ship and port surveys to develop the capacity to apply new regulations, increased capacity for vessel traffic management services, and increased capacity of DGST to provide training.**

- **Effective workshops to bring together road safety stakeholders, and support to DGLT to develop a bus safety management system.**

- **Increased capacity for NTSC to undertake and report on investigations, including that of the AirAsia crash.**

- **Increased capacity for improved air traffic control, including indications of a reduced number of Australia-Indonesian air traffic control boundary occurrences.**

- **Enhanced capacity of BASARNAS demonstrated through their management of activities associated with the AirAsia crash including use of software, services and other support provided through the ITSAP program.**

**Other notable issues emerging from discussions**

- **Focus on practical implementation, secure good outcomes in one location initially; then extend good practice to other locations; and ensure activities are not entirely focussed on Jakarta.**

- **Institutional change to separate regulator and operator of air navigation services follows the Australian model and draws on Australian regulations.**

- **Close links have allowed AMSA to communicate directly with DGST and facilitate a means for addressing deficiencies in Indonesian flagged ships arriving in Australia.**

- **Road safety activities were coordinated with the related activities of INDII and a need by DGLT for a bus safety management system to meet its legislated obligations.**

- **Close relations have been established at leadership, managerial and operational levels. NTSC and ATSB have respectively supported each other with regard to aviation incidents of concern to the other’s jurisdiction.**

- **AirNav Indonesia seeks to achieve a level of service to pilots that is comparable to that in Australia.**

- **BASARNAS was able to make good use of support provided by Australia over time.**

1. For the period 2012-15 for BASARNAS and 2014/15 for other agencies.
2. Achievement considered in the broader context of the long term ITSAP program. Specific achievements for the review evaluation periods are identified in Part D of the table.

Source: Consultant, based on information obtained from the involved agencies

**Table 3: Assessment of Program Components Active in Review Period**
The role of various ITSAP activities in supporting these functions are shown in Table 2. Two other criteria that respectively reflect Tests 1 and 3 above are also shown in the table:

- mutual interest is targeted where Australia could benefit in some reasonably significant, direct way from the assistance provided; and
- Australian influence is used when ITSAP has had a significant impact on the structure of an Indonesian agency and/or the way it works.

None of the ITSAP activities are directly focused on Test 2, though they support growth and reduce poverty indirectly by providing an environment that is more conducive to economic growth that in turn leads to reduced poverty. Hence, this test is not shown in Table 2. Similarly, the fourth test is not included providing an environment that is more conducive to economic growth that in turn leads to reduced poverty. Hence, this test is not shown in Table 2. Similarly, the fourth test is not included.

The information in Table 2 indicates a focus on providing technical support and institutional capacity building, with a strong emphasis also on improved systems. Activities that are in both Australia and Indonesia’s interests and which promote Australian influence are also reasonably strongly represented. While improved governance is given the least emphasis, this is reasonable given that the program has not been intended to change the fundamental ways in which government in Indonesia works.

It is therefore concluded that the ITSAP program is strongly aligned with the priorities of the Australian government. It is considered that there are opportunities to further strengthen the alignment by making it even more relevant to Australian interests – this is discussed in Section 3.

Another perspective on the usefulness of ITSAP sub-programs to the involved agencies is shown in Table 4. The results are based on self-assessment of each agency with regard to the three matters that they identified as most needed by the Indonesian partner agency. Recognising the inherent limitations of such an assessment, the data in the table broadly accords with the results of discussions, with three exceptions:

- DGLT considered that the sub-program in which they were involved was more helpful than considered by Infrastructure. The Review considers the Infrastructure assessment to be reasonable, with the result indicating the extent to which DGLT appreciates the help that it has received.
- BASARNAS considered their sub-program to be less helpful than AMSA. BASARNAS indicated a score of 4 for human resource development, which was its greatest need and did not include the value of support for matters such as eBroadcast and SARMAP that it acknowledged elsewhere and in discussions. It therefore seems likely that the AMSA and BASARNAS scores would upon further consideration be similar.
- The DGST sub-program was considered to be more successful than the air navigation sub-program. This is judged to reflect the importance placed by DGST on the ITSAP activities and a desire by AirNav Indonesia for more substantial, if not continuous, input from Australian staff.

Q2. Are they on track to achieve their end of component outcomes?

Answer: While the Engagement Plans and Completion Reports provide few specific measures of program success, it is evident that the programs have supported greater capacity in the Indonesian Government to plan and implement actions to improve transport safety particularly in the aviation and maritime sectors.

The outcomes described in the Engagement Plan for each sub-programs are shown in Table 5. Several observations are made about the outcomes:

- only in the case of the ATSB sub-program and one SAR project is there a direct correspondence between projects and expected outcomes, with the outcomes for the other sub-programs generally described at a more general level;
- none of the outcomes relate to the specific period to be considered in the current review;
- many of the outcomes are high level and either cannot be easily measured or need a major external review such as those conducted by ICAO and IMO to be measured – together with the Australian agencies involved in ITSAP indicating a great reluctance to be judges of the competence of their Indonesian partners, this makes the assessment of the extent to which outcomes are achieved very difficult;
- even if the outcomes could be measured, it will be difficult to discern a marked change over a one-year period for most of the sub-programs and even over the three year period for the SAR sub-program being considered by the current Review; and
- no work has been taken under ITSAP to quantify or otherwise formally gauge progress to achieving the outcomes.

<table>
<thead>
<tr>
<th>Agencies</th>
<th>Extent to which ITSAP has helped meet needs of Indonesian agency (0=not at all helpful to 5=very important)(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Australian Agency</td>
</tr>
<tr>
<td>ATSB - NTSC</td>
<td>5</td>
</tr>
<tr>
<td>CASA - DGCA</td>
<td>3</td>
</tr>
<tr>
<td>ASA - AirNav Indonesia</td>
<td>4</td>
</tr>
<tr>
<td>Infrastructure - DGLT</td>
<td>3</td>
</tr>
<tr>
<td>AMSA - DGST</td>
<td>5</td>
</tr>
<tr>
<td>AMSA - BASARNAS</td>
<td>4</td>
</tr>
</tbody>
</table>

(1) Self-assessment by each agency. Agencies were asked to indicate the three most important things that the Indonesian agency needed during the appraisal period in order of priority, and to indicate a score for the extent to which ITSAP activities helped to address each need. The data shown is the unweighted average score for the self-identified needs.

Table 4: Assessment of the Usefulness of ITSAP Activities
<table>
<thead>
<tr>
<th>Agency</th>
<th>Sub-Program Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATSB</td>
<td>ATSB 26 – NTSC investigator training:&lt;br&gt;› Increased Indonesian compliance with international standards for transport safety investigation&lt;br&gt;Ongoing close cooperation between the ATSB and NTSC</td>
</tr>
<tr>
<td></td>
<td>ATSB 27 – NTSC transport recorder capability:&lt;br&gt;› Increased Indonesian compliance with international standards for transport safety investigation&lt;br&gt;Ongoing close cooperation between ATSB and NTSC</td>
</tr>
<tr>
<td></td>
<td>ATSB 28 – NTSC road safety investigation capability building:&lt;br&gt;› Increased technical ability of NTSC road safety investigators</td>
</tr>
<tr>
<td>CASA</td>
<td>› Organisational processes better aligned with international expectation&lt;br&gt;› Aviation legislation and guidance material management meets international standards&lt;br&gt;› DGCA has a recognised safety promotion function&lt;br&gt;› DGCA inspectors applying skills consistently&lt;br&gt;› Industry has confidence in DGCA&lt;br&gt;› Improvements in international audit outcomes&lt;br&gt;› Stronger bilateral relations between Indonesia and Australia</td>
</tr>
<tr>
<td>ASA</td>
<td>› Contribution to the reduction of Indonesian aviation safety incidents by assisting the counterpart agency/s to deliver safe and efficient ATM services to cope with increased growth in the Indonesian aviation industry. This will create stakeholder confidence in Indonesia’s capability to manage a sovereign asset (airspace) thus contributing to sustainable economic growth. Importantly, efficient air traffic management will contribute to the reduction of carbon emissions through the optimization of flight routes and reduction in aircraft fuel usage.&lt;br&gt;› AirNav Indonesia will be applying an Annex 19 compliant SMS with a supporting culture that promotes safety reporting with ‘no blame’, a robust approach to risk management that has effective controls to mitigate operational risks, and a methodical application of change management principle.&lt;br&gt;› AirNav Indonesia applies industry standard maintenance practices to maintain equipment to a serviceable level, has the systems in place to ensure a sustainable solution is in place, and new technology is implemented appropriately.&lt;br&gt;› The Indonesian aviation industry is working together to develop strategies to improve safety and service outcomes and AirNav Indonesia has an appropriate corporate strategy in place to meet the demands of industry.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>› Contribution to the reduction of road crashes and incidents by assisting the counterpart organisations to develop knowledge and awareness of an effective SMS framework for public transport.&lt;br&gt;› A strengthened knowledge of road safety for all Indonesian road safety practitioners.&lt;br&gt;› Strengthen and develop SMS for public transport companies.</td>
</tr>
<tr>
<td>AMSA</td>
<td>› Functional regulation and enforcement for maritime safety and environmental protection in Indonesia.&lt;br&gt;› Stronger safety culture among stakeholders involved with ferry transport (regulators, industry and public) to complement formal regulatory requirements.&lt;br&gt;› Improved safety and efficiency of portside operations for the greater occupational safety of workers and safety of passengers, crew and vessels.&lt;br&gt;› Improved safety of navigation through stronger capacity for maritime traffic management.&lt;br&gt;› To simultaneously increase the safety and efficiency of sea transport for passengers and crew, especially on subsidized pioneer routes to remote locations, mainly in Eastern Indonesia. (AMSA 23 – Directorate of Marine Traffic cooperation)</td>
</tr>
<tr>
<td>AMSA-SAR</td>
<td>Assist BASARNAS with the continued development and skilling of its SAR officers and groups.&lt;br&gt;› In the long term, an upward shift in training focus, operational skilling and methods should be noted, which will lead to the successful conclusion of SAR operations in the Australian/Indonesian SAR region.&lt;br&gt;› BASARNAS should further be able to develop their responsibilities and obligations under relevant SAR conventions.&lt;br&gt;To assist BASARNAS with the development of their SAR System.&lt;br&gt;› In the long term, the movement towards the successful meeting of obligations under international standards will be evident, if not fully realised.&lt;br&gt;› Closer relations between agencies will also become apparent.&lt;br&gt;Domestic and international cooperation&lt;br› Move closer to international standards&lt;br› Closer relations between agencies</td>
</tr>
</tbody>
</table>

Table 5: 2014-18 Program and End-of-Investment Outcomes
A well-developed capability to download and analyse data from aircraft cockpit voice recorders (CVRs) and flight data recorders (FDRs) – the ‘black box’ in each aircraft - is essential for the investigation of accidents involving large air transport aircraft. The NTSC is one of the few aviation safety investigation agencies in the Asia-Pacific region with this capability, which has been developed primarily as a result of collaboration between the ATSB and NTSC under the ITSAP program.

Three aviation events in Indonesia in recent years highlight the importance of improved recorder capacity and demonstrate the capability that the NTSC has developed in this area,

- on 9 May 2012, a Russian Sukhoi SuperJet 100 aircraft on a demonstration flight crashed into Mount Salak, near Bogor, killing all 45 people on board;
- on 13 April 2013, a Lion Air Boeing 737-800 crashed on approach to Denpasar-Ngurah Rai Airport, Bali. Fortunately all on-board survived; and
- on 28 December 2014, an AirAsia Airbus A320 crashed in the Java Sea, killing all 162 people on board.

In all three of these accidents, the aircraft’s FDR and CVR were recovered and NTSC staff were able to successfully download information from them in their recorder laboratory. This is a very significant achievement in aviation safety investigation.

A range of ATSB-NTSC ITSAP activities have underpinned the successful development of this capability. NTSC recorder specialists have received training in Australia, and have benefitted from on-the-job guiding and mentoring, both in Indonesia and during placements at the ATSB in Canberra. ATSB has also assisted NTSC with the downloading and analysis of recorder information in more complex cases.

NTSC recorder capability has also been extended into the maritime domain through the ITSAP program. The NTSC has developed the capacity to read, analyse and present voyage data recorder (VDR) and other marine recorded data using the Marine Accident Data Analysis Suite (MADAS). NTSC marine investigators have taken part in a train-the-trainer program to develop a NTSC Fundamentals of Marine Electronic Data course to further strengthen capability in this area.

The development of the NTSC transport recorder capability has been a very significant achievement of the ITSAP program.

More generally, ATSB has established excellent communications and rapport between its Chief Commissioner and the Chairman of NTSC, and also at general manager and technical levels.

While it is not possible to establish progress towards achieving the outcomes in an analytical manner, discussions indicate that progress has been achieved. Matters of note in the evaluation periods for the current review are:

- case studies reported in Boxes 1 to 6 illustrate some of the achievements that have occurred;
- NTSC has developed its capacity to obtain data from travel recorders in the course of investigations of three major aviation crashes in the last three years (see Box 1) as well as a number of other incidents;
- in December 2014, BASARNAS was able to manage the response to the loss of an AirAsia aircraft in an efficient and effective manner that was in marked contrast with the loss of a Malaysian Airlines aircraft earlier in the year and NTSC has been able to take the leading role in investigation of the crash (see Box 2);
- improved cooperation between ASA and AirNav Indonesia has enhanced the management of aircraft crossing between the extended boundary between Australian and Indonesian airspace, with the exchange of air traffic control personnel between Indonesian and Australian centres allowing open dialogue and common understanding of procedures and processes by both organisations;
- following the separation of air traffic control from DGCA (which was influenced by earlier activities under ITSAP) and proposed airport privatisation, CASA has assisted DGCA to develop a clearer approach to regulation of the aviation sector (see Box 3);
- after the establishment in 2013 of AirNav Indonesia, which was based on the ASA model and developed under earlier ITSAP activities, ASA has continued to provide assistance to AirNav Indonesia to reinforce and develop its capacity, including a more disciplined behaviour by air traffic controllers (see Box 4);
- the implementation of Non-Convention Vessel Standards (NCVS) that were developed by DGST with support from AMSA during earlier phases of ITSAP, with particular attention given in the last year to improving the quality of lifesaving devices on passenger vessels (see Box 5); and
- DGLT has been developing a safety management system that can be implemented as part of the regulatory system for bus services in Indonesia (see Box 6).

These case studies reinforce the more general perspective presented in Table 3 that ITSAP activities have, over the review periods, provided services to Indonesian Government agencies that have been pertinent and will contribute to the longer term outcomes set for the ITSAP program. It is judged that the impacts have been greatest for the agencies that have operational responsibilities, i.e. AirNav Indonesia, BASARNAS and KNKT.

7 40 percent of all Australian international air traffic traverses the boundary between Indonesia and Australia.

8 The NCVS provide a comprehensive regulatory basis for improved safety with regard to vessels that are less than 500 tonnes, which is the minimum size vessel covered by International Maritime Organization (IMO) conventions. DGST indicates that around 42,000 of the approximately 50,000 vessels in Indonesia are non-convention vessels.
The crash of AirAsia Flight QZ8501 in December 2014 was a test of the capacity of BASARNAS to coordinate the response to the incident and to manage the response process, and for NTSC to subsequently conduct an investigation of the crash. BASARNAS operates in accordance with the SAR Act 29/14 (enacted in 2014). Several Indonesian agencies support BASARNAS in SAR, including the Indonesian National Armed Forces (Tentara Nasional Indonesia - TNI) which provides assets to SAR operations.

From the outset, BASARNAS provided leadership. Some key actions that it took were to implement its operating procedures, which have been developed to be consistent with the IAMSAR manual jointly produced by IMO and ICAO:

- deploy its own resources and to seek additional assistance from other Indonesian agencies and a number of other countries, including Australia;
- ensure the implementation of arrangements for imported assistance to be expedited through what can sometimes be slow processing of clearance authorisation;
- establish itself as the sole source of official information on the search and rescue activities;
- provide regular information to the media, to relatives of those on board the aircraft and to other stakeholders;
- manage search and rescue activities; and
- retrieve the flight data and cockpit voice recorders.

Historically, Australia has assisted Indonesia in the investigation of major aircraft accidents in Indonesia, including fatal crashes involving a SilkAir flight in 1997 and a Garuda flight in 2007. On this occasion, NTSC led the investigation and submitted the preliminary Accident/Incident Data Report to ICAO within the required 30 days after the crash. The investigation report is scheduled to be released on time by August 2015.

Indonesia’s engagement with Australia under ITSAP facilitated the efficient and effective response to the crash. Contributing factors were:

- eBroadcast, first provided to BASARNAS in 2013, was used extensively throughout the response. It provided BASARNAS with a near-real-time picture of merchant shipping in the search area and the ability to quickly communicate with them during the search operation.
- SARMAP, delivered in November 2014, predicts the movement of drifting objects and missing persons at sea, and provides probabilities for containment, detection, and success. BASARNAS used SARMAP continuously during the response, initially to determine the broad search areas based on the last known position of QZ8501 and, after debris was found, to reduce the search area, to refine the possible point of impact and to determine the likely positions of further floating objects as time progressed.
- Exchange alumni demonstrated great confidence and a high degree of situational awareness. Moreover, the experience benefited their understanding of cross-agency and international relationships, and corresponding deployment of assets and liaison officers.
- The presence of the AMSA SAR Capability Officer in BASARNAS facilitated Australian assistance, including RAAF contributions, Australian aircraft clearance, and effective international liaison and information sharing.
- ATSB was able to provide specialist assistance to NTSC to analyse the flight and voice recorder information, and to assist NTSC to prepare the formal reports to ICAO.

The response also indicates that Indonesia still requires assistance to move towards full compliance with international safety and security standards to report on, and conduct recovery of, major incidents.

On 14 January 2015, BASARNAS Chief Air Marshal Soelistyo wrote to chargé d'affaires David Engel thanking the Australian Government for assistance on the Joint Search and Rescue operation. The letter acknowledged support provided by Australia, Malaysia, Singapore, ROK, USA, Japan, Russia and PRC. The letter noted that BASARNAS wished to enhance its bilateral cooperation with Australia in the future.

Q3. How have the Programs ensured the delivery of sustainable outcomes for Indonesia?

Answer: The sustainability of the programs varies between Indonesian Government agencies, generally being strongest in agencies with operational responsibilities and less strong in policy and regulatory agencies, particularly the land transport sector.

It is judged that the agencies that have been able to take advantage of ITSAP activities to date are more likely to also be able to maintain, and hopefully build on, the progress that they have achieved. As inferred by the discussion in the latter part...
The DGCA identified a need to develop its capacity to review and revise aviation safety regulations. This priority has been driven by the International Civil Aviation Organization’s (ICAO) Continuous Monitoring Approach audit findings relating to Primary Aviation Legislation and Civil Aviation Regulations.

The ITSAP assistance was directed to strengthening the capacity of the Legal Division to undertake its regulatory functions, including identifying, drafting, implementing and enforcing necessary regulations. The assistance helped DGCA to broaden its understanding of legal issues, and influenced the development of new regulations on administrative sanctions and planned airport privatisation in Indonesia. CASA also assisted the DGCA to identify actions needed at a high level to strengthen its legal foundations and to enhance safety oversight management. Activities included an enforcement workshop and access to Australian Government legislative experts to discuss the DGCA’s regulatory development needs and for the DGCA to receive advice on key aspects of regulatory review. In addition, ITSAP arranged for DGCA staff to participate in the 2013 and 2014 annual conferences of the Aviation Law Association of Australia and New Zealand (ALAA NZ) to expand their knowledge of aviation legal issues, gain new insights into industry issues and to establish contacts that allowed capacity building to continue through ongoing relationships.

The enhanced capacity of DGCA staff was evident through their active engagement in ALAA NZ and the meetings with Australian experts. Workshop participants indicated they had gained an improved understanding of enforcement issues, with a majority considering that the workshop enhanced their capacity to undertake their work. CASA is currently building on the enhanced learnings from these projects through further assistance with a more advanced approach.

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of the previous question, this has generally been greatest in the agencies with operational responsibilities and less so in others.

Training has been a major ITSAP activity. There are four general concerns about training programs:

- **Are the most appropriate people selected to participate in them?** The Australian agencies have indicated an awareness of this matter, which was raised in the 2010 review of ITSAP, and appear to have worked with their Indonesian colleagues to address this.

- **Do those who participate gain competence from the training?** Surveys have been conducted following training activities and generally indicate a positive response with regard to matters such as the subject matter, the amount, complexity and usefulness of the material covered and the quality of presentation. Other than in the case of some AMSA training, testing has not been conducted to determine the knowledge gained from the training. Nor have follow-up surveys been conducted to establish the longer term impact of the training.

- **Do those who are trained remain in their positions and put the training to direct use?** There can be considerable mobility of staff in Indonesian Government agencies. It has not been possible to ascertain in the course of the current Review the extent to which people who participated in training continue to work in the same position. However, Indonesian agencies indicate that all of the staff who participated in training continue to work in the agencies. There is, therefore, a strong likelihood that if they are not still doing the same job, the training will still be of some relevance to their work.

- **How sustainable are the training programs?** This has been addressed by directing training to Indonesian staff who can then train others in some sub-programs. It has occurred to the greatest extent in the case of AMSA-DGST, where there has been training of trainers and support for training in one of DGST’s training schools. It has also been a part of the AMSA-BASARNAS and ATSB-NTSC training programs.

The Review identifies ten factors that have positively influenced the sustainability of outcomes from ITSAP activities:

- Activities with Indonesian agencies that have specific operational responsibilities seem to have led to more sustainable outcomes - this is especially apparent in the case of AirNav Indonesia and also for BASARNAS and NTSC;
- international standards (e.g. ICAO and the IMO) set benchmarks and hence should increase accountability and sustainability, though this is more obvious for some agencies (e.g. AirNav Indonesia) than for others (e.g. DGCA);
- larger ITSAP sub-programs, such as in the maritime and aviation sectors, have had a greater impact and appear to be more sustainable than the smaller sub-program in the land transport sector;
- the role of Indonesian agencies in identifying ITSAP projects appears to have led to a corresponding commitment to the projects and hence increased sustainability of them;
- tailoring of project activities to the Indonesian context increased sustainability;
- institutionalization of activities increases sustainability, for example to train trainers as part of training programs so that courses can then be propagated more widely by Indonesian staff;
- establishing practical ways to introduce and enforce new regulations and other practices rather than simply preparing the new regulations and practices or attempting to implement them on a nation-wide basis improves sustainability;
- the motivation of management to succeed, which is especially clear in the case of AirNav Indonesia, BASARNAS, NTSC and DGST, increases sustainability;
- the involvement of senior management of Australian agencies and securing the support of their equivalents in Indonesian agencies increases sustainability; and
## Box 4: Case Study - Cooperation in Air Traffic Control

Airservices has in place long standing operational interactions with its Indonesian counterparts under the AUSINDO umbrella. This forum provides a useful and necessary avenue for dealing with day to day safety issues and technical and operational coordination, but is not designed for raising more strategic issues of interest to the two administrations.

Until January 2013 air traffic management in Indonesia had been organized around a widely dispersed system with both oversight and responsibility for managing some of the air traffic within the jurisdiction of DGCA. It was clear that the capacity to address safety deficiencies was significantly hampered under this model. Even though other agencies were responsible for the majority of airspace and traffic, DGCA took the lead in specifying, acquiring and implementing air traffic management (ATM) systems.

In an earlier phase of ITSAP, ASA provided assistance to demonstrate the relative merits of different organization models for the oversight and provision of air traffic control (ATC) services. ASA also shared lessons learned from the Australian experience some 15 years earlier and provided briefings to key decision makers, including the Minister for Transport and Director General of Civil Aviation. After significant deliberation the Indonesian Government adopted a government business enterprise model for the new agency, called AirNav Indonesia which was established in 2013. The legislated responsibilities, governance structure, funding arrangements, vision and goals of AirNav Indonesia are very similar to ASA and are solely focused on air navigation services. ASA provided assistance to both the DGCA Task Force and the newly appointed Board of Directors on actions needed to establish AirNav Indonesia and to relocate air traffic control to it.

In 2014-15, ASA has provided ongoing support to AirNav Indonesia and DGCA through complementary ITSAP projects. In consultation with these agencies, priority has been given to:

- Establishing and embedding a safety culture through the delivery of workshops to ATC supervisors in the two main control centres;
- ATC staff exchanges aimed at promoting a greater understanding of each other’s operational environment and harmonizing operational procedure and providing assistance with the ADS-B implementation in Indonesia;
- Senior management engagement involving reciprocal visits by AirNav Directors and ASA Executive General Managers to discuss operational, technical and financial issues, and aimed at providing greater visibility of the programme to senior management and building stronger relationships; and
- Assisting AirNav Indonesia to develop a corporate plan, an air navigation charges model, a governance manual for the Board of Directors, and delivering workshops on risk management, IT business systems, stakeholder management and human capital policies and processes.

ASA and AirNav Indonesia now share surveillance information on aircraft movements in the vicinity of the shared airspace boundary, thus considerably reducing uncertainty regarding the transit of aircraft between them. AirNav Indonesia management has asked ASA for advice on air traffic control practices in Indonesian control centres, which have been acknowledged through the implementation of improvements, including the use of more standardised procedures by air traffic controllers. The majority of other ASA recommendations have been adopted. The staff exchange program and medium term deployment of two Australian ATC personnel to Indonesian facilities in FY14-15 has resulted in better outcomes for both organisations.

AirNav Indonesia has an ambition that would like pilots transiting Australian and Indonesia airspace should to receive an equal quality the same levels of services. As AirNav Indonesia develops its institutional model and work practices over the next 3 to 5 years greater confidence can be placed on the quality and predictability of air traffic control services in Indonesian airspace and the eventual achievement of AirNav Indonesia’s target.

Answers:

- **Q4. To what extent have relations and collaboration become closer?**

  The staff of Australian and Indonesian government agencies have comfortable and accessible relationships. This has emerged from an original base with very limited links. Current relations allow for collaborative work to be undertaken when needed.

The Review observed a good relationship between representatives of Australian agencies and staff of Indonesian agencies. As indicated in Boxes 1, 2 and 4, there is a high level of operational collaboration in air navigation, accident investigation and SAR activities. This also occurs in the maritime sector. As an example of the latter, on several occasions Indonesian flagged vessels have, on arrival in Australia, been found to be in a non-critical breach of legal requirements. On these occasions, AMSA has been able to negotiate with DGST for DGST to ensure that the breaches are addressed upon the return of the vessel to Indonesia, thus avoiding the need for legal proceedings and associated costs. Such operational links are vital to supporting quick and
Box 5: Case Study - Ensuring Passenger Ferry Life Rafts Deploy in an Emergency

Various lifesaving appliances, e.g. life rafts, life jackets and beacons, are required on vessels as standard equipment under Indonesian regulations for domestic vessels (i.e. the Non-Convention Vessel Standards) and international conventions for convention size vessels on international voyages.

One of the ITSAP projects has supported the systematic inspection of lifesaving appliances on board passenger ferries in Indonesia. These have found high levels of deficiencies, with the failure rate for the installation and maintenance of life rafts approaching 100 percent.

The principal problem is that fasteners and hydrostatic release units (HRUs), which are designed to ensure rafts float free and inflate during an emergency, are almost universally unserviceable or incorrectly installed. The consequence of this is that there are no functional life rafts on vessels to sustain passengers and crew until help arrives in the event of an incident.

In close cooperation with the Indonesian Coastguard (KPLP) and Port Authorities (KSOPs), efforts have commenced to raise industry awareness of this problem and to increase inspector capability. In the course of 2014/15 several hundred inspectors and operators are being trained in the principles and practice of correct installation and maintenance of HRUs. As there are numerous lifesaving devices and arrangements, the ability to visualize the sequence of events involved in deployment of a life raft is critical to understanding what constitutes effective installation and maintenance. Training is therefore supported by practical shipboard mentoring and instructional videos.

Training has been conducted in key locations including Batam, Makassar, Pankal Balam and Balikpapan with Banjarmasin and Bitung scheduled for completion by June 2015. The training also draws participants from other ports, extending the reach and impact of the training to a wider range of locations in Indonesia’s extensive network of passenger ferries.

The training is followed up with inspection blitzes, which have been conducted at peak travel times such as prior to Idul Fitri when the transport system is at its greatest load and stress. To date the inspections have been advisory only. A test of the effectiveness and sustainability of the program will be consistent enforcement of the regulations, including imposition of fines.

Effective responses to matters that affect both Indonesia and Australia.

Not all activities conducted through ITSAP relate to matters that involve operational cooperation between Australian and Indonesian agencies, for example the land transport safety sub-program and some maritime activities. The Review still observes good collaboration between the involved agencies in these instances. This promotes improvements in the capacity of the Indonesian agencies to undertake their work, which in turn contributes to economic growth in Indonesia and which is also positive for Australia.

While not formally verifiable, the Review accepts the argument that communications between Australian and Indonesian agencies were very limited at the outset of the ITSAP program. Hence, all of the improvement that has occurred can be attributed to ITSAP.

In attributing improvements over the periods being considered in the current Review, it is noted that it takes time to establish a collaborative relationship, and improvements over the Review periods have built on prior activities. In the case of SAR activities over the last three years, there has been a marked improvement in the capacity for collaboration, with the examples described in Boxes 1 and 2 and other assistance provided by AMSA to BASARNAS illustrating a current capacity for collaboration that did not previously exist. The employment of a full-time AMSA representative in the offices of BASARNAS has been instrumental in supporting the improved capacity for collaboration.

It is impractical to quantify the improvement in relations and collaboration for other agencies over the course of the 2014/15 financial year to date. However, all agencies in both Australia and Indonesia have indicated to the Review that they consider they currently have strong positive relationships and have worked together well in the course of the current year.

Q5. How were relationships managed to support program success?

Answer: Sympathetic links between the staff of Australian and Indonesian agencies over a long period, supported by a full-time Australian presence in Indonesia and responsiveness to Indonesian needs, have been essential to developing the close relationship.

Discussions with the agencies involved in the program indicate that five features have underpinned the relationships that have allowed the ITSAP program to achieve its successes.

Firstly, the relationships have been built up over the seven years since the program was established. This has allowed it to develop sufficient momentum to accommodate transitions when, for example, staff have changed. It has also seen people who were in lower level positions in agencies when the program was initiated promoted and carry on their support for ITSAP in more senior roles.

The second feature is the role of open and respectful communications. Australian participants in the program have been aware of cultural differences and have allowed for them. There is a risk that excessive deference can result in challenging choices being avoided, though the Review interprets that this has generally not been the case. A possible exception has been where Indonesian Government agencies have sought to implement measures on a national basis rather than in a more incremental and practical manner.

Next, the positive responsiveness of Australian agencies to requests for assistance from their Indonesian partner agencies has helped to develop relationships. This responsiveness has included both a willingness to tailor projects and activities to meet the needs of Indonesian partner agencies, and also to provide additional assistance in response to emergencies and
The ITSAP program has included 25 specific projects in the assessment periods. Only one of these may not proceed (because CASA has been unable to find suitable experts to provide assistance with the regulatory aspects of implementing ADS-B). All other projects are expected to be completed as planned. Hence, the key success at the program level has been to manage a large number of projects and bring them to completion.

The case studies shown in Boxes 1-6 are examples of specific projects that have proved to be successful. Other examples include:

- the broader program of assistance to DGST to implement the NCVS;
- further support to develop capacity to operate the Vessel Traffic Services system;
- training PSCOs, who are responsible for inspecting incoming international vessels for compliance with international conventions, and more generally developing the capacity of DGST’s training college (BPPTL) to provide training to the maritime industry;
- implementation of E-broadcast and SARMAP in BASARNAS to aid rescue coordination and planning;
- training in mountainous flying and in wildlife hazard management at aerodromes for DGCA; and
- training and professional development of BASARNAS investigators.

The factors that allowed these successes to be achieved are the same as those described in response to Question 3, i.e.

Road crashes are responsible for an extensive and growing level of death and injury amongst the Indonesian population with 37,400 fatalities in 2009 and perhaps ten times this number injured. In economic terms, it is estimated that losses due to road crashes in Indonesia are equal to around 3 percent of Gross Domestic Product. These losses include the cost of healthcare due to injuries resulting from crashes and the loss of income due to death or injury.

The Government of Indonesia is committed to reducing the rate of road fatalities through its involvement in the United Nations Road Safety Decade of Action. Indonesia’s National Plan for Road Safety 2011-2035, in support of this commitment, was formulated on the basis of the mandate in Article 203 of Law Number 22 of 2009. This law also requires the implementation of a safety management system for public transport.

The National Plan for Road Safety includes targets to reduce the fatality rate per 100,000 population by 50 percent by 2020 and by 80 percent by 2035.

The ITSAP project to develop a safety management system (SMS) for public transport supports Pillar 1 of the National Plan for Road Safety. It aims to reduce the number of victims in public transport accidents by 80 percent by 2035. The project provides training and mentoring to employees in DGLT to develop a SMS for public transport. On-site assistance to DGLT has been provided by the Centre for Accident Research and Road Safety at the Queensland University of Technology (CARRS-Q). It included a series of workshops that led to DGLT staff developing SMS guidelines for public transport in Indonesia. These workshops were complemented by DGLT staff visits to Australia to understand the features and application of SMS in Australia as input to consideration of the features of a SMS that is appropriate to Indonesia. In addition, DGLT staff were able to obtain literature and other resources to support the ongoing development and improvement of their SMS.

This activity has assisted Indonesia to develop a SMS for public transport that will contribute to improving governance of public transport and reduce the economic and social cost of road crashes.

The involvement of senior staff in Australian agencies has also been important in cementing the relationship by securing commitment from high level staff in their counterpart Indonesian agencies. This has been particularly evident in the case of AMSA sub-programs and has been developed more recently by ASA.

Similarly, the presence of long term staff in Jakarta (currently the ITSAP field project manager and also an AMSA representative in BASARNAS) has provided continuity and frequency of contact that has underpinned other project activities.

3. What were the key milestones of the ITSAP and AMSA SAR programs success?

**Q6. Examples demonstrating key successes and how these were achieved i.e. what enabled these to happen?**

**Answer:** Twenty-five projects were to have been undertaken in the assessment periods, with only two at risk of not being successfully completed and with no serious implementation issues for the remaining activities. Indonesian input to the identification and design of projects, good communications between the staff in Australian and Indonesian agencies and the receptiveness of Indonesian agencies to capacity building and cooperation has been key to the success of the program. Particular successes are discussed below.

The ITSAP program has included 25 specific projects in the assessment periods. Only one of these may not proceed (because CASA has been unable to find suitable experts to
Developing Relationships

“The importance of this approach [involving interaction at all three levels in the agencies] cannot be overstated. The personal relationships and trust that builds over time in crucial to the success of the program” (ATSB)

Changes over the assessment periods are best illustrated by the ability of Indonesian agencies to undertake tasks for which they are responsible. An indirect indication can be obtained by the number of documents setting out new or revised policies or procedures for the agencies, though it is the quality of the implementation of the policies and procedures that leads to improved outcomes. In general, it is challenging to identify evidence of changes that have occurred in the course to date of the 2014/15 financial year, though somewhat easier with regard to the SAR sub-program.

AMSA identifies some of the key changes that have occurred through the SAR sub-program over the period 2012-15 to be:

Introduction of a SAR Act in late 2014. While ITSAP did not have a direct role in developing the Act, it facilitated discussions with Indonesian personnel about the need for and role of such legislation that is in line with international conventions.

The capacity to use communications and coordination tools to plan extensive operations and to develop overarching plans for major operations. BASARNAS has developed the capacity to plan actions needed in the event of an emergency and to implement them when needed, including the use of technical tools such as SARMAP and eBroadcast provided through ITSAP. The crash of an AirAsia flight in December 2014 illustrated this capacity (see Box 2), where the agency was able, with the support of the SAR Act, to draw on and manage the use of a large range of resources. BASARNAS has developed Standard Operating Practices for a range of activities, including bringing in foreign assets without impediments that have been present in the past.

Learning from experience and exposure to major incident management. BASARNAS has learned from the past experience of other agencies with incidents, for example the experience with the loss of flight MH370. It has also drawn on the experience of its staff who, in the course of placements in Australia, were exposed first hand to Australia’s management of major incidents. From the experience with MH370, BASARNAS directly observed the importance of establishing clear lines of communication, a single, central source of information on progress with SAR activities, the provision of information to the public and the need to prepare for continuous high tempo operations. This was cited as a contributing factor to the successful response to the crash of an AirAsia flight in December 2014.

A measure of the respect of BASARNAS for the support it has received from Australia is illustrated by its invitation to AMSA to join its delegation as an observer to the ASEAN SAR Forum.

In the course of the 2014/15 financial year, evidence for changes in other parts of the ITSAP program that have been embedded into policy and practice are:

NTSC. The capacity that has been developed in NTSC over time is illustrated by its investigation of the AirAsia crash (see Box 2). In addition 11 investigation Policy and Procedures manuals have been updated and new Policies and Procedures developed to guide the conduct of Short Investigations and for discontinuing investigations when appropriate.

AirNav Indonesia. Complementing the initiatives described in Box 4, ASA has provided comments on 11 revised and new Standard Operating Procedures and other documents and has continued to provide advice on the implementation of new technology and on other technical and administrative matters. ASA advice on improvements in air traffic control practices in Indonesian control centres has been adopted, leading to the use of more standardised procedures.

DGCA. As indicated in the case study in Box 3, CASA’s continuing support to DGCA has included the provision of advice on updated regulations, including a Decree on Enforcement and initial steps to transition from an aeronautical information service to aeronautical information management as required by ICAO and associated regulations, and more generally to regulate AirNav Indonesia.
DGST. In addition to improved enforcement of lifesaving devices described in Box 5, AMSA’s assistance to DGST has resulted in the preparation of enhanced regulations to support implementation of Law No. 17/2008 concerning shipping and the development of standard operating procedures for vessel traffic services, with some 15 or so documents that set out new/revised policy and procedures prepared.

Technical support provided under the land transport program has yet to find its way into practice, though it is expected that a public transport SMS in particular will eventually be adopted because it is required by law.

More generally, ITSAP has over its life had a significant influence on institutional arrangements and practices. This is particularly evident in the aviation sector where Indonesia has, after considering a range of options, adopted the Australian model of a government agency as the aviation sector regulator and a separate, corporatized air navigation agency. In turn, Indonesia has been able to gain insights from the Australian experience with the planning and implementation of such agencies, and also from its legislation and other policies and practices.

4. How well were the ITSAP and AMSA SAR programs managed and what are the key lessons learned?

Q8. How were priorities for the programs set?
Answer: Initiatives were identified as priority needs by Indonesian partners and projects developed jointly with Australian agencies. The allocation of funding between sub-programs in the evaluation period has been largely based on the relative emphasis given in prior stages.

Projects in each sub-program were proposed by Indonesian agencies as part of joint discussions with their respective Australian partner agency. They thus represent the priority needs of the Indonesian agency that fit within the intent of the ITSAP program.

In the assessment periods for the current Review the allocation of total funding between the ITSAP sub-programs has been based on the share of funding received in prior phases of the program, other than the additional allocation of $1.0 million that was specifically provided for the enhanced SAR sub-program.

Q9. Was the expenditure to budget?
Answer: Expenditures have generally been in line with budgets, with exceptions in the SAR sub-program attributed to the effect of political issues on the program.

Budgets for each project in the evaluation periods considered in the current Review are shown in Table 6 together with actual expenditures for past financial years in the case of the SAR sub-program and estimated likely expenditure for the current financial year for the other sub-programs.

In the case of the SAR program, expenditure in FY2013 was more than budgeted due to higher than expected in-country set up costs. Expenditure was substantially less in the following year when the sub-program was interrupted due to political issues between the Australian and Indonesian Governments. Budgeted expenditures are likely to be close to fully expended in FY2015 for all of the sub-programs other than the CASA and ASA sub-programs. Variations have sometimes occurred due to funds and activities being carried over from previous years.

Q10. How was flexibility built into the application of systems and processes?
Answer: Flexibility has been addressed through measures such as annual reviews of programs, reallocation of resources and refining of project activities, and re-scheduling of activities to accommodate agency and staffing needs.

Within the overall budget constraint for the ITSAP program, allowance has been made for annual expenditures to be modified to meet the needs of individual projects. There have been few fundamental changes to individual projects, with the most significant being when a project such as CASA 13 has not been able to proceed because of an inability to find a suitable person to undertake the assignment. Otherwise, changes have primarily related to amended schedules to accommodate the availability of staff in Australian and Indonesian agencies and to small changes in the scope of activities.

Q11. How was program progress monitored and reported?
Answer: An appropriate set of documents are used to report on program progress, though monitoring has focussed on expenditure and activities for each project rather than outcomes. Routine reporting is onerous to prepare and interpret, and has been conducted only intermittently.

As set out in Infrastructure (2014), progress of the overall program and its components has been monitored using the following:

- A Monthly Report that provides a description of activities that have been undertaken, the budget for the current financial year and actual expenditure in the month. In practice, this report has been prepared only periodically. The latest report covers the period July 2014 to March 2015 (though only limited activities were undertaken between July and September whilst budget and program activities were being revised).
- Progress Reports on projects are prepared for meetings of the Project Review Group, which have generally occurred twice each year.
- Participant evaluation reports prepared at the end of each training course.
- Project completion reports prepared at the end of each project and which assess the performance of the project.
- Financial acquittals, which are prepared on a quarterly basis and at the end of each project.
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<th>Sector and Project</th>
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<th>Expenditure ($’000) FY2014</th>
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<tr>
<td>Improved efficiency of the Indonesian BASARNAS SAR system</td>
<td>176</td>
<td>729</td>
<td>578</td>
</tr>
<tr>
<td>Improved understanding of the Australian SAR system and arrangements</td>
<td>40</td>
<td>303</td>
<td>142</td>
</tr>
<tr>
<td>An understanding of how BASARNAS SAR operations might be improved through adoption of new procedures and systems</td>
<td>24</td>
<td>116</td>
<td>85</td>
</tr>
<tr>
<td>Increased BASARNAS capacity to coordinate search and rescue within the Indonesian SAR region</td>
<td>55</td>
<td>251</td>
<td>350</td>
</tr>
<tr>
<td>Increased capacity to communicate with merchant vessels via satellite broadcasts</td>
<td>256</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Enhanced Indonesian SAR capability through development of a whole-of-government approach to the SAR system</td>
<td>12</td>
<td>64</td>
<td>90</td>
</tr>
<tr>
<td>Enhanced understanding of SAR system components and function</td>
<td>47</td>
<td>844</td>
<td>255</td>
</tr>
<tr>
<td>Sub-Total (SAR)</td>
<td>610</td>
<td>2,307</td>
<td>1,500</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5,328</td>
<td></td>
</tr>
</tbody>
</table>

(1) Financial year ending in the year shown.
(2) Estimated expenditure for full financial year. Actual for July 2014 to April 2015 shown for ASA and ATSB.

Source: Australian Government agencies.

Table 6: Budget and Expected Outturn Expenditures for the Evaluation periods
An example of a change that previously occurred was in the ASA sub-support and technical advice. During the mid-term review for all ITSAP management, review documentation and procedures, provide peer taskforce team under a series of workshops to discuss issues 12 month project. The primary focus of the activity was supporting the program. The ADS-B Implementation activity was originally scoped as a Engagement Plans that were prepared for each sub-program.

Risks associated with projects have been identified in Engagement Plans that were prepared for each sub-program, including:

- budget reviews;
- continuous review of project activities;
- reviewing feedback forms, and testing results where undertaken, for training programs;
- drawing on the findings in project completion reports;
- use of statistics in the few instances where data is available (e.g. the number of airspace boundary occurrences); and
- use of external assessments such as those conducted by ICAO and the IMO.

These monitoring activities have been used to refine project activities, though the precise extent to which each was applied is unclear. No issues of such substance that they needed a significant remedial action were identified during the evaluation periods for the current review.

Q12. How was risk monitored and managed?

Answer: Australian agencies, through ongoing communications with their respective Indonesian partners and situational awareness, have identified risks and sought to mitigate them. Risks have mainly related to the availability of staff and tailoring activities to maximise their effectiveness.

In them, consideration was given to potential risks, existing controls, the likelihood of each risk occurring and the consequences if it should. An overall risk rating was determined. The risk ratings have typically been either low or medium, with only the occasional outcome considered to have a high risk of failure. The latter includes matters such as trying to develop a stronger safety culture in Indonesian organisations and seeking to change the overall approach of the organisations to their functions. Risk mitigation measures have also been identified in the Engagement Plans.

Australian agencies have responded to risks that have been within their direct capacity to address. These have included actions such as:

- scheduling activities to suit the availability of staff in both Australian and Indonesian agencies;
- tailoring Australian experience so that it is relevant to Indonesian circumstances (covering both cultural and institutional matters);
- selecting Australian personnel who are willing to participate in projects and who are judged to be able to work well in Indonesia;
- selecting Indonesian staff who are the best candidates to benefit from training programs, and sometimes implementing testing of participants in them;
- training Indonesian trainers to improve the sustainability of training activities; and
- providing structured support and oversight to Indonesian staff during placements in Australian agencies.

This is a practical approach and recognises that risks can be managed solely to the extent that they are under the control of agencies. While it does not necessarily directly address all of the risks identified in the Engagement Plans, the measures indirectly address some of the more challenging risks of promoting attitudinal and institutional change by seeking to maximise the relevance and potential impact of projects.

The key means for monitoring risk has been continuous engagement with Indonesian counterpart staff and checking the design of project activities.

Q13. How were relationships managed?

Answer: Relationships between staff in the corresponding agencies have been managed well through continuous and responsive communications over the duration of ITSAP. This has allowed accessible and collegiate relations to be established.

The means used by the Australian agencies to foster and manage the relationships with their corresponding Indonesian partners have included:
Three sub-programs have included training of Indonesian staff, ensuring continuous and productive interactions between Australian and Indonesian staff, having respected Australian staff located in Indonesia and frequent visits by Australian staff to Indonesia, providing high quality Australian staff to establish technical credibility, arranging focussed trips by Indonesian staff to Australia, delivering planned activities, responding where possible to requests for assistance from Indonesian partner agencies, and providing online support to staff in Indonesian agencies.

These actions have, over the period of ITSAP, resulted in accessible and collegiate relations between the corresponding agencies that have also been able to transcend changes in personnel and other disruptions to sub-programs. In the case of the SAR sub-program, the location of a person in Indonesia has been vital to the success of the relationship. In the case of the other sub-programs, activities in the 2014/15 financial year have been oriented to sustaining and reinforcing the relationships established in previous phases of the ITSAP program.

Q14. What key lessons were learned about the delivery approaches?

Answer: A range of delivery approaches have been used in ITSAP. The key lesson is to tailor the delivery method to the particular task. A number of more specific lessons are also identified.

A large number of delivery approaches have been used in ITSAP. When asked for the most useful approaches, the Australian agencies involved indicated between them that almost all had been so, though with some qualifications. From their responses, the following are distilled:

Different group arrangements have their specific roles. Large group workshops have worked well for general dissemination of information (e.g. safety promotion), while small groups are better for training because they allow more interaction and involvement. Middle-size workshops attended by stakeholder groups have also been effective as a means for securing practical deliverables that can then be implemented by Indonesian agency staff.

Training programs can be enhanced to improve outcomes. Five particular matters are noted:

- Three sub-programs have included training of Indonesian staff who are then able to subsequently duplicate the training programs. This is vital where the knowledge and understanding being developed eventually need to be replicated across Indonesia, such as in the maritime sector.
- Even in cases where more limited scope of training is needed, asking Indonesian staff who have participated in one training program to replicate it with support from the original presenters is a useful way to test the effectiveness of knowledge transfer that was achieved in the first instance.
- Testing of training participants at the end of training programs is a means for instilling more discipline and feedback on the effectiveness of the training.
- Involving industry and related government institutions in training programs can be valuable because it broadens perspectives and cross-fertilises ideas in agencies that are sometimes insular.
- The content of training and capacity building programs is important, with the best outcomes being achieved where the content includes practical measures that participants need to put into practice, i.e. when there is a clear and practical purpose to the training.

Other complementary approaches in addition to training have supported the development of staff capacity. Matters include:

- In addition to formal training, on-the-job training has been central to most programs. This has been achieved by deploying Australian staff in Indonesian agencies and having Indonesian staff placed in Australian agencies. There is some debate about the ideal time for the deployment of Australian staff in Indonesia, with observations that there can be diminishing returns after around a week of input but also a preference for medium-term placements. It is generally better for small groups of Indonesian staff to be placed in Australian agencies, with a group of two or three better than a single person to allow ideas to be shared out of work hours between the staff and to avoid the sense of isolation that a single Indonesian staff member can sometimes feel.
- Joint work between Australian and Indonesian staff in Indonesia has been important for the development of standards, guidelines, plans and other similar outputs.
- Involvement of Indonesian staff in regional meetings and conferences has provided them with a broader perspective to their work and access to new resources.
- Mentoring has played a role by providing Indonesian staff with access to relevant people in Australia so that they can seek assistance as and when required.
- Programs have been most successful when the staff of Australian agencies have provided the assistance, rather than consultants, to ensure the most relevant practical experience is passed on.

Indonesian agencies have found study visits, workshops and technical support and training in particular to be useful. Other matters mentioned by Indonesian agencies include joint SAR activities and drawing on Australian expertise. These and other matters raised during discussions reflect a desire to be exposed to new ways of undertaking the activities for which they are responsible, to jointly work with Australian advisors and to have access to improved technical understanding.
Section 3: Findings and Recommendations

The Review finds ITSAP to be strategically relevant, to have been effective, and to have had a positive impact though with some sub-programs being more sustainable than others. The program is judged to be well-conceived, but inevitably there are opportunities to further refine it, especially if funding is constrained.

This section draws out findings from an assessment of the ITSAP program with regard to criteria conventionally used for official development assistance projects. The findings also draw on the responses to the questions in the previous section. The second part to the section describes recommendations that are based on the findings.

3.1 Findings

The Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD) identifies five criteria for the appraisal of aid projects. The criteria are also set out in in DIRD (2013:10-11). These are considered below:

**Strategic Relevance/Appropriateness**

Strategic relevance considers the extent to which the ITSAP program conforms to the needs, priorities and policies of the Governments of Indonesia and Australia. Complementing the discussion in the previous section on Question 1, it is noted that:

- **Transport safety in Indonesia is a serious concern for Indonesia and Australia.** More than 37,000 people died in road crashes in Indonesia in 2009. In addition, other people die in aviation and maritime transport accidents. Some of those who die or are injured will be Australian.
- **ITSAP serves purposes that are important to the Government of Indonesia.** The goal of ITSAP of improved transport safety in Indonesia and the associated purpose (see Section 1.1) are fully consistent with Indonesian Government objectives, in particular a desire to: (i) reduce the high rate of death and injury associated with all modes of transport; and (ii) meet international conventions that are related to transport safety.
- **ITSAP facilitates cooperation on operational matters that involve both Australia and Indonesia.** Australia and Indonesia share a long air navigation boundary which involves cooperation between the countries to manage the movement of aircraft across the boundary. In addition, Indonesia and Australia work together on occasions in a manner that is mutually beneficial in search and rescue operations, on the analysis of information from aircraft and vessel recorders and on the movement of own-flagged vessels in the waters of the other country. Having good links between equivalent government agencies of each country supports these operational activities.
- **ITSAP serves the broader goals of the Australian Government.** By enhancing the capacity of the Indonesian Government to improve transport safety, ITSAP meets the goals of Australia’s aid program by indirectly promoting growth and reducing poverty, pursuing Australia’s national interest and extending Australia’s influence. As described elsewhere, Indonesia has adopted the Australian air traffic management model and Australia is a trusted source of advice on matters addressed in the program.

**Effectiveness**

Effectiveness is the extent to which the ITSAP program is attaining its objectives, taking their relative importance into account.

- **It is difficult to precisely establish the extent to which the objectives of the program have been achieved.** It is impractical to expect that a modest size program such as ITSAP will, over the evaluation periods considered in the current Review, lead to a measurable change to the goal of improved safety in Indonesia (which might, for example, be best measured by a decline in the number of transport-related deaths). The objective of assisting Indonesia to regulate and promote transport safety in accordance with applicable international standards and contemporary safety management practices and the outcomes set in the engagement plan for sub-program provide more tangible targets. However, no data for objective measures for these has been presented in project completion reports, and hence it is not possible to definitively establish the extent of any change. Notwithstanding these limitations, it is evident that there has been a general improvement, as discussed in the next two items.

- **ITSAP has resulted in changes that should improve transport safety in Indonesia.** Acknowledging the constraints indicated in the previous item, the Review considers that significant change has occurred over the term of the program that will contribute to the objectives being met. Four of particular note are: (i) ITSAP has influenced institutional reform in the management of aviation in Indonesia (with the separation of regulatory and operational responsibility for air navigation in Indonesia following the Australian model), and has provided ongoing support to the operator (AirNav Indonesia) and to the...
encourage open discussion and collaborative decision-making. At the number of participants at PRG meetings and revise the format to 10 The 2010 Review (see Appendix D) also recommended that the agencies for other sub-programs cannot be seen in isolation from previously no comprehensive regulatory regime – this is an essential requirement to securing improved shipping safety in Indonesia; (iii) ITSAP has supported improved management of international shipping, with the number of reports under the Tokyo Memorandum of Understanding on Port State Control in the Asia-Pacific Region reported to have declined over the duration of the program; and (iv) ITSAP has provided drift modelling, communications and ship location services and capacity building that have substantially improved the ability of BASARNAS to conduct search and rescue activities and has supported the capacity of NTSC to conduct and report investigations of transport incidents, some of which need to be done to international standards. A range of other activities have been undertaken that will also contribute to improved safety. Over time, it should be possible to use audits conducted by ICAO and the IMO to objectively establish improvements in safety management.

Recent achievements have succeeded because of past activities. The achievements during the last three years for the SAR program and in the current financial year to date for other sub-programs cannot be seen in isolation from prior activities. Rather, they have depended on the experience, lessons learned, relationships and other building blocks put in place in the earlier work. As examples of the last of these: (i) the development of regulations to support the management of air navigation by DGCA built on the prior work to support the establishment of AirNav Indonesia and the redefining of DGCA’s role in the aviation sector; and (ii) building the capacity of inspectors to enforce safety regulations for non-convention vessels depended on the earlier work to develop the regulations.

ITSAP has mostly involved peer-to-peer cooperation. ITSAP is a relatively unique aid program in that it mostly involves the staff in Australian Government agencies working with their peers in Indonesian Government agencies. The result is that the Australian staff providing assistance in Indonesia have full knowledge of the technical tasks that need to be performed. ITSAP has placed emphasis on recognition of cultural and other differences between the two countries. With this understanding, Australian staff are well placed to provide pertinent and appropriate advice to their Indonesian colleagues. This has allowed mentoring, training and workshops to be focussed and practical rather than being general in nature.

Continuing and sensitive communications and joint activities have resulted in good relationships between agencies. These relations have been developed over the course of the ITSAP program. They have been essential to supporting the work of the program and also to developing the links that support operational activities that involve both Australian and Indonesian agencies.

Efficiency
The efficiency criterion considers the outputs of the ITSAP program relative to the costs it has incurred. The TOR for the current Review does not require this issue to be addressed. Accordingly, only a few observations are made.

- There is no available information to benchmark the program, and it would in any event be difficult to benchmark. The ITSAP program is different to many aid activities in that it involves the use of government staff to primarily provide technical advice and capacity building. This means that a benchmark such as the cost of preparing an infrastructure project relative to the capital cost of the project cannot be used. In addition, it is difficult to easily and accurately determine the full cost of using government staff on a comparable basis with private sector advisors. Hence it is not possible to draw conclusions on the efficiency of the program relative to others that involve private contractors.

- Staffing pressures in Australian agencies will encourage their management to ensure that staff resources are used efficiently. The Australian agencies involved report that it is not always easy to release staff from their usual duties to undertake ITSAP activities. This should act as a natural means to ensure that staff undertake their work for ITSAP as efficiently as possible.

- The program uses considerable travel resources. Between June 2013 and October 2014, Australian staff made 50 visits to Indonesia and spent an average of 4.8 nights in Indonesia per trip. Given six sub-programs and an overview function, this is equal to around one trip per group of activities every two months, which is judged to not be unreasonable for a program that has sought to develop relationships between organisations as well as undertake technical activities. It seems likely that the average time per trip is short by comparison with most aid projects. While time pressure can be assumed to have resulted in staff staying in Indonesia for the minimum time needed to fulfil their task, it would still be worth considering if activities could be structured to involve fewer but longer trips. Finally, thirteen Australians from five agencies travelled to Indonesia for the meeting of the Project Review Group (PRG) in October 2014. Such a meeting is a good occasion to maintain close links with Indonesian partners and the people involved also undertook other program activities in addition to the meeting. However, there is still merit in considering if there are opportunities to achieve greater efficiency in the amount of travel that is required for such events.¹⁰

¹⁰ The 2010 Review (see Appendix D) also recommended that the number of participants at PRG meetings and revise the format to encourage open discussion and collaborative decision-making. At the time, Infrastructure considered it was not possible to reduce the number of participants.
Impact

The impact criterion identifies positive and negative changes that result from ITSAP, covering direct and indirect effects and intended and unintended effects. These have been addressed in detail elsewhere in the report (see Table 3 for a summary) and also in the discussion above with regard to Effectiveness. In aggregate, it is concluded that:

> The ITSAP program has had a positive impact, with increased capacity demonstrated in partner Indonesian agencies. As examples: (i) NTSC has the facilities and competence to extract and use data from most transport recorders and has shown its capacity to conduct and report on an investigation of the AirAsia crash; (ii) DGCA has improved regulations for air traffic management and is promoting safer aerodrome and flying practices; (iii) the newly created AirNav Indonesia has improved its air traffic control practices and is making progress with establishing its corporate systems; (iv) DGLT has been able to develop a sounder public transport safety management system than would otherwise have been the case and has an improved understanding of road safety improvement planning; (v) DGST has begun to promote some safety matters related to non-convention vessels as a prelude to enforcement and now has the capacity for vessel traffic services, and one of its training institutes has a greater capacity to deliver courses; and (vi) BASARNAS has shown its capacity for improved SAR activities with its management of the AirAsia crash. There are no known unintended effects of the program.

Sustainability

Sustainability measures whether the benefits of the ITSAP program are likely to continue after donor funding has been withdrawn.

> The sustainability of the ITSAP program is likely to be high, though it will vary between sub-programs. It is judged that the operational agencies in Indonesia have displayed the greatest capacity to develop their competence and there are good prospects for the agencies to sustain and build on the progress that they have made. Of the government departments DGST seems to have been able to implement activities that should have a lasting impact, with DGCA in greater need of support for the program to continue to have a strong long term impact. The small size of the land transport sub-program and the substantial challenges for activities in the sector are likely to test its sustainability.

3.2 Recommendations

The following observations and associated recommendations for future ITSAP activities are made.

Program features

> The concept for the program is well conceived. The triple objectives inherent to the current program (i.e. supporting improved transport safety in Indonesia, facilitating coordination of operational activities that involve both Australia and Indonesia and meeting other needs of Australia) are sound, noting that the current program is more oriented to serving the first two of these objectives.

**Recommendation 1.** The ITSAP program provides significant benefits and there is no need to fundamentally change the concept if it is continued.

> The focus of program activities could be sharpened, especially if funding is constrained. More emphasis on the last of the objectives described above would lead to a greater focus on those areas where the safety of Australians in Indonesia is most at risk rather than safety in Indonesia more generally. The extent to which this should occur depends on three factors: (i) there is value in engagement between corresponding agencies in the two countries to support operational matters that routinely or occasionally involve participation by both and there is merit in this being the highest priority for the program; (ii) support for safety in Indonesia more generally will foster its economic and social development and should be supported if funding is available; and (iii) if funding is constrained, emphasis could be given instead to projects with activities in localities where Australians are most at risk and projects that support operational matters that routinely or occasionally involve participation by both Indonesia and Australia.

**Recommendation 2.** If funding is constrained, emphasis should be given to projects that support operational matters that routinely or occasionally involve participation by both Indonesia and Australia and to projects with activities in localities in Indonesia where Australians are most at risk.

Sub-programs features

> Sub-programs could be made more strategic. The current ASA sub-program is based on four themes, but this thematic approach is not always as clear in the other sub-programs. Similarly, projects often are technical task oriented (e.g. training or preparation of documents) rather than outcome oriented. In some cases, the same task has been given a new project number in subsequent stages to the ITSAP program, reinforcing an impression of a number of isolated activities rather than being elements of a longer term strategy. Finally, a risk with technical task oriented projects is that it is easiest to assess them by simply measuring the outputs delivered. By contrast, a stronger outcome focus can be achieved by identifying the key themes to the sub-programs, measurable objectives for each theme and projects that will enable the objectives to be met. The alternative is, with a technical task oriented approach, to also find a means to describe the underlying themes to the sub-program11. It is conceivable that a sub-program could have no strategic theme, but rather simply a set of activities then identified how this is to be done under ITSAP and how success is to be measured.

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11 As an example, the AMSA sub-program includes a non-convention vessel standards project, with activities associated with the standards also included in two other current projects. An alternative approach is to have a single project to improve non-conventional vessel standards with...
comprise un-related, ad hoc activities that respond to needs identified by the involved agencies; this is not unreasonable, but it should be made clear in the sub-program design that this is the case.

**Recommendation 3.** There is a need for a stronger thematic approach to sub-programs to give them more coherence and to make them more outcome oriented.

- **Aid coordination has not been an issue to date but should be monitored.** ITSAP has been able to build on assistance provided by other donors in the past, such as implementing a vessel traffic system that used tracking stations previously provided by the Government of Japan. To date there are no other reported instances where the programs of other donors have directly related to ITSAP activities. There is a need to maintain an overview of the activities of other donors that may be related to ITSAP to ensure there is no overlap and that activities are coordinated where related activities occur.

**Recommendation 4.** An overview of the activities of other donors that may be related to ITSAP should be maintained to ensure coordination and complementarity are achieved where necessary.

**Project features**

- **Increased emphasis should be given to efficiency in the design of projects and implementation of the program.** The current Review has not addressed in detail the cost-effectiveness of the ITSAP program. However, it notes that the Project Proposal template set out in DIRD (2014:26-30) does not include the criterion of Efficiency (i.e. is the project being done in the most cost-effective manner). Explicit consideration of this issue would demonstrate that projects are being implemented as efficiently as possible. The same approach should be taken with regard to the management of the ITSAP program.

**Recommendation 5.** Explicit consideration should be given to efficiency in project design to demonstrate that projects are as cost-effective as possible.

- **Lessons can be learned from past ITSAP activities.** As indicated in the responses to Questions 3 and 14 and in other places in this report, the experience with ITSAP to date provides lessons that can be used to enhance future activities.

**Recommendation 6.** Lessons learned from past ITSAP projects should be built into future projects.

**Relationships**

- **The future challenge is to sustain the relationships that have been established.** Australian agencies have developed good relationships with staff in Indonesian partner agencies. This has required a long elapsed period and other resources. Maintaining the relationships already developed is desirable as a break in the relationships would require considerable time and other resources to redevelop. A challenge is to identify if there are ways in which the cost of doing this can be minimised. The relationships are most important in cases where there are operational matters that routinely or occasionally involve participation by both Indonesian and Australian agencies.

**Recommendation 7.** The relationships developed to date should be sustained and reinforced to further develop the technical capacity of Indonesian agencies and to support Australia’s interests.

**Program assessment and oversight**

- **The monitoring and evaluation framework needs further development.** No completion reports have yet been prepared for the projects that have been underway during the evaluation periods that could provide data on their performance. More generally, the current Review has found few tangible outcome-oriented performance measures for the sub-programs being assessed against which progress could be objectively determined. Where a potential measure is available, there is no benchmark data for the beginning of the projects. A review of prior evaluation reports and engagement plans indicates the primary bases for the level of achievement have been matters such as: course evaluation forms; observations of improved performance; improved compliance with international standards; and an improved ability to perform specified activities. In many cases, the level of achievement has simply been a description of the work that was undertaken. The understandable reluctance of Australian agencies to be seen to be judging the performance of their Indonesian counterpart agencies and a disinclination of Indonesian agencies to critical appraisal contributes to this matter. Moreover, it is often difficult to find objective measures that can also be determined at the beginning and end of the project. Even so, some improvements should be possible, for example:
  - testing could be used more extensively at the end of training courses;
  - course participants could be re-surveyed say 6 months after courses and workshops to determine the extent to which they improved the capacity of the participants to do their work (and if, indeed, they are still doing a job for which the course or workshop is relevant);
  - external measures of performance such as ICAO and IMO assessments could be used as bases against which performance may be assessed (even if only by judgement);
  - practical outputs of activities should be followed up, for example to establish if road safety remediation schemes prepared with ITSAP funding have been implemented and if regulations regarding safety equipment on vessels have been fully implemented and enforced; and
ensuring Australian participants record achievement with regard to outcomes rather than outputs/activities, and to be explicit as possible where reporting judgements on achievements.

**Recommendation 8.** The monitoring and evaluation framework for the program should be developed to more explicitly record and report the achievements of projects.

PRG meetings are large, formal and costly. PRG involves a large group of people from a range of agencies. Inherent to this arrangement is a high level of formality. There appears to be little inherent reason for detailed review of sub-program activities twice each year by such a group, especially when each sub-program is, for the most part, independent of other sub-programs. A small steering committee involving a representative from each Indonesian agency and the Australian core management team should be sufficient to address general progress, exception issues and concerns, overarching policy issues and future direction. Correspondingly, there could be formal annual progress meetings for each sub-program: in addition to discussing matters at a more specific manner, such meetings would reinforce the partnership between the two agencies involved in each sub-program.

**Recommendation 9:** Consideration should be given to reducing the role and scale of the Project Review Group in favour of more formal coordination at the sub-program level.