

# AUSTRALIAN FUTURE SUBMARINE PROGRAM

## AUSTRALIAN INDUSTRY CAPABILITY PLAN

### Final Version for Approval

This document contains both Background IP & Foreground IP



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**DCNS**

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## Approval

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## Revision Index

| Revision | Date | Revision Content |
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## 1 Purpose and Scope of the Document

### 1.1 Purpose of the Document

The Australian Industry Capability Plan (AICP) provides the Contractor's plans, procedures and responsibilities for the management of AIC for the duration of the Future Submarine Program (FSP) which includes the Contract.

The Contractor uses the AICP to manage, coordinate and monitor the delivery of the AIC program.

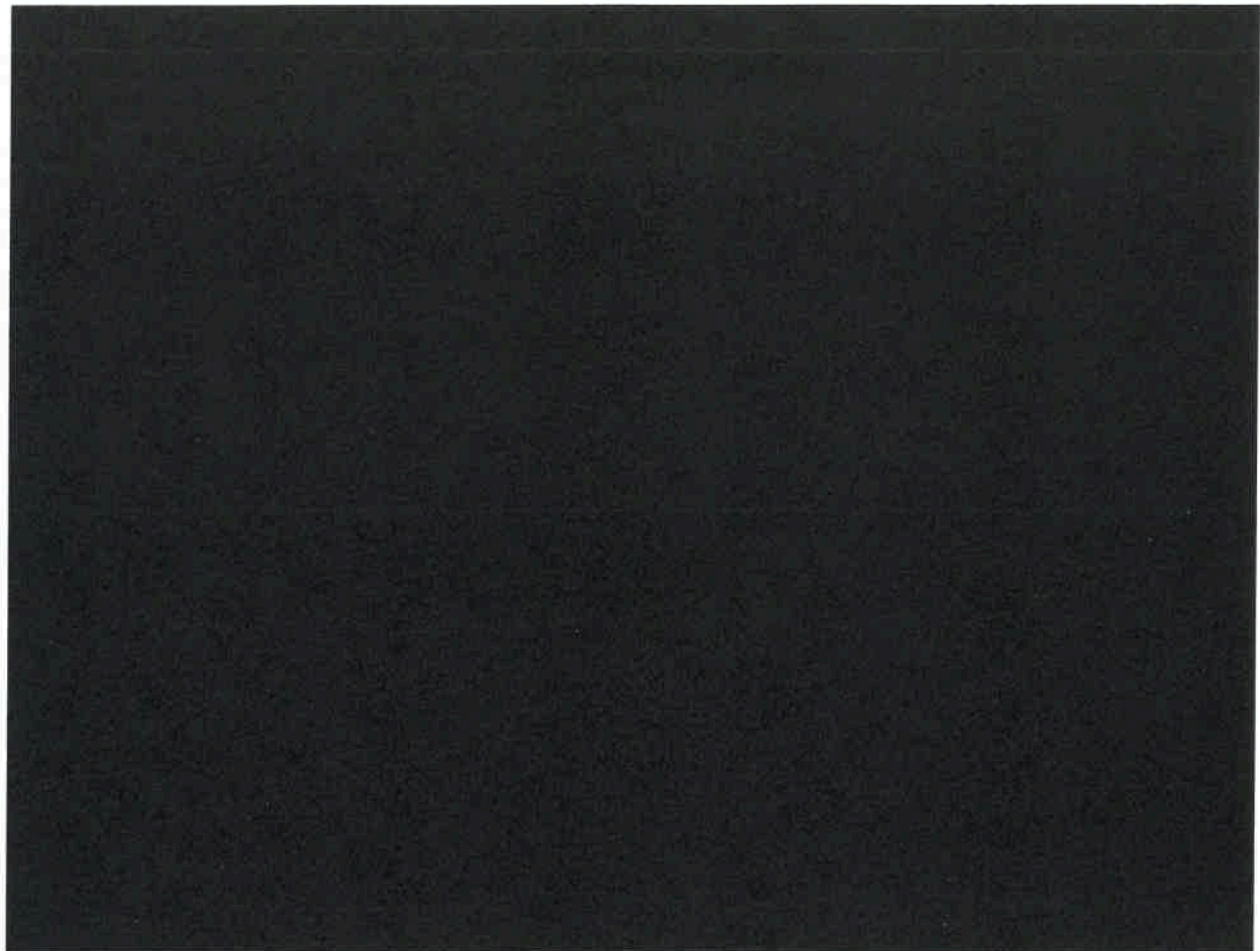
The Commonwealth uses the AICP to:

- evaluate the performance and progress of the Australian Industry Capability (AIC) program; and
- identify the Commonwealth's involvement in the AIC program.

### 1.2 Background

Submarines are one of the most complex, sensitive and costly Defence capability acquisition Governments can make. Their strategic importance to Australia as a critical element in national maritime security planning demands the most effective submarine capability to support national maritime security objectives.

The FSP will be defined by a capability design, construction and sustainment challenge of unprecedented scale and complexity, and will span decades. It will involve Federal and State Governments, Defence, industry and universities and Australia's international partners – working together for generations to come.



### 1.2.1 Design and Mobilisation Contract

The DMC has been established to mobilise the FSP and commence initial design activities. The mobilisation activities include:

- finalising the enabling agreements with the French Government, the CoA and Lockheed Martin Australia Pty Ltd (LMA);
- development of the fundamental principles and strategies to be applied to the design of the FSM;
- development of the management plans required for the execution of the FSP, including AIC, and transfer of technology; and
- commencement of Design Studies [REDACTED].

The DMC has been structured with successive steps:

- **Step 1:** Early Mobilisation and Preliminary Design Studies of six months duration;
- **Step 2:** [REDACTED] expected to commence on completion of Step 1 [REDACTED]; and
- **Step 3:** [REDACTED] will only commence after Step 2 if the Design Contract is not signed.

DCNS is committed to identifying the maximum number of opportunities for Australian industry in the FSP that create value for the Program – value that includes industrial benefits without creating additional costs or risks.

The DMC has a number of streams of activity. In the context of Australian industry the principal activities occur in Stream 5 which consists of the following:

- **Stream 5.1:** the development of an AICP for the FSP;
- **Stream 5.2:** development of a Program Procurement Plan (PPP) that encompasses the supply chain activities and methodology to support the FSP;
- **Stream 5.3:** a completed study on the development of the Australian Build Approach for the construction of the FSMs; and
- **Stream 5.4:** a study during Step 1 into the availability and economic viability of Australian manufactured hull steel equivalent to that normally used by DCNS and a plan for development of the Australian capability for manufacture of steel in Australia that meets the DCNS' and the CoA's requirements for use in the FSM.

### 1.2.2 Stream 5.1 Australian Industry Capability Plan

This AICP seeks to maximise the involvement of Australian industry without unduly compromising capability, cost, schedule or risk in all phases of the Program. It aims to deliver a sovereign capability to operate and sustain the FSM. The AICP describes how DCNS will identify, engage and assess the capability of Australian industry, including the selection and qualification of key strategic and other suppliers to deliver a sovereign submarine capability.

The AICP also describes the approach to most effectively manage the security requirements associated with current and future sensitive submarine capability data, as it may be derived through research collaboration arrangements with civil research agencies or other non-Commonwealth research entities.

### 1.2.3 Stream 5.2 Procurement Activities

Procurement activities will be conducted to prepare the selection and qualification of subcontractors or suppliers for the provision of key equipment, material, technologies and services, especially those which are critical to the preliminary design phases of the FSP. This will include the identification of the key systems and equipment, and the potential suppliers of those systems and equipment that are critical to preliminary design activity. Procurement strategies will be presented to the CoA for each of the identified key systems or equipment at timing intervals to be agreed with the CoA. Further details of the integration and interaction between the AICP and PPP activities are provided within this document and – in [R2] – PPP.

Initial procurement activities will also cover the scope of standard equipment supply and will include:

- the drafting of Request For Information (RFI) packs in preparation of supplier and product qualification and delivery of the RFIs to proposed suppliers;
- the review of supplier responses to the RFI and engagement with suppliers for response clarifications; and
- the pre-qualification of suppliers.



The PPP describes DCNS methodologies and processes for meeting procurement and supply chain management responsibilities for the FSP. It also describes the approach to engagement with suppliers and subcontractors in support of design related activities, reflecting DCNS Procurement Processes including AIC development, monitoring and control.

#### 1.2.4 Stream 5.3 Development of the Australian Build Study

A study conducted to inform FSP stakeholders of the approach to deliver the Australian build of the FSM. The study includes the assessment of options to manage the delivery of high risk technical elements of the build for the Future Submarine. It also takes into consideration the production workforce training, the availability of production facilities, procurement, supply chain and materiel delivery and how the technology transfer to the Australian program will be achieved. The study also considers the support required by production teams for problem resolution from the design team during the build.

#### 1.2.5 Stream 5.4 Australian Steel Development and Qualification

The Australian Steel Development and Qualification (ASDQ) study, conducted in accordance with [A7], will include a proposal for maximum use of Australian steel. Where no equivalent Australian steel is identified through the study, an assessment of the Australian manufacturing capability will be provided and the relative costs identified to deliver Australian made equivalent steel that meets the qualification requirements of DCNS and the CoA.

During Step 2, DCNS will develop a detailed ASDQ Plan working with a suitable Australian steel provider(s) to deliver equivalent Australian made steel based on the study completed in Step 1.

#### 1.2.6 Stream 7 – Transfer of Technology

To enable the CoA to establish sovereign capability to operate and sustain the FSM capability, DCNS will develop a Transfer of Technology (ToT) program that provides sufficient and appropriate technical data and knowledge transfer, including an understanding of the FSM design intent and basis of design. It will involve a collaborative approach between the CoA and DCNS that ensures the CoA obtains sufficient knowledge of the FSM design to fulfil its legal and regulatory responsibilities for approval and acceptance. The CoA will be actively involved in the DCNS design process with the in-country team of CoA staff in France working with the DCNS team in order to understand the design through each phase.

It includes the ToT to the Australian shipbuilder of the FSM and the nominated sustainment contractor of the FSMs in service, and a transfer of the Design Authority (DA) role to DCNS Australia. The ToT program also includes the transfer of the required technical data, tools and processes, and provides appropriate training, experience and mentoring to develop the skills of the workforce that will sustain the FSM whilst maximising Australian industry involvement.

Stream 7 comprises activities leading to identification, definition and development of the ToT to the CoA. Key activities to be undertaken are:

- **Stream 7.1:** the development of the Transfer of Technology Strategy (TOTS);
- **Stream 7.2:** the development of the ToT Training Plan (TP) (which includes the provision of the first training activities); and
- **Stream 7.3:** the development of the Technical Data Management Plan (TDMP), and the Integrated Product Development and Support Environment (IPDSE).

### 1.2.7 Stream 7.1: Transfer of Technology Strategy

The TOTS will be developed and executed in accordance with the TOTS - [A6] and will detail how DCNS will deliver sovereign capability to the CoA, including the activities which will ensure appropriate ToT to Australian industry. This strategy will incorporate sufficient data, knowledge and understanding of the design to facilitate establishment of the sovereign capability to maintain, operate and modify the FSM in a safe and cost-effective manner.

### 1.2.8 Stream 7.3: Technical Data Management Plan and IPDSE

The compilation of technical data contributes to the CoA's sovereignty in sustaining the FSM. A TDMP - [R7] will describe DCNS strategy, plans, methodology, and processes for the identification, control, update, validation and support of technical data, including identifying the requisite time estimates and dependencies.

The scope and format of the Technical Data Package (TDP) for the FSP will be described in the IPDSE.

## 1.3 Assumptions

The Australian industry component of the FSP will be influenced by the outcomes of a number of related and transverse strategies and plans, as referred to elsewhere in this Plan. The ongoing cognisance of any adjustments made to the assumptions which shape these other documents will be essential, as they may have an impact on the execution of the AICP. These assumptions will therefore be regularly monitored by the Australian Industry Capability Steering Group (AICSG). The AICP is currently shaped by the following assumptions:

- twelve FSM will be built in Australia, one setting to work every 24 months;
- the AICP will need to be amended and updated from time to time as the FSP develops. The involvement of Australian industry will be overseen within the framework of the AICSG;
- the AICSG will manage and oversee the AIC activities within the FSP;
- Australian industry involvement is to be maximised but not to the detriment of cost, schedule or capability;
- the learning curve assumptions for Australian industry are based on assumptions consistent with previous DCNS ToT experience in submarine construction;
- the DA capability will be transferred to DCNS Australia;

- the proposed AIC approach will be enduring throughout the acquisition program and throughout sustainment; and

- schedule assumptions are as per the PMP - [R1] and in the Integrated Master Schedule developed in accordance with the IMS Data Item Description (DID) - [A2].

## 1.4 Referenced Documents

- [R1] DR\_FSP\_DMC\_CDR\_PM-15\_PMP (Project Management Plan for DMC)
- [R2] DR\_FSP\_DMC\_CDR\_PM-33\_PPP (Program Procurement Plan)
- [R3] DR\_FSP\_DMC\_CDR\_PM-09\_RMP (Risk Management Plan)
- [R4] DR\_FSP\_DMC\_CDR\_PM23\_Build, Test & Integration Facilities and Infrastructure (BTIFI) Plan
- [R5] Conditions of Contract - Attachment A - Annex C – Contract Data Requirements List
- [R6] 2016 Defence Industry Policy Statement (DIPS)
- [R7] DR\_FSP\_DMC\_CDR\_ENG-21\_TDMP (Technical Data Management Plan)

## 1.5 Applicable Documents

- [A1] DID-PM-AICP - Australian Industry Capability Plan (AICP);
- [A2] DID-PM-IMS - Integrated Master Schedule (IMS);
- [A3] DID-PM-DAB - Development of the Australian Build (DAB);
- [A4] DID-PM-BS - Build Strategy (BS)
- [A5] DID-PM-CWBS - Contract Work Breakdown Structure (CWBS);
- [A6] DID-PM-TOTS - Transfer of Technology Strategy (TOTS);
- [A7] DID-ENG-ASDQ - Australian Steel Development and Qualification (ASDQ) Options Study;
- [A8] DID-PM-QMP - Quality Management Plan (QMP).

## 1.6 Referencing Principles & Definitions

The following key terms, principles and definitions are used throughout this document.

Table 1. Key Terms

| Key term                                  | Meaning                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Australian Future Submarine Enterprise    | means the collective term for the Commonwealth Submarine Sustainment entity, the Submarine Sustainment Contractor and related industry members.                                                                                                                                                                            |
| Australian Industrial Content             | means the value of an element (work package or equivalent) from an Australian-based company or organisation (i.e. having an Australian Business Number (ABN)) at sale price from that company or organisation less the value of all incorporated imported content at cost to the Australian-based company or organisation. |
| Australian Sustainment Organisation (ASO) | means the organisation operating as a subset of the Future Submarine Enterprise with responsibility for the planning and implementation of sustainment for the Future Submarines.                                                                                                                                          |
| Contract                                  | means the COC, the Attachments including the Statement of Work, and any document expressly incorporated as part of the Contract.                                                                                                                                                                                           |
| Contractor                                | means DCNS.                                                                                                                                                                                                                                                                                                                |

| Key term                         | Meaning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Customer, Commonwealth           | Department of Defence of the Commonwealth of Australia, ABN 68 706 814 312                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Design Authority                 | Authority vested in the submarine designer who commits to designing the submarine in compliance with applicable laws and regulations. As such, the Design Authority validates the passing of technical or industrial milestones and has the exclusive power of applying design modifications to the supplies.                                                                                                                                                                                              |
| Future Submarine or FSM          | means the submarines to be acquired by the Australian Government for service in the Royal Australian Navy under the Future Submarine Program.                                                                                                                                                                                                                                                                                                                                                              |
| Future Submarine Program or FSP  | means the Commonwealth's Future Submarine Program and includes all activities connected with that Program, including all elements of the design, development, build, operation, sustainment and disposal of the Materiel System during its life of type.                                                                                                                                                                                                                                                   |
| Industry Requirements            | means those requirements that contribute to the overall objectives of maximising Australian Industry Involvement without unduly compromising cost, schedule and capability and, in parallel, the achievement of optimum sovereignty in operation and sustainment.                                                                                                                                                                                                                                          |
| Intellectual Property or IP      | means all present and future rights conferred by law in or in relation to any of the following: <ul style="list-style-type: none"> <li>• copyright;</li> <li>• rights in relation to a Circuit Layout, Patent, Registrable Design or Trade Mark (including service marks); or</li> <li>• any other rights resulting from intellectual activity in the industrial, scientific, literary and artistic fields recognised in domestic law anywhere in the world whether registered or unregistered.</li> </ul> |
| Program                          | means the Future Submarine Program or FSP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Sovereign Industrial Capability' | For the purposes of this AIC Plan, 'Sovereign Industrial Capability' as described in the Defence Industry Policy Statement 2016 means those industrial capabilities which are so important to Australian Defence missions that they must be developed or supported by the Australian defence industry because overseas sources do not provide the required security or assurances of supply.                                                                                                               |

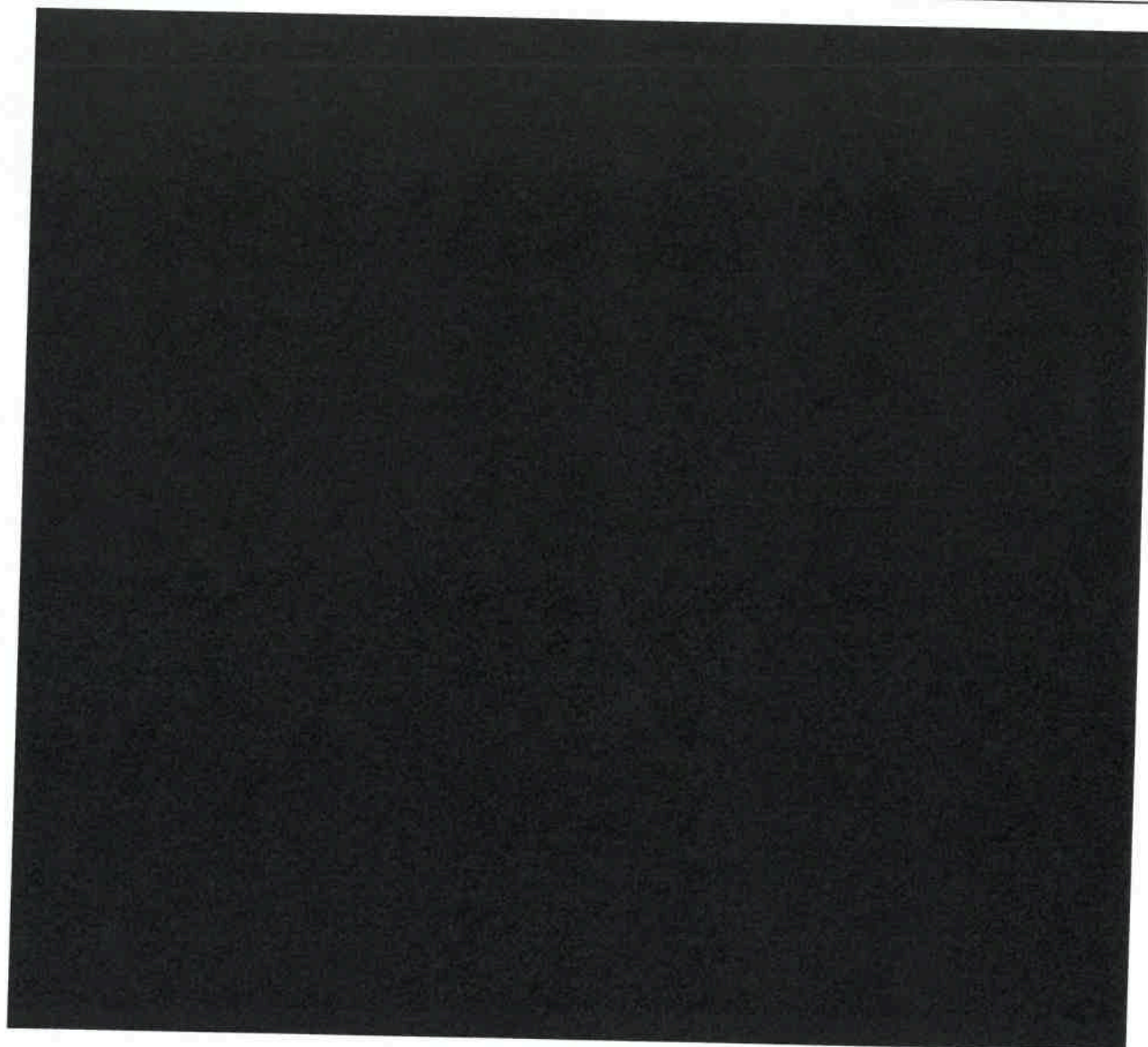


| Key term      | Meaning                                                                                                                            |
|---------------|------------------------------------------------------------------------------------------------------------------------------------|
| Subcontractor | For the purposes of this plan also includes any entity that would be engaged for the build and sustainment of the Future Submarine |

## 1.7 Hierarchy of Plans

The processes for project management for the FSP are described in an integrated set of plans, which direct how work is to be planned, executed, monitored and controlled for the DMC, and as amended for future phases of the FSP. Plans, key communication tool for FSP stakeholders, provide the basis for tracking and measuring FSP progress.

The hierarchy of plans and other documents that underpin the management of the FSP, as required to support the DMC phase is shown in Figure 2. These plans will be delivered, updated and maintained in accordance with [R1] - PMP and [R5]- Conditions of Contract - Attachment A - Annex C – Contract Data Requirements List. The AICP sits within this construct as one of the project management documents.



## 2 Executive Summary

This AICP describes how DCNS intends to develop AIC for the FSP. The Plan addresses the requirements contained in DID-PM-AICP. The transversal nature of AICP activity across the FSP demands broad consultation and collaboration with many Program stakeholders.

This AICP is shaped by DCNS experience in providing a sovereign industrial capability to the French Navy and the 'Direction Générale de l'Armement' (DGA) and calls on previous technology transfer programs to countries such as India, Malaysia, Chile and Brazil in developing a plan which meets the unique requirements of Australia.

In the context of the overall FSP, DCNS will be delivering the FSM capability and associated sovereignty through a transfer of know-how and know-why from France which maximises Australian industry involvement, without unduly compromising cost schedule and capability. Achieving the optimum operational and sustainment sovereignty will require:

- adherence to pragmatic collaborative engagement on capability, cost and schedule issues;
- establishment of AIC in the Build, Test and Integration Facilities and Infrastructure (BTIFI) elements of the program;
- establishment of the industrial capabilities necessary for Australia to operate and sustain the FSM over its life cycle with the maximum Sovereign indigenous support capability in accordance with the Strategic Industrial Capability Assessment Framework (SICAF) issues when released; and
- development of new solutions for Australia's submarine enterprise which continue to meet Australia's evolving strategic needs.

DCNS has established and now supports in Australia a sovereign subsidiary company (DCNS Australia) to deliver a sustainable in-country industrial and production capacity sufficient to deliver Australia's most complex program. This subsidiary provides the organisational infrastructure which supports the implementation of the AICP.

To execute its AICP responsibilities [REDACTED], DCNS is implementing a strategy of knowledge transfer, using the purposeful application of this knowledge – combined with the cultivation of an innovation environment - to provide the local industrial base to support sovereign operation and sustainment.

In so doing, DCNS will work closely with the CoA, through the AICSG to identify which knowledge elements are required to be transferred for what purposeful applications. This collaboration will specifically identify which initiatives best support the acquisition of sovereignty and the maintenance of regional superiority.

AICP execution will comprise complementary industry engagement and enterprise development activities. Industry participation will be driven by a communications program which both involves and informs all relevant stakeholders regarding plans for industry engagement. So together, DCNS and the CoA will create the industrial capabilities within the Enterprise necessary for sovereign operation and sustainment of the FSM Capability. In its principal role, DCNS manages the platform system elements of the Plan and cooperates with the Combat System integrator (CSI) to deliver whole ship performances. DCNS will use its understanding of existing industry capabilities worldwide (in particular in Europe and Australia), critical needs and imperatives of the Royal Australian Navy (RAN), the mechanisms to transfer technology, and the methods DCNS uses to monitor and maintain the health of the Enterprise stakeholders. Chapter 7 details the alignment of the procurement process to the AIC requirements and industry capability identification.

## 2.1 Strategic Objectives/Approach

To deliver the AICP the following objectives will shape implementation activity development:

- provide industrial capability within Australia, on an enduring and sustainable basis, necessary to meet defined targets of availability and capability. DCNS will achieve this through a strong and flexible process to transfer technology and knowledge, and a design approach that considers sustainment from the outset;
- establish Australian industry in the BTIFI elements of the Program;
- successfully transfer sovereign Australian FSM capability to the Commonwealth's nominated Australian Sustainment Organisation (ASO) by applying technology transfer mechanisms to suppliers;
- reduce the total cost of ownership of the FSM capability to the lowest realisable level through the development of long-term strategic partnerships with suppliers and supporting the creation of an innovation environment for industry;
- foster an innovative culture within the Australian Future Submarine Enterprise by developing Research and Development (R&D) cooperation, nurturing the industrial base and related Centres of Excellence (CoE). These would draw together industry, academia, research institutions and government and seek to grow companies into adjacent industries, reducing dependence on the FSP through diversification; and
- create high value opportunities for Australian industry during all phases of the FSP by focusing on a tailored procurement process which takes into account Australian industry capability and the transfer of knowledge to Australia.



## 3 AIC Management and Principles

### 3.1 Overall Approach

Looking ahead to the operational and sustainment phase of the FSP, there is a risk that the scientific and industrial base in Australia may not be able to supply the requisite knowledge, goods and services to the Australian Future Submarine Enterprise in order to maintain the sovereign operation and sustainment of the FSM.

DCNS is therefore best placed to transfer knowledge, for a clearly understood purpose in support of the FSP to a selected Enterprise participant and then play a role in sustaining this industrial capability. The CoA will assume close oversight of the management of this risk. This plan establishes several consultative mechanisms with the CoA to work through critical areas of technology transfer, the development of contractual requirements, supplier selection and procurement, and continuous improvement and innovation within this ecosystem. The overall responsibilities of DCNS extend to the management of all of the industrial elements of a support system and also involve significant cooperation with non-industrial stakeholders in the private sector, the technical and scientific sector, education providers and the CoA itself.

DCNS will work with the CoA to identify what knowledge is required to be transferred for which specific application within the Enterprise, and then execute various initiatives to establish or enhance the associated scientific, technical or industrial capability. In executing the AICP, DCNS will collaborate with the CoA in the following activities:

- identification of the technologies, priority systems and equipment items necessary to deliver sovereign operation and sustainment as defined by contractual requirements set by the CoA;
- oversight of the ToT from existing DCNS suppliers and partners to Australia, and where required, from new suppliers to Australian partners;
- establishment of Australian industry in the BTIFI elements of the Program;
- continuous monitoring of the effectiveness of the types of ToT used, including improving them as required;
- continuous assessment of the industrial health and capability of suppliers and partners, in all sectors, as necessary to support the sovereign operation and sustainment of the FSM;
- development and management of initiatives to create innovation and collaboration across the Enterprise, through the cultivation of an Innovation Environment; and
- commercial management of Enterprise participants to achieve value for money.

In all phases of the FSP Australian industry will acquire knowledge, technology and skills through ToT programs. DCNS will seek to control costs through collaboration with suppliers and partners by developing ToT program business cases where ToT is performed in one of the identified mechanisms. When not implementing ToT programs itself, DCNS will support its suppliers in this task.

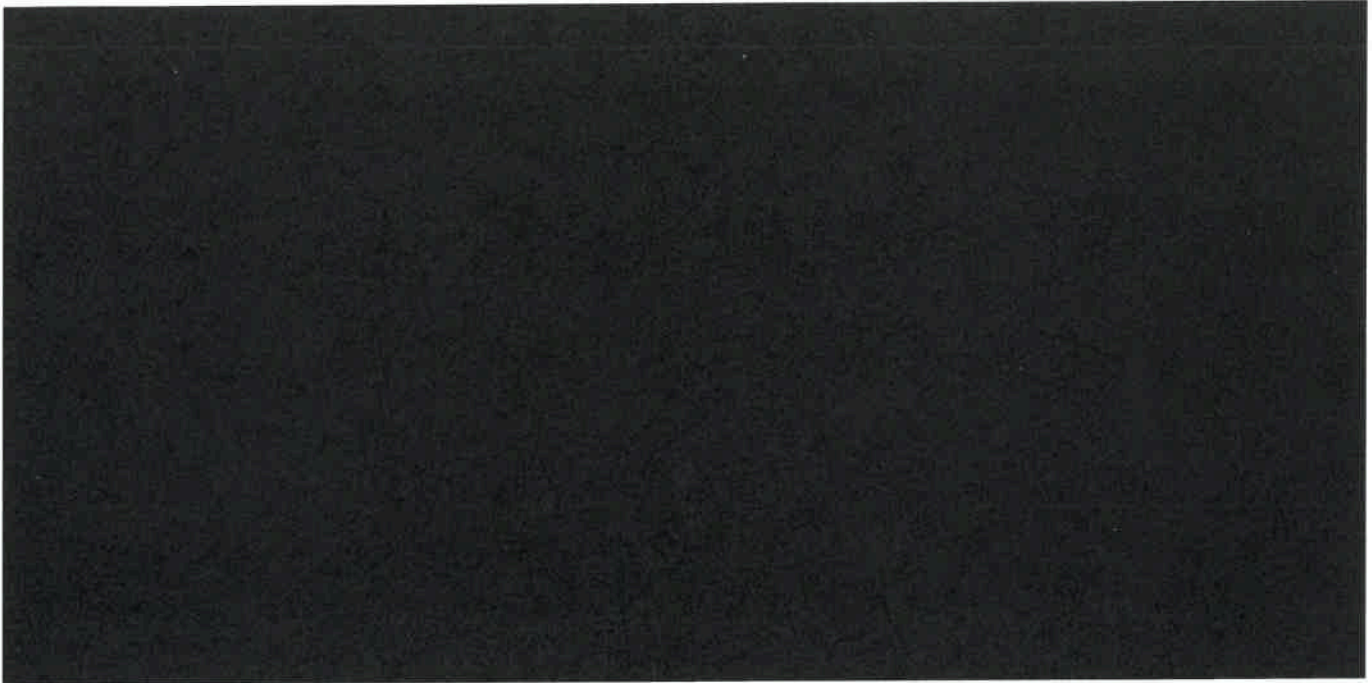
### 3.2 Flow-through of the Plan throughout the Program [REDACTED]

This section describes how this plan will be flowed down through design, procurement and other processes executed during the program. It makes reference to connections with related deliverables, including:

- [REDACTED]
- Procurement Process;
  - Build, Test and Integration Facilities and Infrastructure (BTIFI) - [R4];
  - Australian Steel;
  - Project Management
  - Build Strategy (BS);
  - ToT Process including Training;
  - Technical Data Management Process;
  - Quality Management Process; and
- [REDACTED]

The following section describes how the AICP and processes flow through the various relevant processes of the other elements of the FSP.

[REDACTED]



### 3.2.3 Build, Test and Integration Facilities and Infrastructure

The BTIFI Plan at [R4] describes the approach to facilities required for the FSP. The design and build of new Australian infrastructure will be an early contributor to the achievement of Australian industrial content.



### 3.2.4 Australian Steel

Options for Australian Steel Development and Qualification (ASDQ) are being developed in accordance with the requirements at [A7] – ASDQ Study.



### 3.2.5 Project Management

The AIC Plan is a subordinate plan to the Project Management Plan



The Contract Work Breakdown Structure (CWBS) developed in accordance with [A5] - CWBS and through that the Work Breakdown Structure (WBS) supports operational management of the Program for:

- baselines (scope, costs, time, physical progress);
- progress monitoring including compliance of the deliverables and gap analysis; and
- reporting and decision-making.

The WBS will evolve over the life of the Program as new SOWs are developed and implemented. Initially the WBS is related to the DMC. The WBS elements impacting on Australian industry include:

- Design;
- Program Management;
- BTIFI;
- Australian Industry Involvement (All);
- Procurement;
- Project Office and Facilities; and
- Transfer of Technology.

The numerical descriptors for these elements will be used as links to the Australian industry reporting schedule and the Local Industry Activity (LIA) description sheets described at Annex B. Clearly, the WBS will evolve across the life of the Program and, where necessary, changes to the LIA WBS descriptors will be implemented.

### 3.2.6 Build Strategy

In a similar manner to that referred to in the BTIFI studies, the execution of the BS will impact on such Australian industry elements as production, location, workforce aspects, training etc. and activities will be monitored closely by the AICSG.

### 3.2.7 ToT Process

To enable the CoA to establish a sovereign capability to operate and sustain the FSM capability, DCNS will develop a ToT program that will provide sufficient and appropriate technical data and knowledge transfer, including an understanding of the FSM design intent and basis of design. It includes a collaborative approach between the CoA and DCNS that ensures the CoA obtains sufficient knowledge of the FSM design to fulfil its legal and regulatory responsibilities for approval and acceptance. The CoA will be actively involved in the DCNS design process with a proposed team of CoA staff to be located in Cherbourg, France working with the DCNS team in order to understand the design through each phase.

The ToT process includes ToT to the Australian shipbuilder of the FSM and the nominated sustainment contractor of the FSMs in service. The ToT program also includes the transfer of the required technical data, tools and processes, and provides appropriate training, experience and mentoring to develop the skills of the people that will sustain the FSM.



Stream 7 comprises activities leading to identification, definition and development of the ToT to the CoA. The key activities to be undertaken are:

- **Stream 7.1:** the development of the TOTS;
- **Stream 7.2:** the development of the ToT – TP (which includes the provision of the first training activities); and
- **Stream 7.3:** the development of the TDMP, and the IPDSE.

See section 8.2.4 for details of the workforce development and planning aspects.

The ToT to Australian equipment and service providers will involve a collaborative arrangement between Australian industry and DCNS to maximise Australian industry involvement and ensure that Australian equipment and service providers obtain sufficient knowledge to build and sustain the FSM, including sufficient knowledge of the FSM to support upgrades and other in-service sustainment demands associated with the platform.

The TOTS [A6] defines DCNS expectations for Commonwealth and Australian industry involvement in the ToT. This includes how the CoA, Australian industry and DCNS would work together to ensure that the CoA obtains sufficient knowledge of the FSM design to fulfil its legal and regulatory responsibilities for approval and acceptance (including sufficient knowledge of the FSM design).

A Training Needs Analysis (TNA) will be conducted to progress and finalise the ToT Master Training Plan (ToT-MTP). This document will describe the practical management of the training organisation, the associated deliverables and their acceptance, the follow-up of trainees and the training syllabus. The ToT-MTP will address the flow through of AIC requirements into the training of the Australian workforce, particularly at the Australian shipyard. A significant element of the training effort will be aligned to ensure that the appropriate and approved levels of ToT are achieved.

### 3.2.8 Technical Data Management Process

Technical Data Management for the FSP is detailed in [R7] - TDMP.

The DCNS organisation for managing Technical Data (TD) is integrated into the DCNS FSP organisation as detailed in [R7] - TDMP. The principal functions involved in management of TD are highlighted in red in Figure 4.

The linkage with the AICP derives from the ToT Delivery Manager's oversight of ToT requirements compliance to ensure their correct implementation throughout the Program.

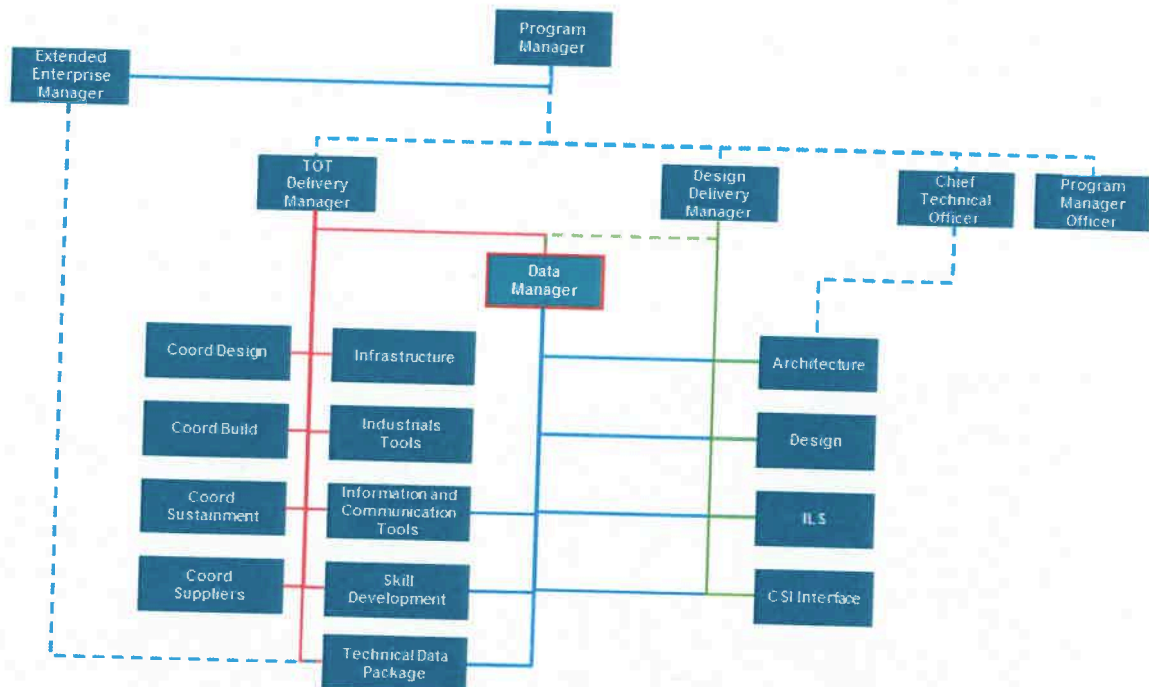


Figure 4. Technical Data Management Organisation

### 3.2.9 Quality Management Process

The FSP Quality Management Plan - [A8] links quality processes for AIC and relevant PPP elements as follows:

- AIC processes and procedures being developed in compliance with ISO 9001 Quality Accreditation;
- incorporation of the Supplier Pre-Qualification Questionnaire (SPQQ) process into the DCNS Australia Quality Management System (QMS);
- inclusion of the pre-audit (or Flash Audit) at the supplier premises by Supplier Quality Assurance (SQA) staff into the quality audit schedule in accordance with the QMS; and
- audit of the AIC processes and procedures as part of the overall QMS audits.

### 3.3 Overall Program Organisation and Management

#### 3.3.1 Program Level

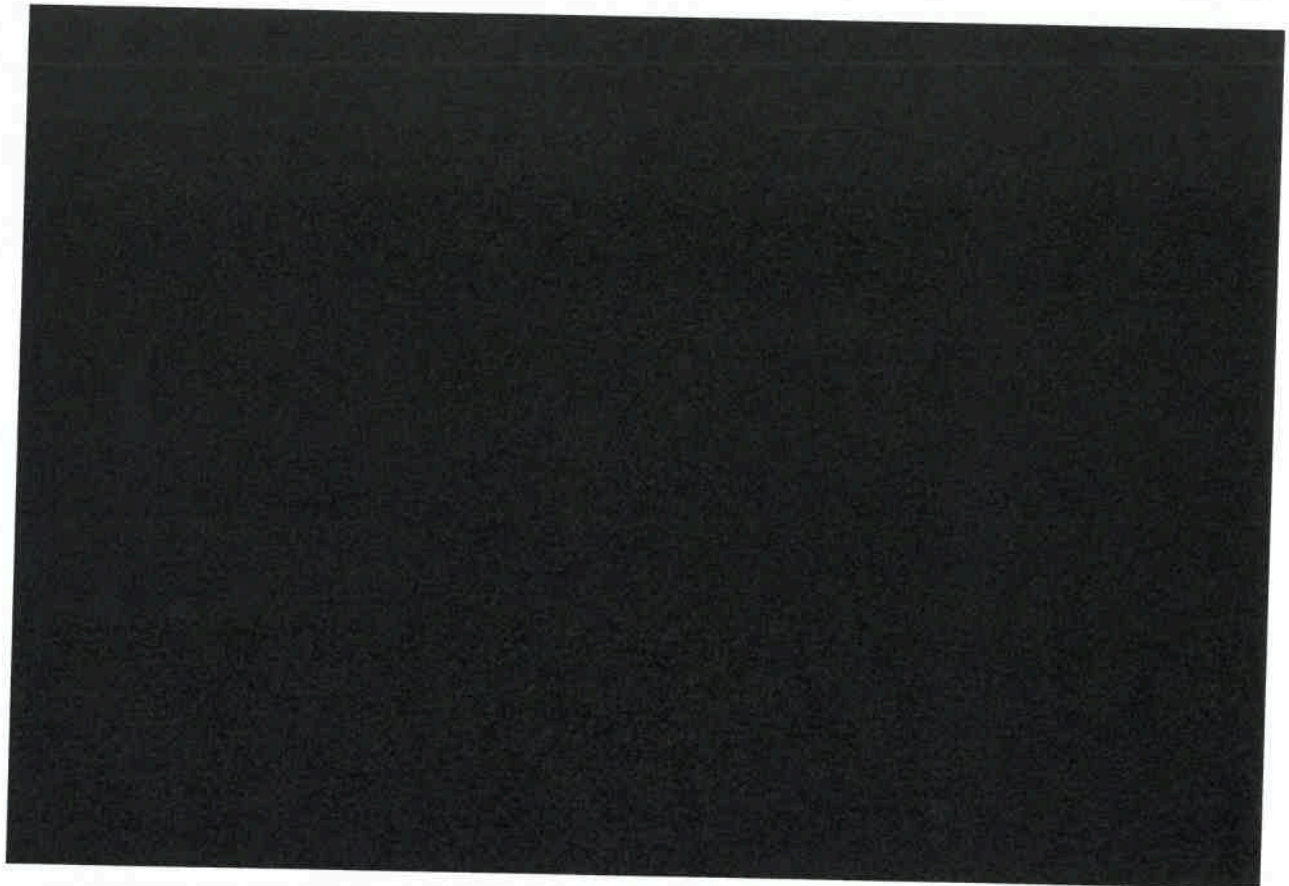
The organisation adopted by DCNS to manage the FSP overall and perform the required activities is close to a generic DCNS program organisation: a Program team gathering the programmatic transverse functions leads the production activities which are divided into one or several streams. In the case of the FSP, this organisation has been adapted to cover all aspects, and all phases, of the Program.

According to the DCNS generic organisation, the Program team would normally be attached to the Programs Division. To take into account the strategic characteristics of the FSP, and the CoA requirements for the FSP Program Director to report directly to DCNS general management, DCNS has chosen to include the FSP Program team under the DCNS Deputy Chief Executive Officer (DCEO) in charge of Group Development. The FSP Director consequently reports to the Deputy CEO – Development.

In order to manage activities shared between France and Australia, DCNS has chosen to set in place a French-Australian program team, where DCNS Australia and DCNS S.A. program team members are integrated. Australian team functions are aligned and responsible to the French program functions. For example, the AICP Manager has direct responsibility for the execution of the AIC tasks which are included in this Statement of Work.

The transverse nature of the AICP will see a wide range of activities being conducted in both France and Australia, and these will include interaction between many stakeholders across DCNS business lines. The industry and innovation functional construct within DCNS Australia is described in more detail in section 3.3.4 and shown in Figure 6.





### 3.3.2 Key Reporting Responsibilities

The AIC Director, in DCNS S.A, has development responsibility for the associated sovereign industrial capability delivery. This DCNS strategic level arrangement supports the operational level framework within which the authorised AIC representative for DCNS executes his responsibilities reporting to the Chief Executive Officer (CEO) DCNS Australia.

AICP implementation will be managed, coordinated and monitored within an overall DCNS strategic governance construct; one which continually fosters and develops linkages with agreed international partnering principles. This approach ensures that activities within the AICP, such as those related to procurement, academic and research partnerships, all develop and retain long term strategic alliance-oriented characteristics.

The DCNS operating model of cross-connected teams combines all of the capabilities of DCNS in France and Australia - such that while the business team element delivers all of the requisite enablers, the program team elements in France and Australia prepare and perform the activities as contracted.



### 3.3.3 Resourcing

Resources for the activities associated the implementation of the AICP during the DMC will be drawn from:

- DCNS Australia:
  - General Manager Industry and Innovation (nominated AIC Manager) + four Full Time Equivalents (FTE);
  - coordination of collaboration mechanisms associated with overall FSP industrial enterprise support systems; and
  - industrial innovation and Research and Technology (R&T) policy development and implementation (e.g. Collaborative R&T, CoEs);
- DCNS S.A.:
  - AICP Director;
  - DCNS Research staff; and
  - Transversal Program staff.
- Procurement Team (as per PPP - [R2]); and
- Transfer of Technology (as per TOTS - [A6]) personnel.

### 3.3.4 AIC Organisation

The general linkages between the DCNS Australia Industry and Innovation team and activities such as Program Procurement and Transfer of Technology are shown in more detail in Figure 6. This functional description indicates that the two principal areas of activity (Industry and Innovation) have stakeholder elements in both Australia and France.

In the context of the FSP in particular there is a connectivity framework which ensures that the strategies and objectives of the AICP can be integrated into the relevant Program areas as required to meet the dedicated outcomes of this Plan.

Industry interaction within Australia will also be closely aligned with the opportunities available through the various transfer of technology options and the linkages not only between DCNS and Australian industry, but through fostering similar interaction between Australian industry interests and the broader network of DCNS industry partners and the DCNS Global Supply Chain (GSC).

Early innovation and research and technology development initiatives are already represented through established linkages between a number of these local and remote entities (e.g. research collaboration involving DCNS S.A. and both French and Australian universities). The construct shown in Figure 6 envisages that these will continue to develop, but in an environment where attention is given to the research and technology imperatives (and constraints where appropriate) between entities (e.g. DST Group/DGA/DCNS).

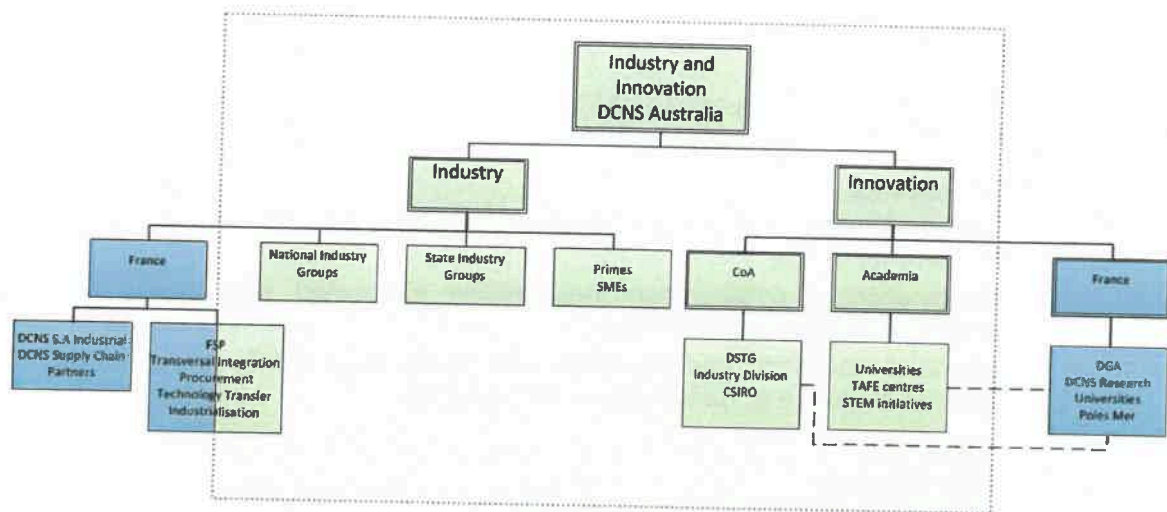


Figure 6. Australian Industry and Innovation Construct

### 3.3.4.1 AIC Manager

The authorised AIC Manager is the General Manager, Industry and Innovation within DCNS Australia. The incumbent [REDACTED] liaises directly with the Commonwealth Program Office and is a permanent member of the AICSG. [REDACTED]

#### 3.3.4.1.1 General Role Description

The AIC Manager has overall responsibility for the coordination of FSP delivery outcomes which relate to the development and sustainment of the Australian industrial enterprise and its associated innovation environment. Complementing this higher level objective is the maximisation of Australian industry and academic institution involvement, with a broader focus on driving high value industry opportunities.

#### 3.3.4.1.2 Main Duties

The main duties of the AIC Manager include:

- the management, oversight and implementation of the AICP for the FSP;
- the collaboration with all other FSP delivery activities as they relate to industrialisation and industry innovation activities within Australia;
- the facilitation of Transfer of Technologies into Australia in support of the Program; and
- being the DCNS-authorized 'AIC representative' for the FSP.

#### 3.3.4.2 AIC Manager – Control and Influence

[REDACTED] the AIC Manager has connectivity which allows him to exercise control and/or influence over other elements of the Program to ensure that Industry Requirements are addressed as the design progresses.

This role works very closely with all relevant stakeholders to ensure that in terms of engagement with local and French (and other international) industry players he/she is able to closely monitor the FSP Procurement team engagement with Australian industry in the performance of activities such as:

- close liaison and collaboration with program related activities such as supply chain development and qualification, technology transfer and workforce development and/or up-skilling;
- providing support to, and advice on, the various technology transfer mechanisms for the innovation environment;
- thorough analysis of existing directories of Defence Suppliers;
- establishment of a list of selected industry players to be engaged;
- analysis of feedback from industry; and
- assisting with Customer training and simulation requirements development as required.

French industry will generally be engaged with and through the Procurement team under the procurement technology transfer and industrialisation functions in France.

### 3.3.4.3 Principal Accountabilities

The principal accountabilities of the AIC Manager are:

- fostering a sustainable FSM industrial capability in Australia;
- creating high value opportunities for Australian industry across all FSP phases;
- reducing the FSM total cost of ownership; and
- creating an innovative industrial culture across the enterprise.

### 3.3.4.4 Primary Areas of Responsibility

Industrial, Innovation and R&D policy development and implementation as required to deliver the Program, including (but not limited to):

- collaborative research and development;
- Centres of Excellence (creation of and/or collaboration with);
- coordination of consultative mechanisms (to be developed) associated with overall FSP industrial Enterprise support system(s);
- industry mobilisation initiatives;
- training initiatives;
- vocation development activities; and
- supply chain integrity support.

Within DCNS Australia these activities are managed through a management structure [REDACTED]. The Industry section has responsibilities related to the overall relationship with Australian industry, including the compilation and assessment of local participation related data, and liaising closely with the procurement function in support, monitoring and compliance activities. The Innovation section manages the development of relationships and related collaborative activities with research agencies as they relate to the FSP. A close linkage exists with the DCNS S.A. International Development and Research and Development Cooperation agency which will support FSP activity as well as continuing to develop broader global interests.

### 3.3.4.5 Implementation Approach

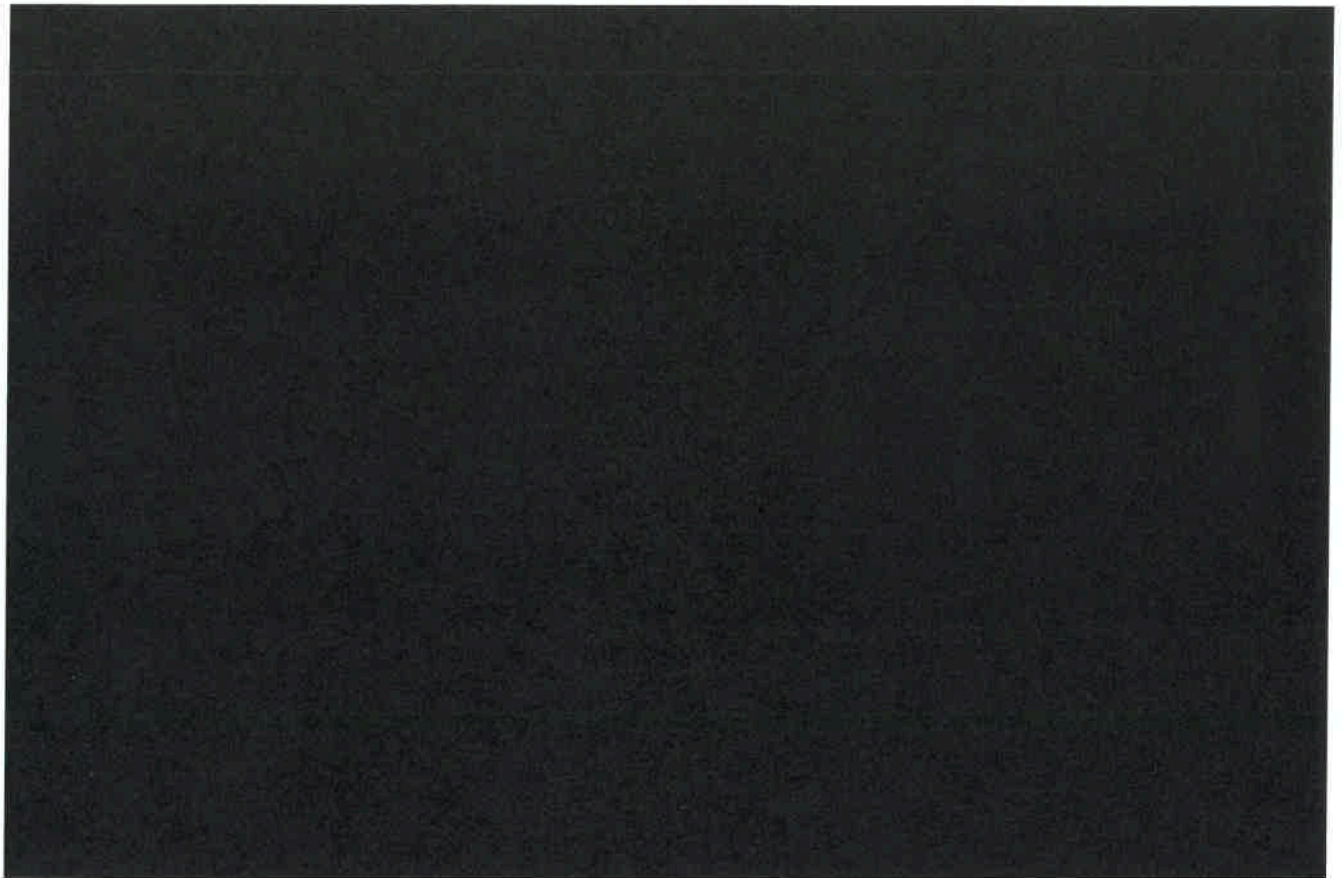
The effective implementation of the AICP will require close collaboration across a number of specific domains, especially those which are implicated in any transfer of technology activities. For example, the relationship of AICP objectives for both design and procurement functions will need to be robust enough to incorporate mechanisms through which the imperatives of sovereignty and regional superiority can also be considered in the context of cost, schedule and capability.

The AICP execution function is organisationally located within DCNS Australia. As noted previously (and shown functionally in Figure 6) a principal role of the subsidiary is to ensure a sustainable in-country industrial and production capacity for the Program. This function will be executed through DCNS Australia

The focus of many of the SOW elements, like the thrust of the AICP overall, is across the FSP, and will endure through each stage and for subsequent contracts issued under the FSP.

As the Program progresses, there will be varying contributions from (for example) innovation, procurement, technology transfer and the overall maturation of AIC to the CoA regional superiority and sovereignty in sustainment objectives.





## 4 Maximising Opportunities for Australian Industry

### 4.1 Overview

This section details the DCNS approach to creating a sovereign and sustainable industrial base within Australia. It describes how DCNS intends to maximise the involvement of Australian industry.

This section includes the DCNS approach to a competitive supplier selection and qualification processes integrating capability, cost, sustainment and industry issues. This applies to both the Contractor's supply and all subcontractors system and sub-system elements.

### 4.2 Approach to Creating a Sovereign and Sustainable Industrial Base

A strong Australian supply chain is fundamental to sovereign sustainment and to maximise Australian Industry Involvement. DCNS will use its experience with developing and executing international programs which will be enhanced by a clear understanding of the CoA's requirements. Our approach will be reinforced through a comprehensive technology transfer regime designed to deliver operational independence and independent sustainment.

#### 4.2.1 Considerations

In order to achieve a sovereign submarine capacity in Australia two inter-related features are considered:

- an operational imperative to act in autonomy and to allow the RAN to carry out its missions; and
- an industrial sustainment capability for upkeep, update and upgrade of the FSM.

Operational independence is based on three main perspectives:

- **Performance:** gathering of the best available technologies will allow DCNS to deliver the most capable FSM;
- **Safety:** the ability to provide safe and effective equipment and also to provide rapid resupply should a safety-related defect occur; and
- **Reliability:** each supply will be assessed to provide a high level of reliability and with the aim of easing the physical management of the FSM.

Independent Sustainment has to be addressed on three levels:

- **Upkeep:** maintaining a seaworthy submarine through planned maintenance and the ability to support repair of defects;
- **Update:** addressing emerging obsolescence; and
- **Upgrade:** enhancing the FSM's operational capabilities as to meet emerging threats.

The inter-dependence between these features is illustrated at Figure 9.

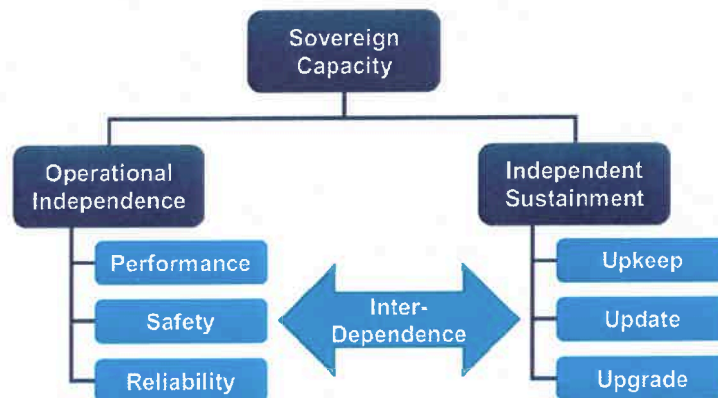


Figure 9. Approach to Sovereign Capacity

From an Australian industry perspective, this means an indigenous capacity to meet operational needs of performance, safety and reliability while also supporting the capability to sustain through Upkeep, Update and Upgrade.

It is therefore important that systems in the submarines and other activities needed to deliver the sovereign capacity are developed with these sustainment imperatives in mind from the very outset. This requires a mapping of Australian capabilities and the identification of potential industry capability gaps, by:

- qualifying the reliable suppliers (companies with skills, experience, tools, process, performance, etc); and
- comparing with overseas suppliers to identify any risks and opportunities.

### 4.3 Australian Industry Capability Priority List (AICPL)

#### 4.3.1 Introduction

DCNS, in collaboration with the CoA, will make an assessment of the systems and activities that should be performed in Australia. The purpose of this assessment is to illustrate the extent of AIC. In turn, this provides an indication of the extent of technology transfer that will be required and indicates where DCNS believes the gaps exist in Australian industry.

From a list of systems and activities associated with design and the build of a submarine, made against criteria such as:

- Australian Involvement Imperatives; and
- Sustainment Importance.

#### 4.3.2 Building the AICPL

In order to assimilate the various inputs for consideration by the AICSG, a table has been developed using a range of input criteria:

- Systems and Activities;
- Australian Involvement Imperatives;
- Sustainment Importance;
- Global Ranking;
- Applicability; and
- Industrial and ToT implications.

These inputs are described in more detail below.

##### 4.3.2.1 Systems and Activities

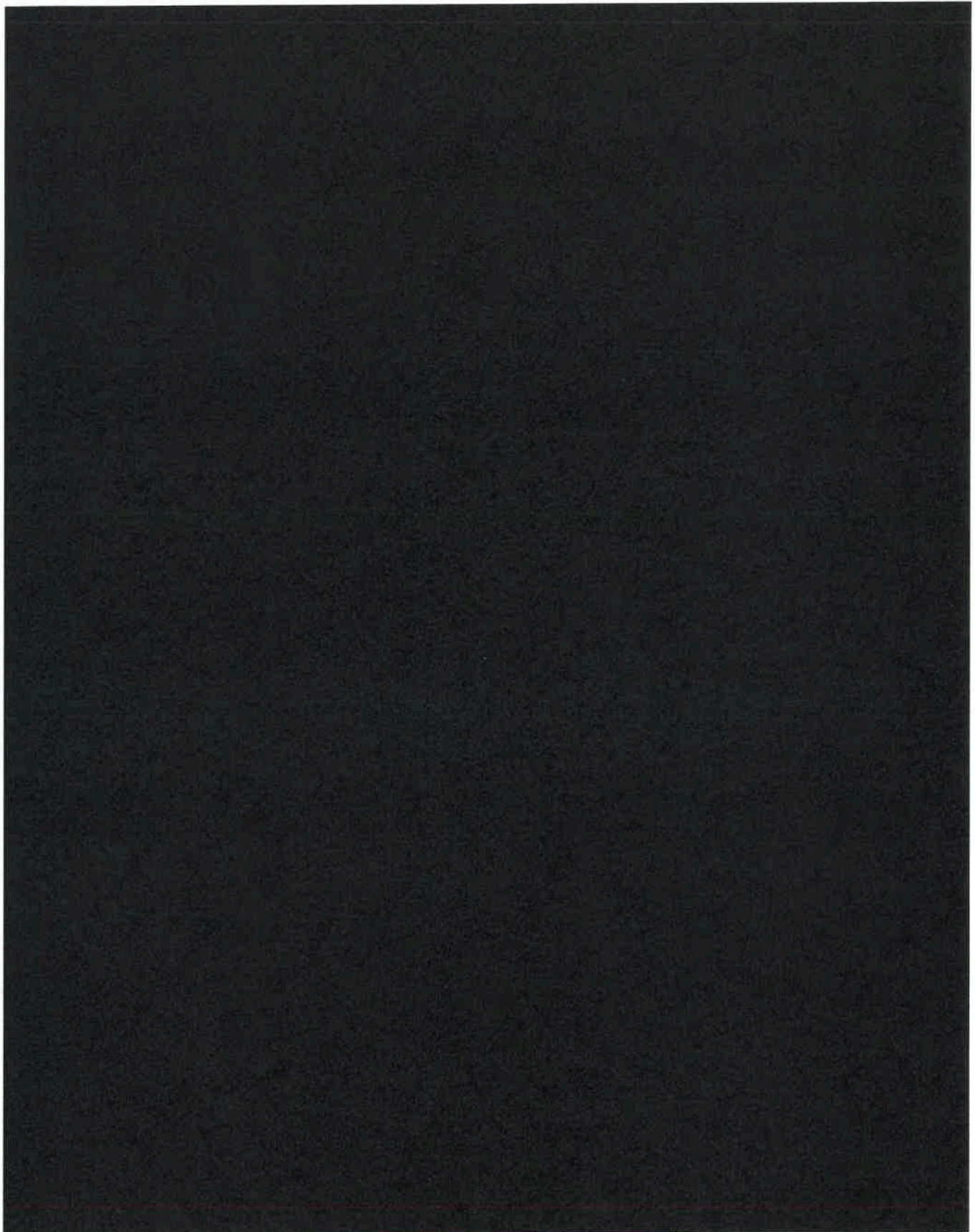
The list of systems and activities is compiled from a transverse view of items such as the Product Breakdown Structure (PBS) and Work Breakdown Structure (WBS). As the WBS and PBS mature, the list will be able to be indexed with the appropriate cross reference to the relevant AIC Schedule and LIA Description Sheets (described at Annex B).

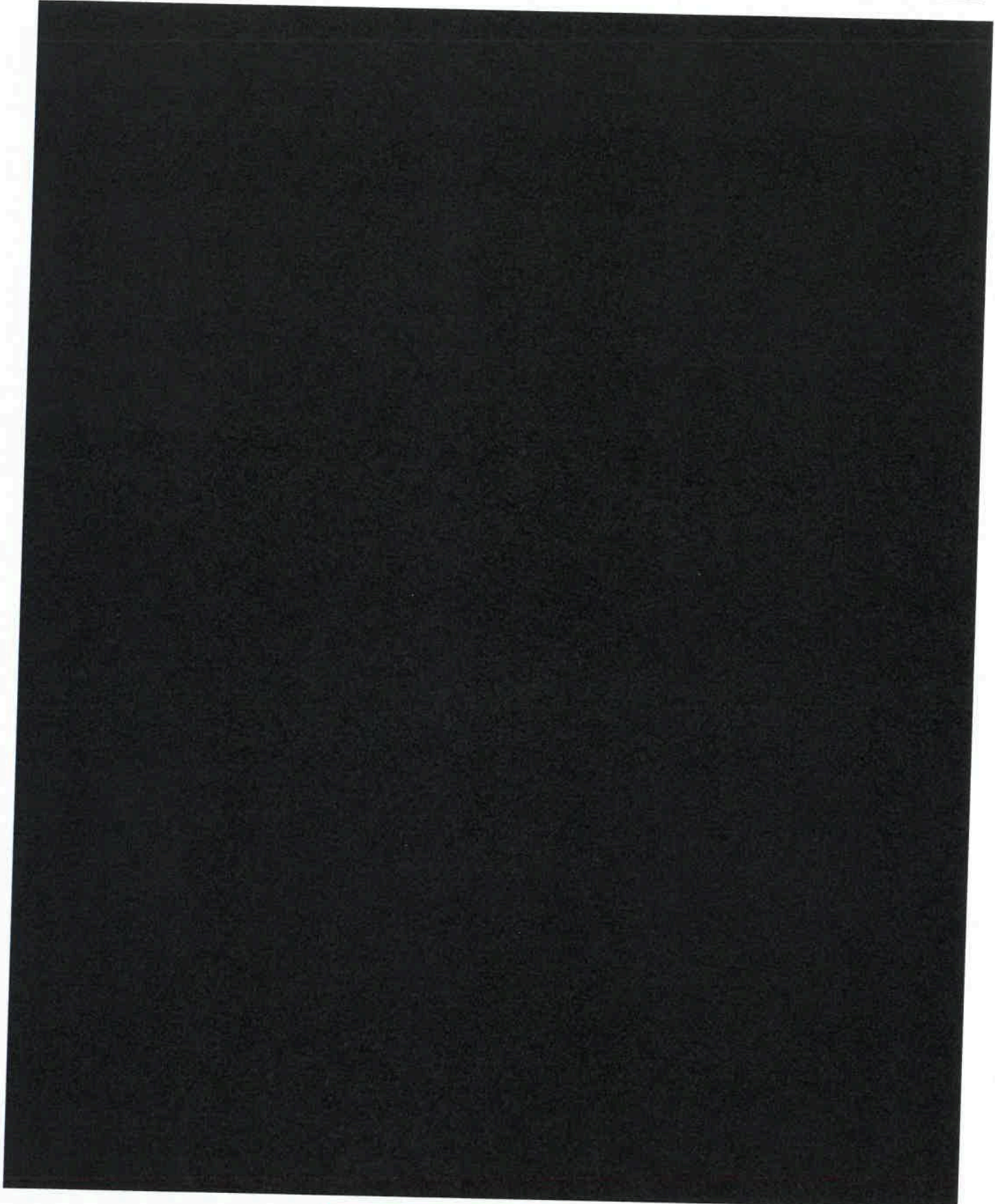
The current version of the AICPL will be maintained by DCNS and reviewed at AICSG meetings. This plan, therefore, contains a description of the overall approach to the structure and purpose of the AICPL rather than the latest version of the list. Iterations of the AICPL will be raised as agenda items at the AICSG for discussion and agreement and outcomes from these meetings will document the agreed way forward.

It describes the planned process to link the AIC Schedule with the WBS/PBS. The WBS will evolve through the phases of the FSP.

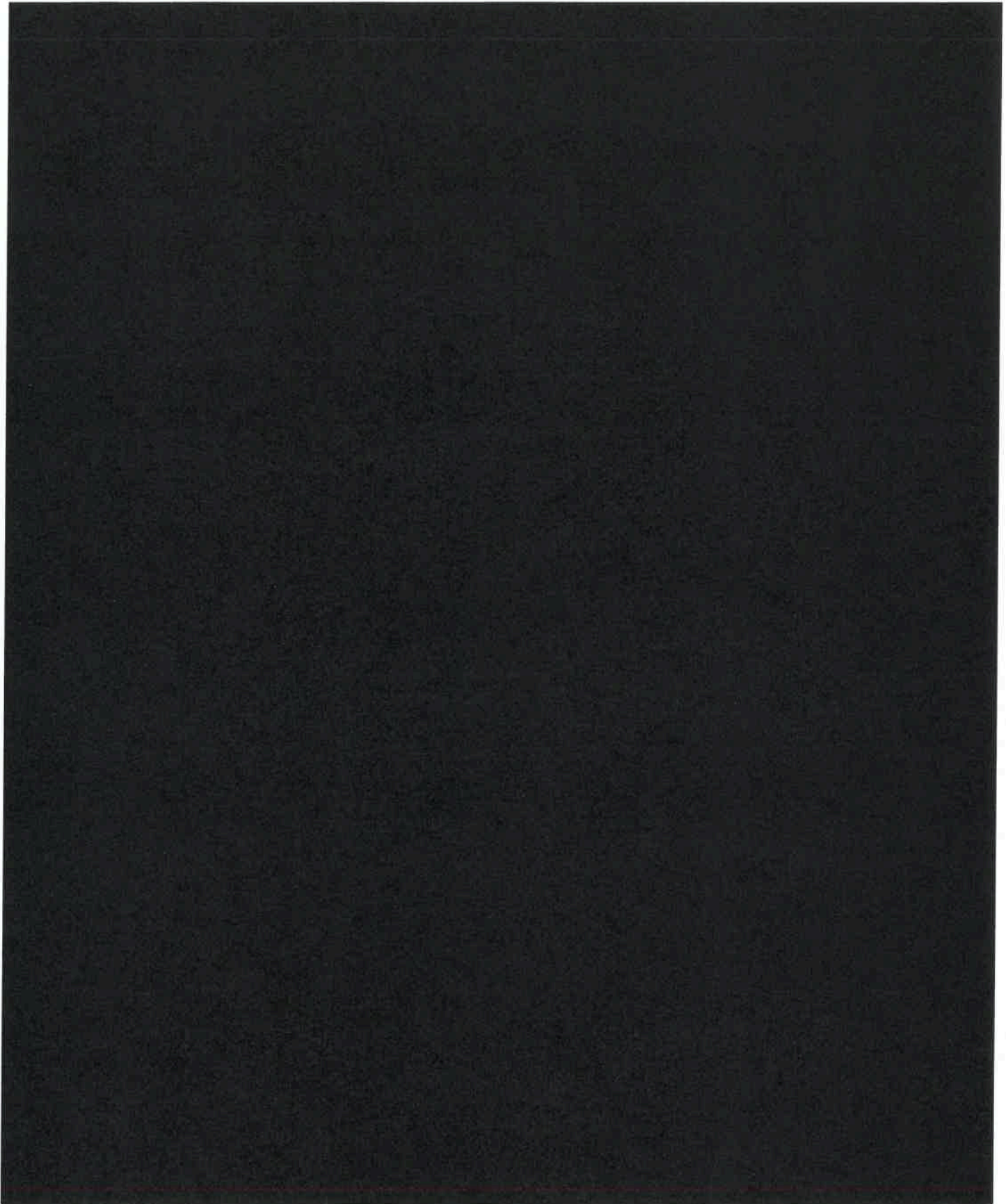
The PBS is intended to be used during submarine design activities as a mutual reference for the systematic breakdown of the submarine and the identification of the FSM systems, sub-systems, interfaces, personnel, ordnance, stores and consumables, including ballast.











#### 4.3.2.3 Australian Involvement Imperatives

The next criterion to be considered in prioritising the AICPL is the imperative for work for each item to be performed in Australia. In developing the assessment criteria, the following considerations are made:

- the inclusion in existing Priority and/or Strategic Industry Capabilities (PIC and SIC) for as long as that system remains extant;
- an assessment based on the planned Sovereign Industrial Capability Assessment Framework (SICAF) foreshadowed in [R6] - DIPS;
- published evaluation of the AIC imperative from any CoA input to the Gate 0 processes such as the TOP5 consideration where the CoA asked DCNS to address (in particular):
  - technical importance;
  - sovereignty; and
  - value for Money.

Sustainment of any system is enhanced if the entities involved in the sustainment have know-how generated through involvement in the design and build. There are four levels of importance that are applied to Australian industry imperatives in the context of the AICPL:

- Crucial;
- Significant;
- Beneficial; and
- Helpful.

A score is applied on a sliding scale from 0-4 based on the effect of the following criteria:

- improved know-how;
- the extent to which certainty of supply is guaranteed;
- the strategic imperative to retain or grow the capability in Australia;
- the extent to which the capability is supported by infrastructure and facilities already planned; and
- the vulnerability of the system to shelf-life and/or supply delays.

The output of the AIC determinations from the Priority List at the AICSG shapes the contribution to the PPP processes [R2] where the source selection for equipment is made for the build phase.



#### 4.3.2.4 Sustainment Importance

In this approach, the essentiality of procurement activities including items and services with regards to sustainment are assessed. In accordance with criteria (impact on performance, safety and reliability) these activities are ranked in five categories:

- **Essential (4):** Is Australian know-how essential for this equipment to be sustained?
- **Important (3):** Is Australian know-how important for this equipment to be sustained?
- **Highly Desirable (2):** Would sustainment outcomes be enhanced if there was Australian know-how for this equipment/system?
- **Desirable (1):** Would it be desirable for other reasons that this equipment/system was sourced from Australia?
- **Irrelevant (0):** There are no Sustainment implications for this item.

#### 4.3.2.5 Global Ranking

The result of the above analysis is applied to the required list of products and services as a sum of the scores for Design, Australian industry imperative and one-third of each of the Sustainment criteria. The resultant score is referred to as the Global Ranking and the AICPL is ordered according to this ranking.

#### 4.3.2.6 Applicability

The AICPL then contains an indication of the applicable phases of the FSM lifecycle:

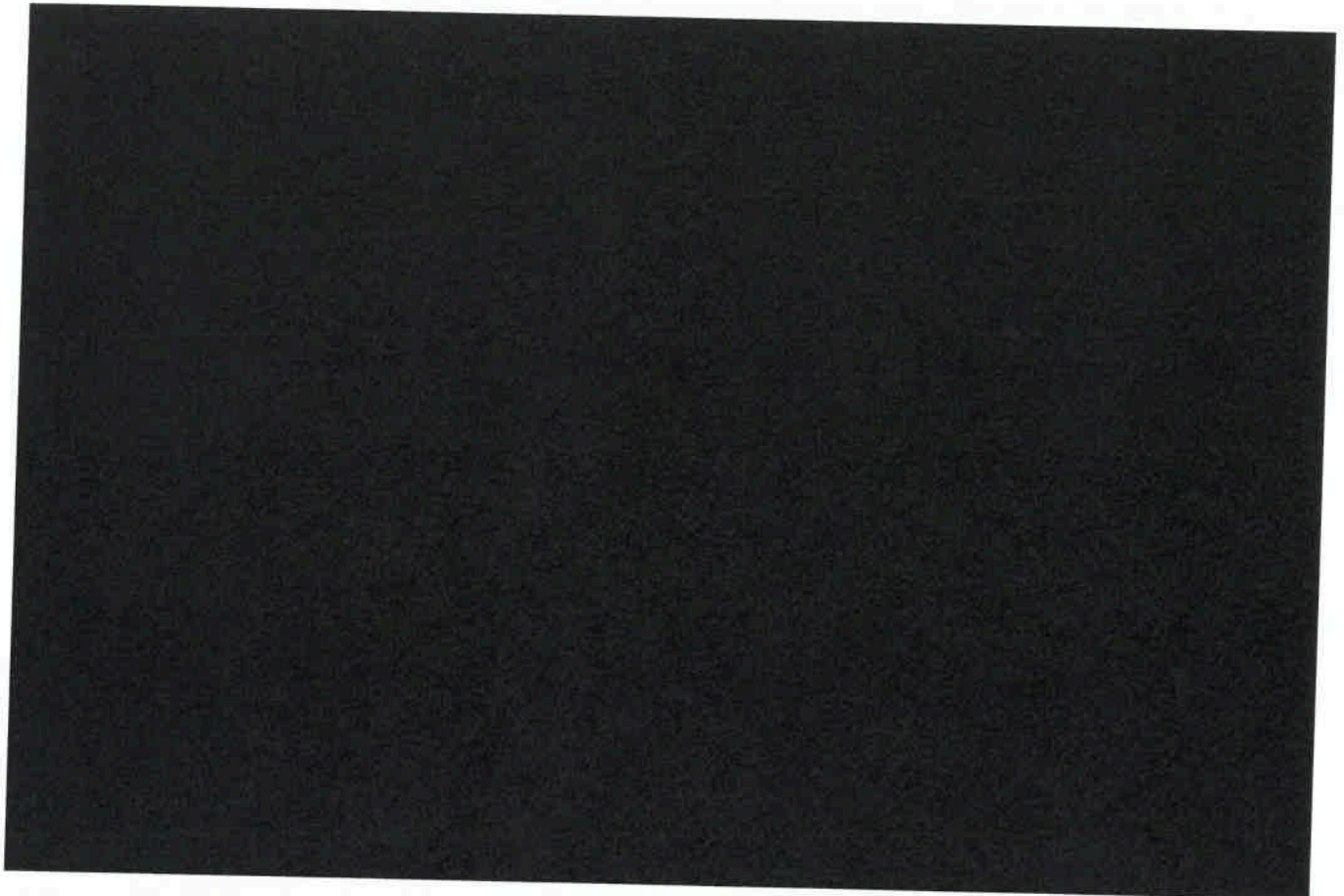
- Design and Build; and/or
- Sustainment.

#### 4.3.2.7 Industrial and ToT Implications

The next part of the AICPL lists historical DCNS suppliers and indicates whether or not a potential Australian partner and/or footprint of those suppliers has been identified. The applicable ToT framework is indicated and a traffic light assessment of the readiness of the potential Australian industry partner to receive and use any technology that might be transferred is included. These assessments are shown as follows:

- **Mature:** The AIC is fully developed and ToT would be achieved by a simple update to drawings and/or procedures with no additional training;
- **Intermediate:** The AIC is ready for ToT but will require application training for the ToT to be fully effective; and
- **Undeveloped:** There is little or no existing capability in this technology area and significant effort will be required to develop an appropriate AIC.

These assessments of the Australian industry capability gap are derived, in part, from visits and audits conducted by DCNS staff and as derived in the Work Package described below. The assessments can be used to identify areas where the AIC program should focus its attention.



#### 4.3.4 Australian Industry Capability Gap Analysis

This work package is designed to identify baselines in terms of specifically identified (and CoA-agreed) scientific, technical and industrial capabilities. The activities of [R2] - PPP) will greatly inform this analysis. As a minimum the outcome of this work will provide the basis from which initial knowledge transfer decisions can be taken. Further, these results will establish a starting point from which measurements of improvement can be assessed and from which claims for the achievement of the AIC Plan can be substantiated. Measurements would focus on such areas as level of content (quantum) and the CoA sovereignty priorities (quality).

The output would be an AIC gap matrix which is expected to comprise similar range of characteristics to the AICPL and focus heavily on sovereignty issues.

##### 4.3.4.1 Proposed Approach

The industry capability gap analysis is planned to be undertaken as follows:

- a 'top down' review of existing and contemplated plans for technology roadmaps, proposed funding strategies, the development path adopted by CDIC and the implications

of the Defence Industry Policy Statement (DIPS) - [R6], etc. The areas addressed would include the broader range of CoA activities and not be limited to Defence in particular;

- a 'bottom up' analysis conducted by DCNS in collaboration with the CoA which identifies and documents the relevant capabilities (e.g. technical skillsets, industrial/engineering capacities, etc.) which will be required to sustain/support production and sustainment requirements. Collaboration will be in the form of dedicated workshops; and
- as indicated in section 3.1 during the DMC a review of the AICPL approach proposed above will be conducted in conjunction with the CoA to determine how it might be adapted to provide a more effective capability gap analysis tool.

Figure 11 depicts how initial focus areas for industry capability gap analysis are derived from the AICPL, PPP, TOTS and other CoA input.

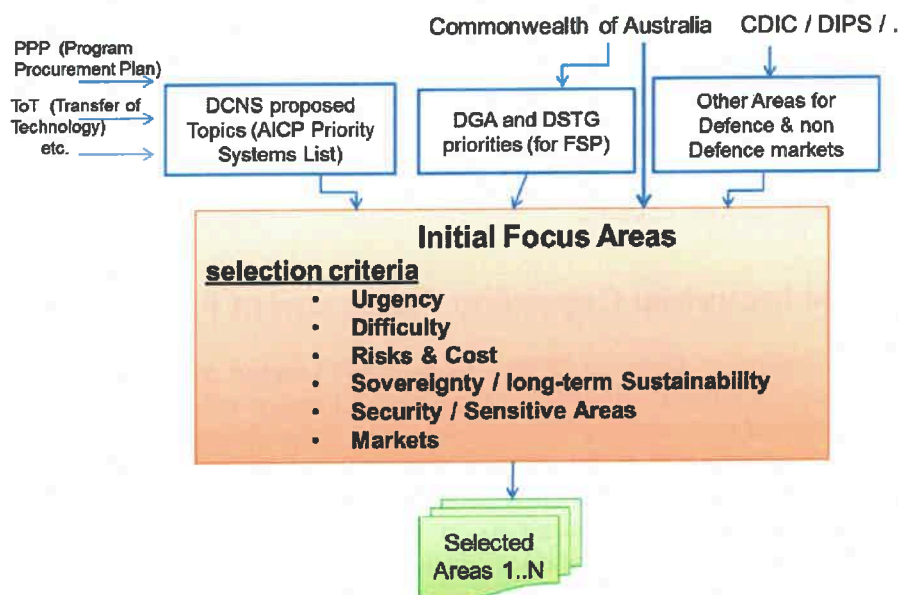


Figure 11. Capability Gap Analysis: from Initial Focus Areas to Selected Critical Areas

#### 4.3.5 Bridging Australian Industry Capability Gaps

There is a range of mechanisms that might be used to bridge the Australian industry capability shortfalls either identified by DCNS in collaboration with the CoA through the procurement process, or nominated by the CoA as a sovereignty requirement. These gaps will be addressed using a combination of methods such as ToT, tailored procurement strategies, workforce skilling and enterprise development initiatives highlighting the interface requirement to other related activity across the Program.

Capability gaps will be identified, and approved solutions agreed from the following:

- ongoing development and agreement of the AICPL at the AICSG;
- continuing Supplier Pre-Qualification;
- outputs from the Innovation activities including roadshows; and
- DCNS assessment of capability via targeted qualification activities



#### 4.3.5.1 Proposed Approach

The types of bridging mechanisms to be considered comprise:

- using the procurement processes described in [R2] - PPP, including the flowing down of the requirements for sovereignty and maximisation of Australian Industry Involvement of key French and European suppliers to DCNS;
- assisting with supplier improvement activities (e.g. audit and ToT), so as to increase quality and competitiveness during a contract;
- participating in funded collaborative projects related to innovation (see section 8.4.4), not necessarily linked to supplies for the FSM. That is, innovation collaboration in non-specific FSM areas (in which DCNS may be involved as part of its global strategies) might at some future time become relevant to future submarine supplies, and have a positive impact on improved Australian sovereignty or submarine capability due to new technology or processes (part of which might be conducted in France for example); and
- interfacing to broader government initiatives which have an impact on the development of Australian defence industry capabilities such as:
  - Centre for Defence Industry Capability (CDIC);
  - Defence Cooperative Research Centres (CRC); and
  - Industry Growth Centres.

#### 4.4 Strategic Industrial Capability Assessment Framework

The 2016 Australian Defence White Paper (DWP) stated that submarines are an essential part of Australia's naval capability, providing a strategic advantage in terms of surveillance and protection of our maritime approaches. The Government has determined that regionally superior submarines with a high degree of interoperability with the United States are required to provide Australia with an effective deterrent, including by making a meaningful contribution to anti-submarine warfare operations in our region. The DWP concluded that the key capabilities of the future submarine will include:

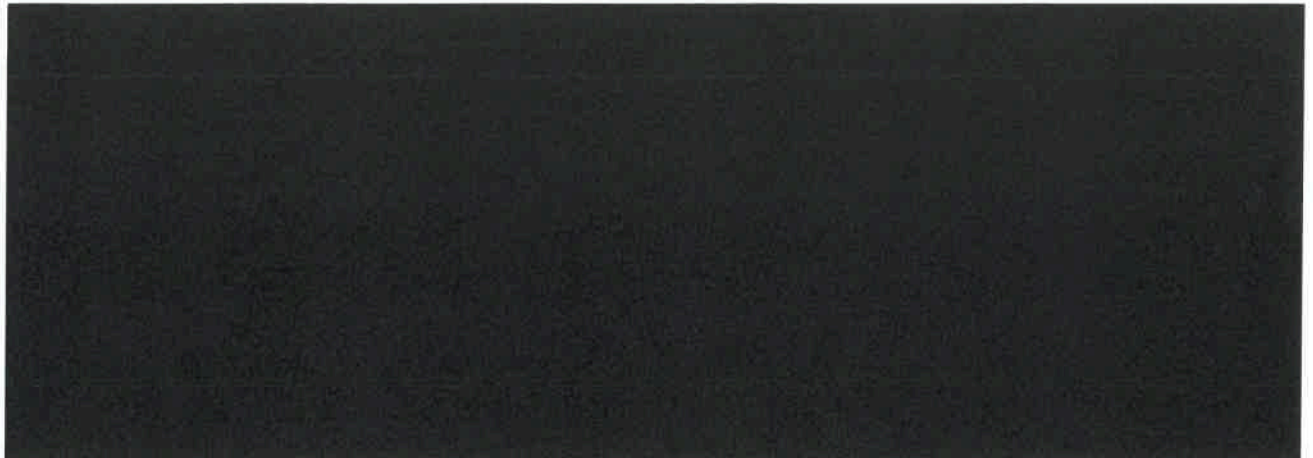
- anti-submarine warfare;
- anti-surface warfare;
- intelligence,
- surveillance and reconnaissance; and
- support to special operations.

Further, the DWP indicated that the key strategic requirements for the FSM include:

- a range and endurance similar to the CCSM;
- sensor performance and stealth characteristics which are superior to the CCSM;
- upgraded versions of the AN/BYG-1 combat system and Mark 48 Mod 7 heavyweight torpedo jointly developed between the United States and Australia as the preferred combat system and main armament; and
- the new submarines will have advanced communications systems to link with other Navy ships and aircraft to conduct anti-submarine warfare operations.

It follows that these key capabilities will drive the strategic industry capability for the FSP and inform any Sovereign Industrial Capability considerations.

Sovereign Industrial Capabilities are those capabilities that are so important they must remain within Australia's exclusive control to ensure uninterrupted access.



DCNS understands that the DICP will be released by mid-2017, and will identify the sovereign industrial capabilities that are required to be maintained and supported in Australia. It is therefore expected that an update to this AICP will be required after DCNS analysis of the new DICP and SICAF is completed. The results of that analysis will provide inputs into respective work packages as soon as possible after release of the SICAF and DICP.

#### 4.5 Addressing SICAF Issues

The DCNS analysis of SICAF and the DICP will address the following elements:

- the applicability of particular parts of the framework to submarine industrial capability;
- elements of the DICP that will affect the Program; and
- any changes that will be required to the AICP including the AICPL.

#### 4.6 Australian Government Grants

The AIC Program aims to create opportunities for Australian companies to compete on their merits for Defence work on a value for money basis. Consequently, for tendered solutions to represent value for money, tenderers must describe how their proposed approach will enhance defence industry capability and capacity.

While there are several Australian grants potentially available to Australian industry, the landscape for these grants is changing, largely due to the emergence of the CDIC. Some grants are currently held in abeyance with new approaches to be announced in 2017. This section addresses the current situation with regard to Australian grants that may be applicable to the Program. Future AIC reporting will address the actual grant achievement and any updates to the grant landscape will be addressed in future updates to the AICP.

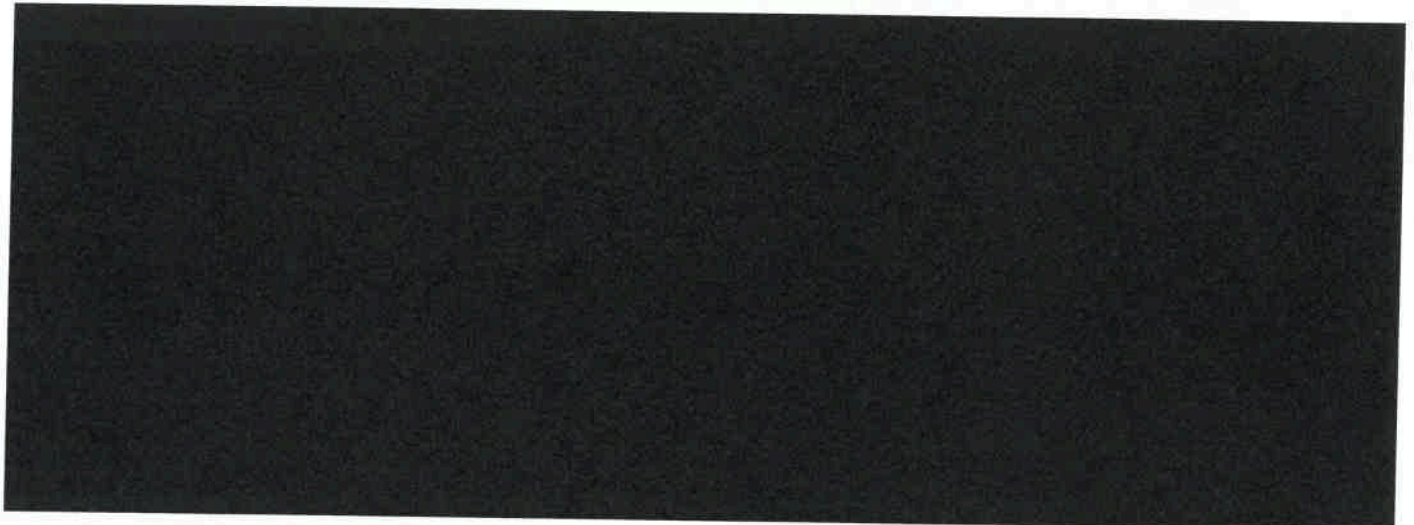
DCNS will collaborate with the CDIC and Defence to provide inputs to a new skilling model to guide the development of Australian industry in line with Defence's long-term FSP requirements. Initial discussions with the CDIC have already commenced between the CoA and DCNS to establish the framework within which the organisations will collaborate in relation to the AIC component of the FSP.





#### 4.6.1 Subs in Schools

One area of Science, Technology, Engineering and Mathematics (STEM) that is of interest to DCNS for the FSP is the Subs in Schools program. DCNS will work with Re-Engineering Australia (REA) (the program owner) in association with the Department of Defence (DOD) to provide input into the program. The program is focused on engaging student interest in the technology of submersible vehicles and submarines and is built on the fundamentals of project-based learning.



#### 4.6.3 CDIC Advisory Services

The CDIC delivers advisory and facilitation services to defence sector Small and Medium Enterprises (SME) across a range of areas including business management, skills development, innovation collaboration, export activities and supply chain facilitation. DCNS will encourage its supply chain to work closely with the CDIC to address identified shortfalls. DCNS will also work closely with the CDIC to ensure that there is effective two-way information flow in respect of how each entity might assist the other's respective Australian industry objectives, for example the upskilling of an identified potential industrial partner.

#### 4.6.4 Capability Improvement Grants

As part of an advisory or facilitation service from the CDIC a company in the DCNS supply chain may be given specific business capability improvement recommendations. DCNS will, where possible provide capability requirement information to the CDIC advisors. In these cases the supply chain member may be invited to apply for a Capability Improvement Grant. A CDIC Capability Improvement Grant reimburses a supply chain member for up to half of the cost of engaging a consultant or expert to implement the recommendations provided in



their CDIC advisory or facilitation services report, including undertaking any recommended training. DCNS will work with the CDIC to identify specific requirements.

#### 4.6.5 Next Generation Technology Fund

The Next Generation Technology Fund (NGTF) is a forward looking program which will focus on research and development in emerging and future technologies and develop early ideas into innovation concepts that could further be explored and matured through the Defence Innovation Hub. This will include technologies that are expected to deliver on a time horizon that may be greater than ten years. Specifically in relation to the FSP, Defence is interested in technologies, systems and processes that increase the survivability and effectiveness of all maritime platforms. This might include but is not limited to signature management, autonomous platforms, advanced environmental sensing systems and advanced concepts for crewing and human machine integration. Around \$730 million will be invested (over the decade to FY 2025-26) in strategic next generation technologies that have the potential to deliver game-changing capabilities to Defence. The annual funding will increase over the decade.

The NGTF is focused on science and research proposals that are early in the innovation spectrum, while the Defence Innovation Hub is focused on ideas that are able to deliver Defence capability and Australia defence industry growth in the near term. Put simply, the NGTF focuses on research and the Defence Innovation Hub focuses on development.

The Defence Science & Technology (DST) Group will lead and manage the NGTF. The DST Group identifies, conducts and integrates research in the next generation technologies relevant to Australia's national security. DCNS will work collaboratively with the DST Group and academia, research agencies, Australian industry in the FSP supply chain and other areas of Defence and Government, to create a vibrant and interlocking innovation capability using collaboration networks.

#### 4.6.6 Innovation Proposals

The CDIC now hosts the Defence Innovation Portal, the primary gateway for companies seeking to submit innovation proposals or ideas to the Defence Innovation Hub and NGTF. DCNS will assist its supply chain member to identify the benefits to the FSP of any innovative proposal and support applications DCNS believes are in the interests of the FSP. This will assist the CDIC to ensure the supply chain member develops a proposal that is aligned to Defence's innovation priorities. In turn, the CDIC will help the supply chain member understand the new Defence innovation intellectual property and contract framework.

#### 4.6.7 R&D Tax Incentive

The R&D Tax Incentive is broad-based, market-driven assistance for all industries. It provides a targeted tax offset to encourage more companies to engage in R&D.

It aims to:

- boost competitiveness and improve productivity across the Australian economy;
- encourage industry to conduct R&D;
- provide business with more predictable, less complex support; and
- improve the incentive for smaller firms to engage in R&D.

The Incentive is a self-assessment programme. When applying, DCNS Australia and its supply chain candidates must correctly apply the law in making your claims, and have records to justify any self-assessment. AusIndustry (a division of the Department of Industry, Innovation and Science) (on behalf of Innovation and Science Australia) and the Australian Taxation Office (ATO) jointly manage the R&D Tax Incentive. AusIndustry manages registration of any R&D activities and may check that they comply with the law. The ATO may check if the R&D expenditure being claimed in any company tax return is eligible. The deadline for lodging an application for registration is ten months after the end of a company's income year.

DCNS will advise its Supply Chain of the potential availability of this incentive and seek notification of any claims relevant to the FSP in supplier progress reports.

## 5 Derivation of Program Requirements into Local Industry Activities

To understand the process of derivation of Industry Requirements (IR) or Local Industry Activities (LIA), DCNS has referred to the AIC Better Practice Guide (BPG).

The purpose of the BPG is to assist users in understanding the AIC Program in relation to Defence Procurement. Furthermore, the BPG is a primary reference that outlines how Defence addresses industry requirements during project acquisition and sustainment, and what is sought from industry under the program.

IRs are work packages that the CoA and DCNS wants Australian industry to deliver. IRs by design should elicit responses from the supply chain that will produce tangible capability and capacity benefits in the way of skills, technology, innovation, knowledge, competition and facilities for Australian industry.

IRs would normally be developed by the CoA and promulgated into any Request For Tender (RFT) documentation prior to release. However, given that the Strategic Industrial Capability Framework has not yet been released, and that PICs and SICs are being phased out, DCNS will wait until the SICAF is promulgated before finalising the IR(s) for each LIA in consultation with the CoA at the AICSG.

To develop an IR for CoA validation, DCNS will:

- consider the definition of the PICs found within the PIC Health Checks and Strategic Industry Capabilities found within: DIPS 2010 Building Defence Capability: A Policy for a Smarter and more agile Defence Industry Base;
- seek guidance from the Customer in determining the applicability of the PICs or new SICAF;
- Seek guidance from the Customer on the applicability of the SICAF in the elements of the Price & Delivery Schedule (PDS);
- explore the PDS to analyse and consider whether any elements of work packages must be performed in-country; and
- link the work packages to the SICAF and populate the IRs into the LIAs.

The breakdown of the LIAs will be to at least the same level as the PDS of the Contract and will mature as the details of the Activity are developed. LIA updates will be provided progressively at the quarterly AIC meetings and in the accompanying AIC progress reports.

Where DCNS has multiple Australian companies delivering against the line item in the PDS, there will be separate AIC Schedule entries and LIA description sheets for each Australian company and explicitly state those individual companies along with the quantum of work (A\$ values) they will undertake.

On release of the SICAF in mid-2017, DCNS will review the breakdown of LIAs in light of the new framework. If required, updates to LIAs will be provided at the next scheduled AICSG.



## 6 AIC Monitoring and Reporting

### 6.1 Overall Process Description

A prime objective of the monitoring and reporting process is to allow the Commonwealth to evaluate the performance of the overall AIC Program in maximisation of Australian industry content. In this context, the procurement process is an enabler to establishing the Australian Industry capability. In broad terms the AIC reporting process will provide sufficient data for the CoA to determine the difference between the Price and Delivery Schedule amounts and their respective local and imported content values.

Another important element of the reporting process is to identify, for applicable LIAs, which important industry capabilities are being addressed through contracting the Australian company undertaking the LIA. In order to meet the Government's stated desire that strategically critical capabilities remain within Australia's exclusive control, these industry capabilities include those deemed to:

- confer an essential strategic advantage by being resident within Australia and which, if not available, will significantly undermine Defence self-reliance and Australian Defence Force (ADF) operational capability; and
- provide Australia with enhanced Defence self-reliance, ADF operational capability, or longer term procurement certainty.

In the context of the AICP, LIAs will be described in terms of the benefits Australian companies accrue through their engagement in Program-related activities, tasks or work packages. These benefits can relate to such aspects as:

- skill and knowledge transfers to the Australian company (short and long term);
- the introduction of new technologies (direct and indirect);
- competitiveness and adjacent market development;
- workforce related improvements; and
- improving the DCNS Global Supply Chain.

All of this information will be presented in a dashboard format as described in the following section.

#### 6.1.1 Data Capture

##### 6.1.1.1 AIC Reporting Schedule Data

To meet the reporting imperatives of the AICP, the Enterprise Resource Planning (ERP) system will be developed so that mandatory fields will be included in each company's listing so that the necessary reports in accordance with data requirements of the AIC Reporting Schedule at Annex B can be generated with minimal additional effort. The input for these fields will be captured as part of the procurement process through the ERP. The minimum format for the AIC reporting schedule is at Annex B however this will be reviewed and modified as required during the development of the dashboard.

### 6.1.1.2 Australian Industry Participation Data

Information associated with Australian industry engagement in the Program can include elements such as:

- details of the party contracting to DCNS (if not an Australian company);
- details of each Australian subcontractor including name and location;
- workforce data (number of staff, new staff generated due to FSP contracting, outsourcing information);
- a description of the work that will be undertaken by each Australian subcontractor, including the location of the work to be performed, overall value and Australian work value (Australian industrial content);
- details of any price differential encountered (by comparison to non-Australian sources of supply if available at the time of comparison) and possible actions to be taken in amelioration;
- the assumed (at this stage) benefits to all parties from the inclusion of the Australian company as part of the contractor's supply chain including contribution to sovereign capability to operate and sustain the FSM;
- any relationship of the contracted activity to the goals of the TOTS - [A6];
- when available, details of the subcontracted Australian company entry into a Global Supply Chain of the Contractor, or when established with DCNS Australia, the Australian Global Supply Chain Program or one of its other subcontractors as a result of this Program;
- identification of the appropriate phase:
  - e.g. Design and Build and/or Sustainment.
- if applicable, identification of relevant technology transfer mechanism(s) (note: supplier may already have achieved ToT via other programs) ;
- planned investment in technology transfer;
- identification of Australian footprint of existing DCNS suppliers;
- health checks of candidate Australian companies (capability readiness maturity);
- attribution of Intellectual Property Rights (IPR);
- collaborative R&D activities and opportunities;
- industry engagement activities capturing data such as:
  - number of Industry & Innovation Portal Users;
  - seminars and participation levels; and
  - current/potential capability assessment and/or qualification activities.

#### 6.1.1.2.1 Australian Industry Participation Data Monitoring and Dissemination

DCNS is developing the systems and processes which will enable data to be collected and correlated in forms that best suit reporting responsibilities through the life of the Program. While the precise areas of interest and emphasis are being further refined (through the AICSG for example) the early data manipulation and presentation will be facilitated through the use of a multi-purpose dashboard. Where appropriate the dashboard will incorporate lead and lag indicators which will provide measures of planned activities and their level of achievement.

Initially, the dashboard will provide information in relation higher level industrial category research and capability evaluation activities which are in support of the design process as it evolves through the remainder of the DMC. More specific detail in the data base will

increase as the requirements of the design process (through more detailed RFIs at the product level for example) emerge.

This dashboard may incorporate data on such elements as, for example:

- number of companies registered (by technology);
- number of companies pre-qualified (by technology);
- number of companies qualified (by technology);
- company location data;
- RFI/RFT numbers prepared and issued;
- contracts let (by number and value);
- jobs reported to have been created;
- number of RFIs issued;
- TOP5/TOP40 lead time requirements;
- collaborative research agreements developed/commenced;
- researchers engaged/exchanged/employed;
- facilities planned/designed/built;
- Transfer of Technology related data:
  - training plans developed/executed.
- licence information;

Much of the information pertaining to the categories above should be readily available in the ERP system, although there will likely be a requirement to map some Australian industry activities into the ERP or sourced from other mechanisms (for example the number of jobs created).

### 6.1.2 AIC Monitoring

A dedicated AICSG with permanent DCNS and CoA representatives will consider all matters relevant to the AICP – with the introduction of subject experts to provide support when required. The form and frequency of AIC reporting will be defined by the AICSG. Working Groups within the Steering Group will examine relevant Australian industry involvement activities such as, but not limited to:

- procurement activities;
- industry Capability Gap Assessment;
- industry Capability Gap Bridging initiatives;
- sensitive technologies and the processes for their protection;
- Transfer of Technology; and
- industry and academia communication strategies.

### 6.1.3 AIC Reporting

AIC reporting will provide progress information on such activities as:

- work package progress reports;
- reporting of relevant procurement system activities;
- industry engagement and information activities;
- innovation environment initiatives;
- emerging AIC risks as addressed at the RMP - [R3]; and
- details of any Australian Government Grants received which directly relate to the engagement of Australian organisations or companies by the Contractor for the Program:
  - details regarding the grant program (i.e. name, purpose, agency funding the grant program);
  - commencement date and term of the grant; and
  - amount of funding received.

The AIC reporting mechanism will be implemented to facilitate the identification, extraction or analysis of data fields contained in either the AIC Reporting Schedule or the associated LIA description sheets. AIC reporting periodicity will be agreed at the AICSG.

### 6.1.4 Claims for Achievement

AIC Reporting activities against which claims for achievement will be made fall into a number of categories:

- financial performance in respect of Australian industry involvement value which will be substantiated through the AIC Reporting Schedule and LIA description sheets; and
- financial investment in, but not limited to, industry and academic engagement and information activities. Examples, which will be reported separately, would include:
  - industry briefings;
  - innovation seminars and innovation portal initiatives; and
  - collaboration activities involving universities.

Claims for Achievement will be raised as agenda items for the AICSG.

### 6.1.5 Non or Degraded Performance

Any non or degraded performances will be the subject of review at regular AICSG meetings. The availability of relevant performance criteria will be an important element, and this in turn will require close collaboration between both AIC and procurement functions.



[REDACTED]

For procurement activities where the Gate process is reduced, but where for example the AIC priority is high (e.g. as per the AICPL), the AIC and procurement teams will still need to collaborate closely. This is necessary to ensure in particular that the procurement strategy both contemplates LIA objectives and endures throughout the procurement process.

Remediation of these issues will be determined as an action item out of meetings of the AICSG. Possible approaches could include:

- referral of Australian companies to the CDIC or other CoA initiatives to support industry outcomes (note: the Australian companies must make that approach directly to access the programs);
  - investigation of alternate partnering arrangements to provide greater support to local industry; and
- [REDACTED]

## 7 The AIC Schedule and LIA Description Sheets

### 7.1 Introduction

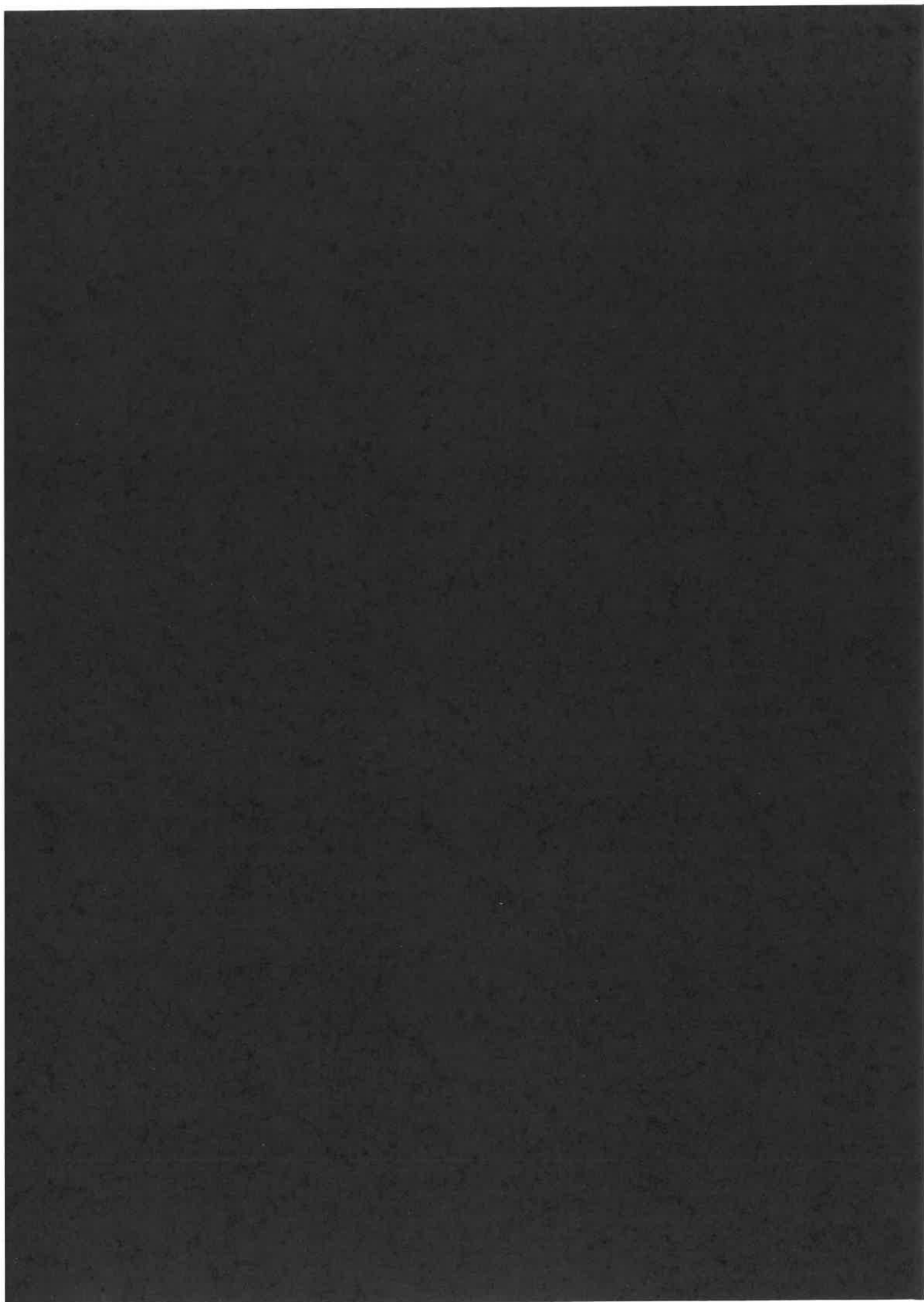
Given the evolving nature of the Program, production of detailed LIAs for the Program at the beginning is not an appropriate approach. The intended development of the Program in phases supports the development of associated LIAs for each phase. It is proposed to develop a standard LIA template for incorporation into the procurement process, particularly as not all procurement activity is subjected to a formal Gate process. Preparation of this template will be managed through the AICSG.

Prior to completion of one phase it is proposed to prepare the LIAs which will be associated with the next phase. Additionally, it may be possible to also prepare more general LIAs for subsequent phases.

The AIC Progress Reports (AICPR) will be tabled at the AICSG meetings.

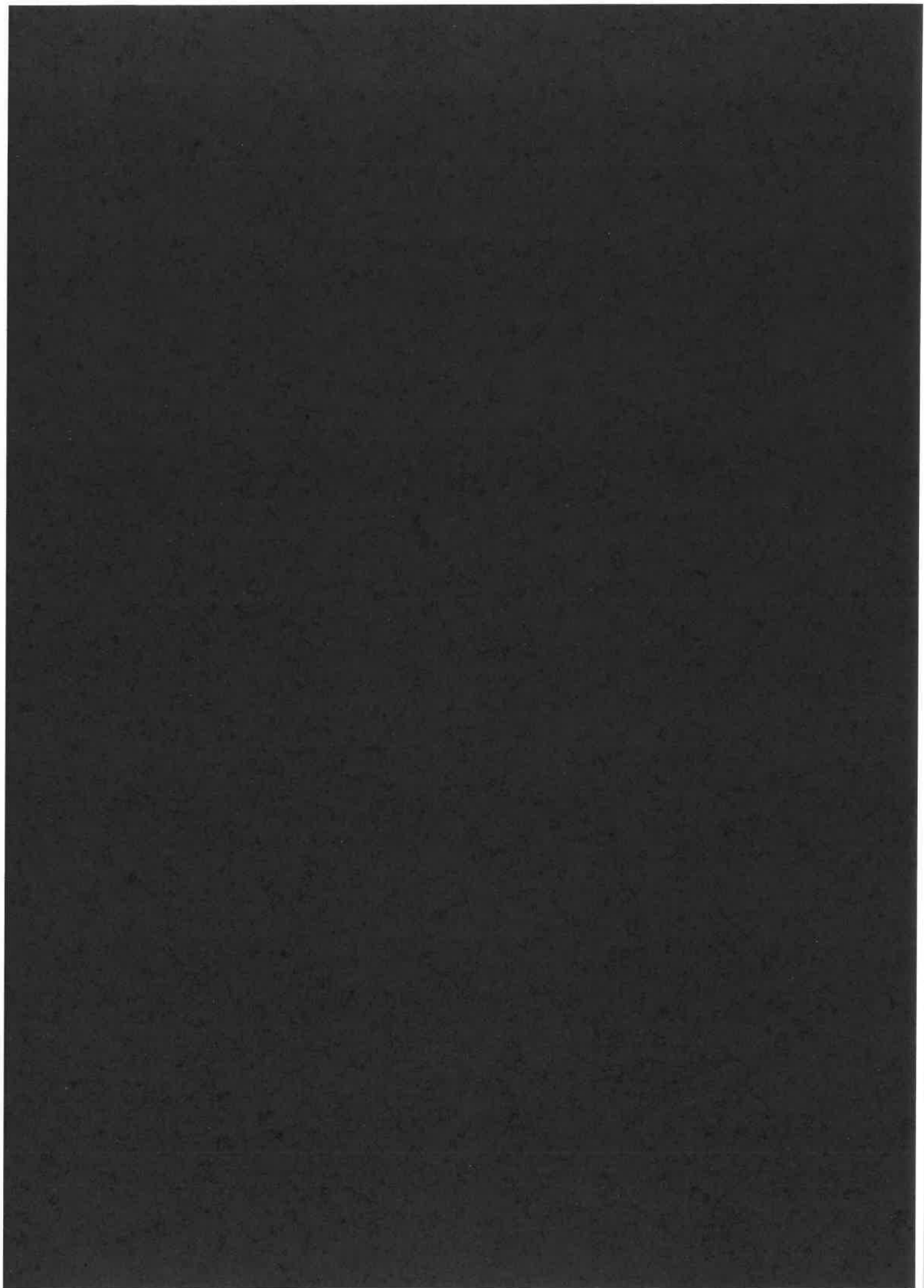
The AIC schedule and LIA sheets are identified using the PBS or WBS as applicable.













## 7.7 Initial LIAs

Annex C provides the template for the LIA Sheets and the initial LIA Sheets as follows:

- LIA -1 WBS 1.1.3 ..... LIA Title: Program Management;
- LIA -2 WBS 1.1.2 ..... LIA Title: Design;
- LIA -3 WBS 1.1.5.2..... LIA Title: Procurement;
- LIA -4 WBS 1.1.5.1 & 1.1.7.1 ..... LIA Title: AIC Management and ToT Management;
- LIA -5 WBS 1.1.7.1 and 1.1.7.2 ..... LIA Title: ToT Implementation & Training; and
- LIA -6 WBS 1.1.4 .....LIA Title: Build, Test & Integration & Infrastructure.



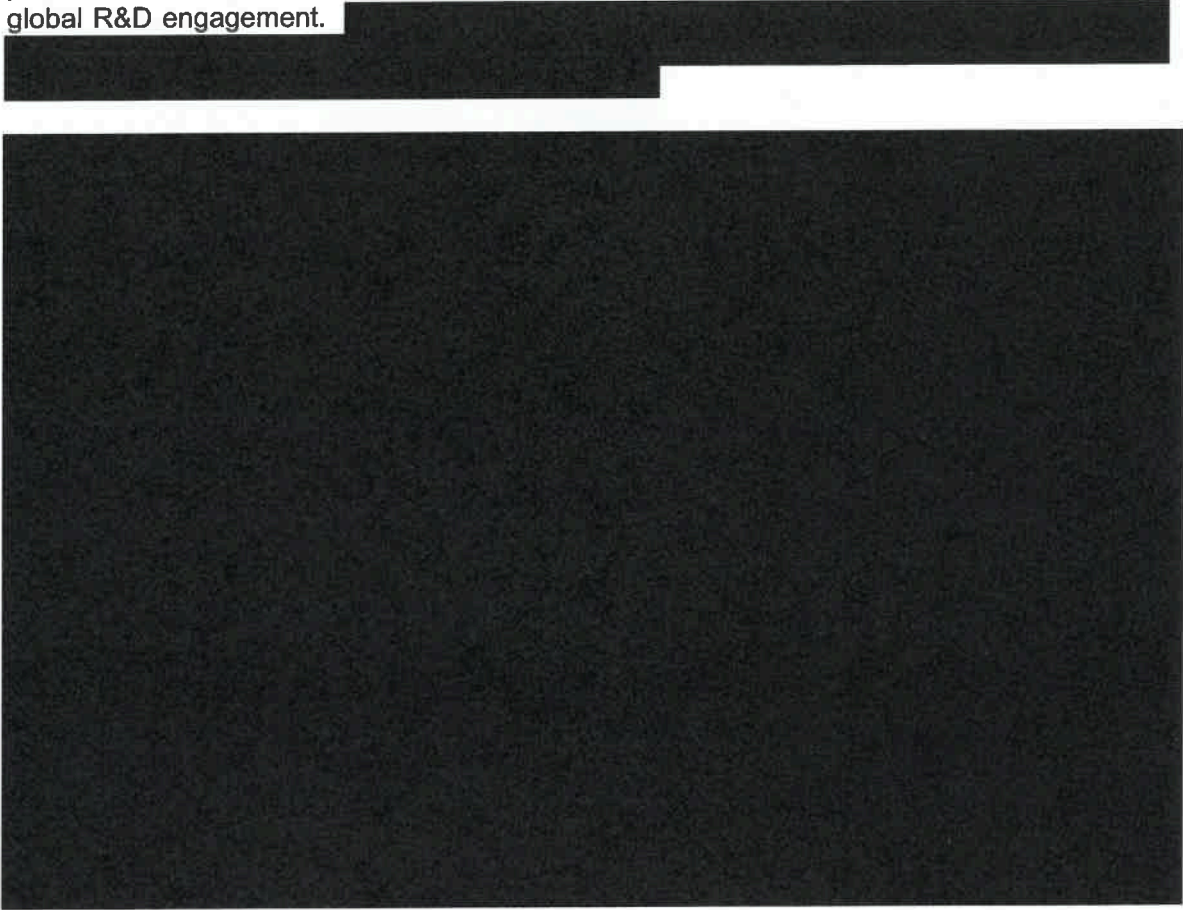
In the context of the broader AICP (Approved), DCNS will also develop LIA sheets related to activities which include but are not limited to:

- provision of a schedule of planned events and engagements during Step 2 supporting the execution of the AICP – as per the approved SOW;
- Australian Industry Involvement Steering Group progress meetings;
- continued assessment of the industrial health and capability of suppliers and partners, in all sectors, as necessary to support the sovereign operation and sustainment of the Future Submarine;
- initial work on determination of capability gaps that require action to achieve a sovereign sustainment capability;
- review of AICP progress through the Australian Industry Involvement Steering Group; and
- continue the program of Australian industry opportunity roadshows throughout Australia.

## 8 Future Submarine Enterprise Development

### 8.1 Introduction

DCNS as a group can rely on a rich innovation environment that has developed over time. One of the key features of DCNS innovation policy is collaboration. DCNS therefore aims to develop long-term relationships with partners of excellence around the world. As part of this global engagement, several relationships have been developed over the years between DCNS Research and Australian partner organisations. These will be maintained or developed in the next phases of the Program and new ones will be created. In that context, part of the collaboration activities will be linked to the FSP and others will relate to DCNS global R&D engagement.



## 8.2 Technology Transfer

### 8.2.1 Organisation

Transfer of Technology, as one of the key transverse activities with an influence on the AICP, is conducted using a dedicated team which develops and delivers the ToT Program. The organisation which manages and coordinates the ToT Program is centred mainly in France, with linkages into Australia as shown below in Figure 17.

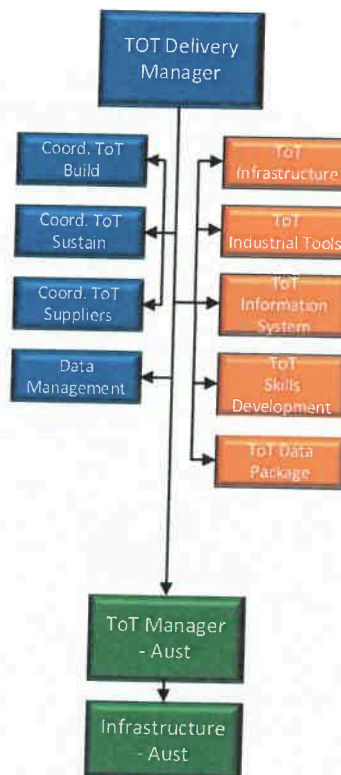


Figure 17. ToT Linkages

This team will be headed by the ToT Delivery Manager responsible for the overall delivery of the ToT Program. This position reports directly to the DCNS FSP Manager.

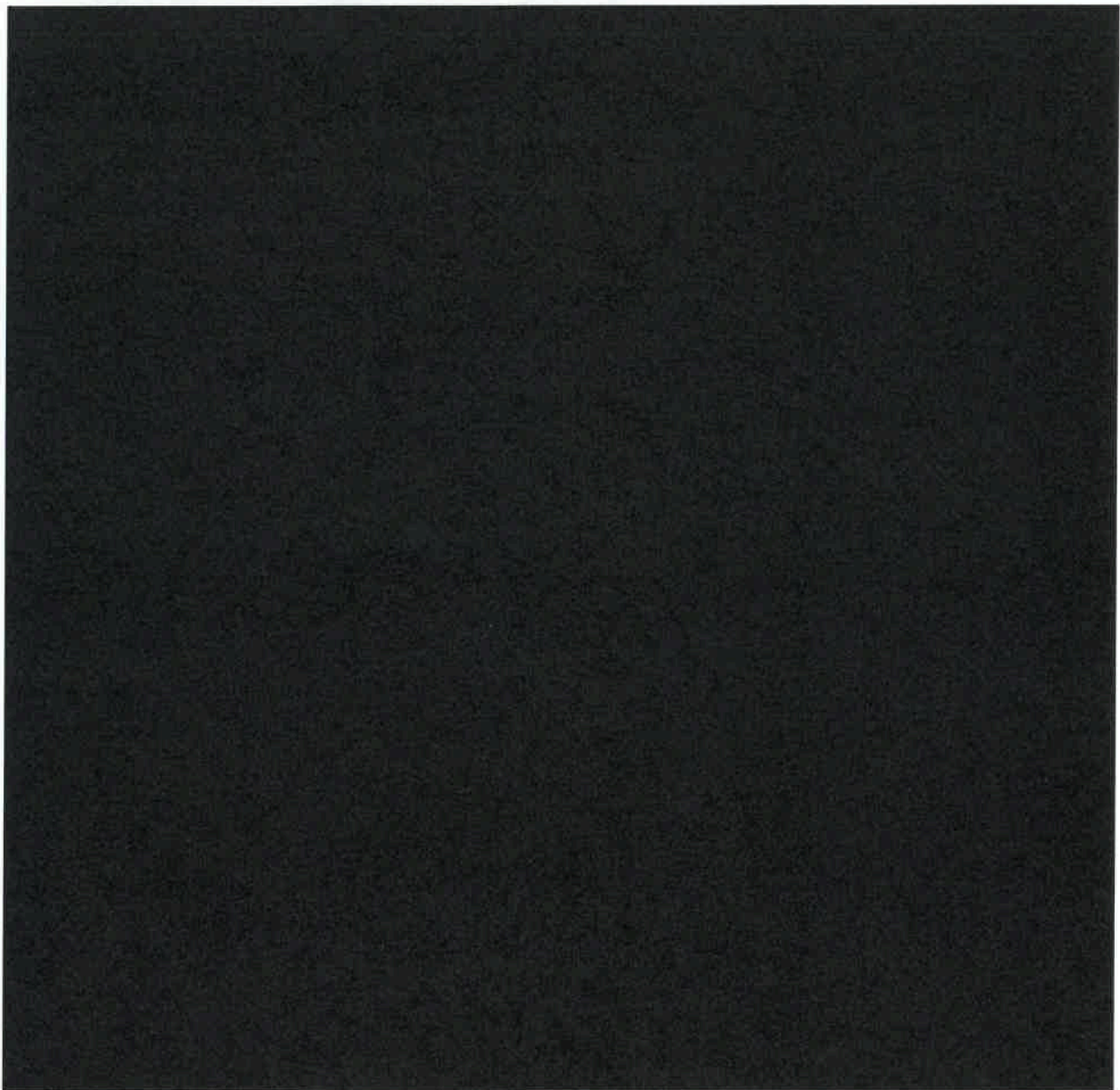
The work of preparing and delivering each element of ToT is organised by the type of ToT activity, namely:

- infrastructure;
- industrial tools;
- Information Systems;
- skills development; and
- data packages.

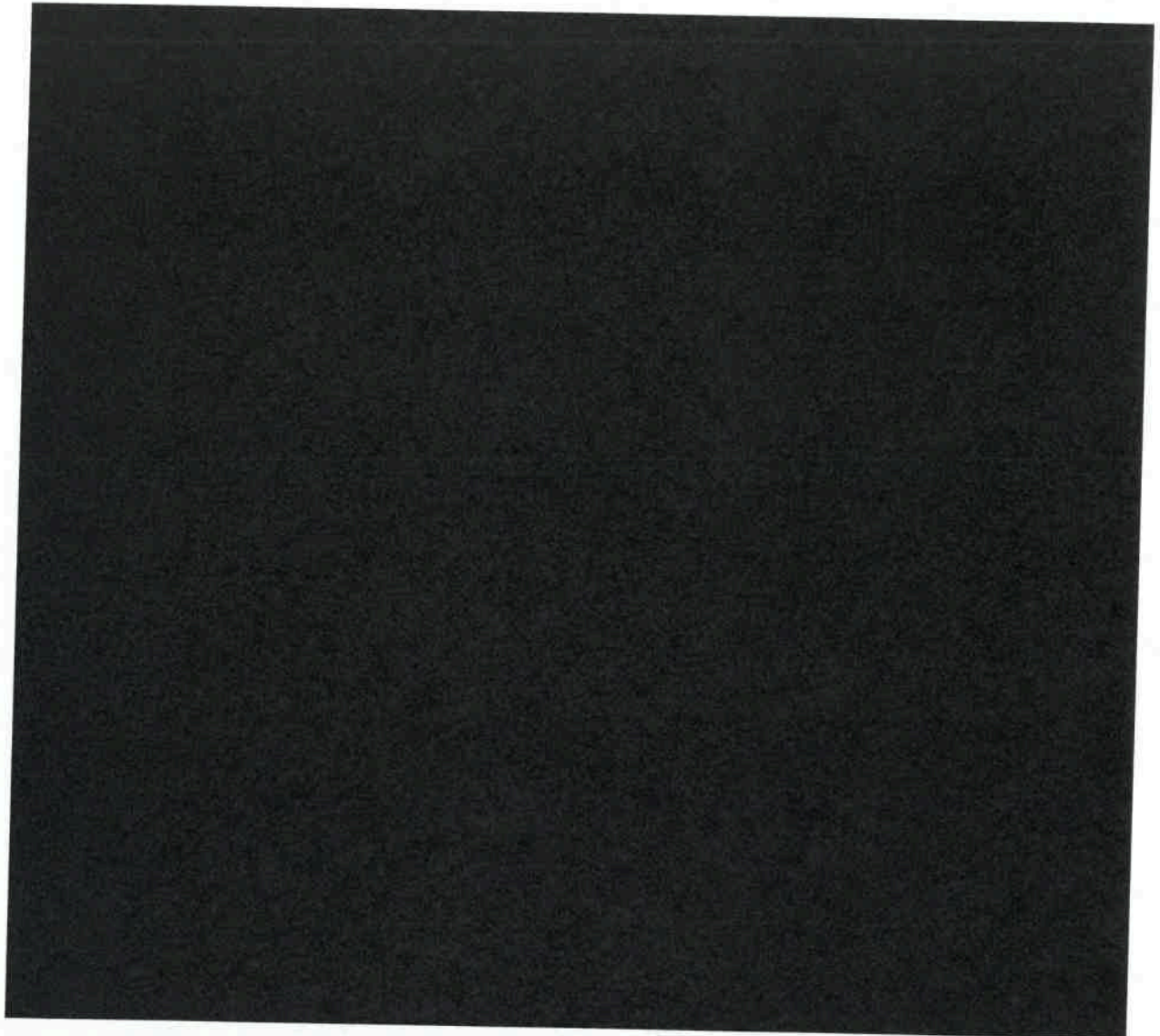
The ToT Manager will be assisted by three ToT coordinators who will manage the ToT element activities for their respective domains of Build, Sustainment and Suppliers. This will ensure that the different ToT elements are coherent and focused to meeting the required ToT capabilities.

## 8.2.2 Framework

ToT comprises all things necessary for an industrial capability and includes such things as IP, 'know-how', 'know-why' and the means of production. The types of ToT employed will be determined by the objective of the specific ToT and the identity of the entity to whom that technology is being transferred. In certain cases the ToT will be specifically in the interest of increasing AIC and in other cases be directed towards broader strategic program objectives such as developing a sovereign design authority capability coupled with those elements associated with upkeep, update, upgrade and acceptance for the FSM. Example mechanisms which can be employed to transfer technology include training, provision of tools and data and transfer of IP.







### 8.2.3 ToT Readiness Level

In the case where a specific ToT type is required to enhance the capability of an Australia-based industrial entity, this entity will be evaluated on its level of readiness to accept such technology as part of a qualification process to become a DCNS supplier (either FSM-specific or more broadly).

Levels of readiness to accept ToT and to become DCNS suppliers vary, and these will be ranked in three categories. This assessment is mainly informed by the Supplier Qualification process described in more detail in [R2] - PPP and related particularly to supplier and product risk. These categories are:

- **Mature:** When the Australian supplier's capability is considered adequate to provide equipment or services required in the FSP supply chain;
- **Intermediate:** When the Australian supplier's capability is considered partially adequate. The ToT effort required to bring the supplier to the right level is more significant than at the mature level; and

- **Developing:** When the Australian supplier's capability is considered insufficient. The ToT effort required to bring the supplier to the right level is more significant than at the intermediate level.

DCNS will define and, where relevant, contract, with its suppliers the ToT programs and their related training, management and monitoring. DCNS will inform the CoA of the status of the negotiations with the suppliers during the procurement process as described in [R2] - PPP.

#### 8.2.4 Summarised Workforce Development & Planning

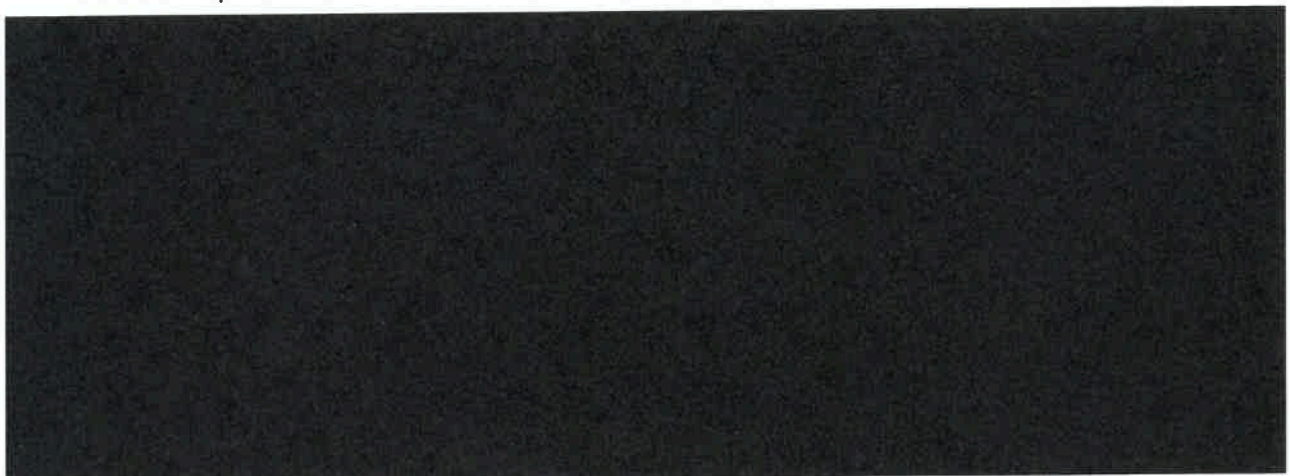
As described at section 3.2.7, during the DMC, DCNS will develop the TOTS - [A6] to:

- define, establish and monitor the ToT program for the Contract. This will include ToT to Australian Industry as well as to the CoA;
- ensure that parties providing or involved in the ToT understand their respective responsibilities, the processes to be used, and the time-frames involved; and
- define DCNS' expectations for CoA & Australian Industry involvement in the ToT.

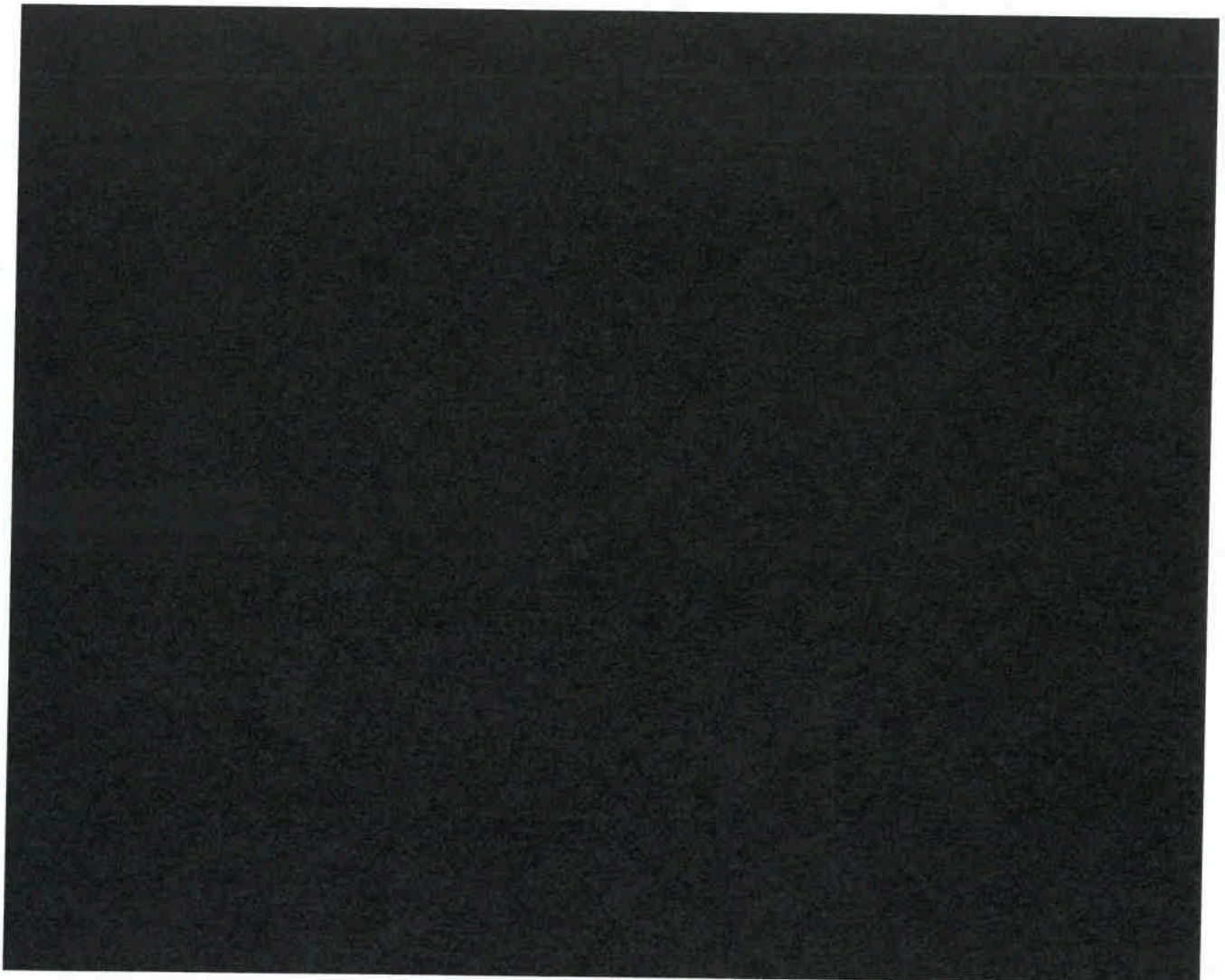
This includes how the CoA, Australian industry and DCNS would work together to ensure that the CoA obtains sufficient knowledge of the FSM design to fulfil its legal and regulatory responsibilities for approval and acceptance (including sufficient knowledge of the FSM design).

The ToT Program aims to provide each organisation of the FSM enterprise a dedicated training program that covers the Design & Build phase and the Sustainment phase in order to address all training needs for the FSM whole life cycle. The ToT is described in detail in the ToTS - [A6].

The DCNS ToT Program aims to provide sufficient and appropriate Technical Data and knowledge transfer, including an understanding of the FSM design intent and basis of design, so that Australia could operate and sustain its submarine capability in a sovereign, safe and cost effective manner. The stakeholders involved in the ToT are DCNS, CoA, the Australian shipbuilder, the RAN and Australian companies.







### 8.2.5 Sustainability and Viability of Supply Chains.

Successful completion of the ToT program is essential for the sustainability and viability of supply chains and the success of the development of the sovereign capability in Australia to support the FSM.

The ToT to Australian equipment and service providers will be a collaborative arrangement between Australian industries and DCNS to maximise Australian industry participation and ensure that Australian equipment and service providers obtain sufficient knowledge to build and sustain the FSM, including sufficient knowledge of the FSM to support upgrades and other in-service sustainment demands of the platform. The readiness level assessment described at section 8.4.3.

Assessment of the sustainability and viability of the supply chains starts with the processes described at section 4.3.3. Depending upon the ToT methodology utilised, either DCNS or the OEM transferring technology will retain active involvement in supporting the sustainability of the Australian 'partner'.

DCNS will create long term relationships with the Australian supply chain to foster innovation, technology transfer and sustainability. As a matter of course, any DCNS approved supplier is eligible to bid and win work on any global DCNS program. In addition, DCNS will work with the CDIC to gain entry to the Global Supply Chain (GSC) program in order to further

assist Australian companies to succeed in winning an increasing share of the DCNS global work.

The routine supplier audit program will enable DCNS to monitor the continued sustainability and viability of the FSP supply chain.

### 8.2.6 Centre for Defence Industry Capability and Related Initiatives

DCNS will assist the CDIC by providing input into a new skilling model to guide the development of Australian industry in line with Defence's long-term FSP requirements. There have already been initial discussions between the CDIC, the FSP and DCNS teams to discuss the framework within which the respective organisations could collaborate in relation to the AIC component of the FSP.

Further details of the collaboration possibilities are described at section 8.4.4.

### 8.2.7 DCNS Industry & Innovation Portal

The DCNS Industry & Innovation Portal is part of the continuing DCNS effort to embrace new and innovative ideas and in particular assist to implement the National Innovation and Science Agenda. The Portal facilitates collaboration between DCNS and current and future stakeholders. DCNS uses the portal to identify and nurture partners, collaborators and contributors.

The DCNS Industry & Innovation Portal is accessed via the DCNS Australia website ([www.dcnsgroup.com.au/innovation](http://www.dcnsgroup.com.au/innovation)). The Portal provides the opportunity for participants to post ideas, partake in group discussions, get updates about the nation-wide series of Industry Briefings and join a network of engaged and focused participants.

The registration process for the Portal is simple and there are few restrictions to joining and participating.

## 8.3 Innovation Environment Strategy

Knowledge, with purpose and environment, is the foundation for innovation. Higher education organisations and research centres create, enhance and disseminate knowledge. In this regard, Australia's strong higher education industry is an asset on which DCNS can draw and expand for the benefit of technology areas related to the FSM and beyond.

As part of its role in setting in place and managing an innovation environment in Australia, DCNS will create or strengthen links between:

- DCNS and research organisations in Australia; and
- research organisations in France and in Australia.

The initiatives proposed in the innovation environment meet the strategic objective to:

- provide the industrial capability within Australia, on an enduring and sustainable basis, which is necessary to meet the CoA's defined targets of FSM availability and capability; and
- foster an innovative culture within the Australian Future Submarine Enterprise by developing Research and Development (R&D) cooperation, nurturing the industrial base and related CoE. These would draw together industry, academia, research institutions



and government and seek to grow industry capability into adjacent markets, thus reducing dependence on the FSP through diversification.

## 8.4 Innovation Environment Cultivation

The implementation of this strategic approach will support the cultivation of a fertile environment in partnership with several stakeholders and through initiatives such as sponsorship of R&D cooperation projects, academic and education exchanges, involvement in CoE and supporting SME to become innovative and sustainable businesses.

### 8.4.1 Proposed Approach

In order to broaden engagement with a wider range of identified innovation stakeholders, while maintaining close control of any related security imperatives, DCNS will initially:

- conduct an industry capability gap analysis as described at section 4.3.4;
  - including taking stock of what is currently occurring;
- coordinate CoA/DCNS R&D activities to avoid duplication of effort in research roadmaps and objectives between DCNS and DST Group;
- maintain existing, or develop new, relationships with relevant stakeholders (for example academia, government departments, innovative industry players);
- identify and isolate broader Australian university and/or industry activities which require special consideration in relation to security and capability development aspects; and
- broaden the scope and reach of the existing DCNS Innovation Portal (described at section 8.2.7) which has been established as part of a broader industry and academia engagement program.

The output will be to identify and consolidate the DCNS position in the national innovation environment, as well as to develop and implement appropriate action plans.

## 8.4.2 Initial Focus Areas for Future Submarine Enterprise Development

The initial focus areas for Future Submarine Enterprise Development, indicated at Figure 16, include:

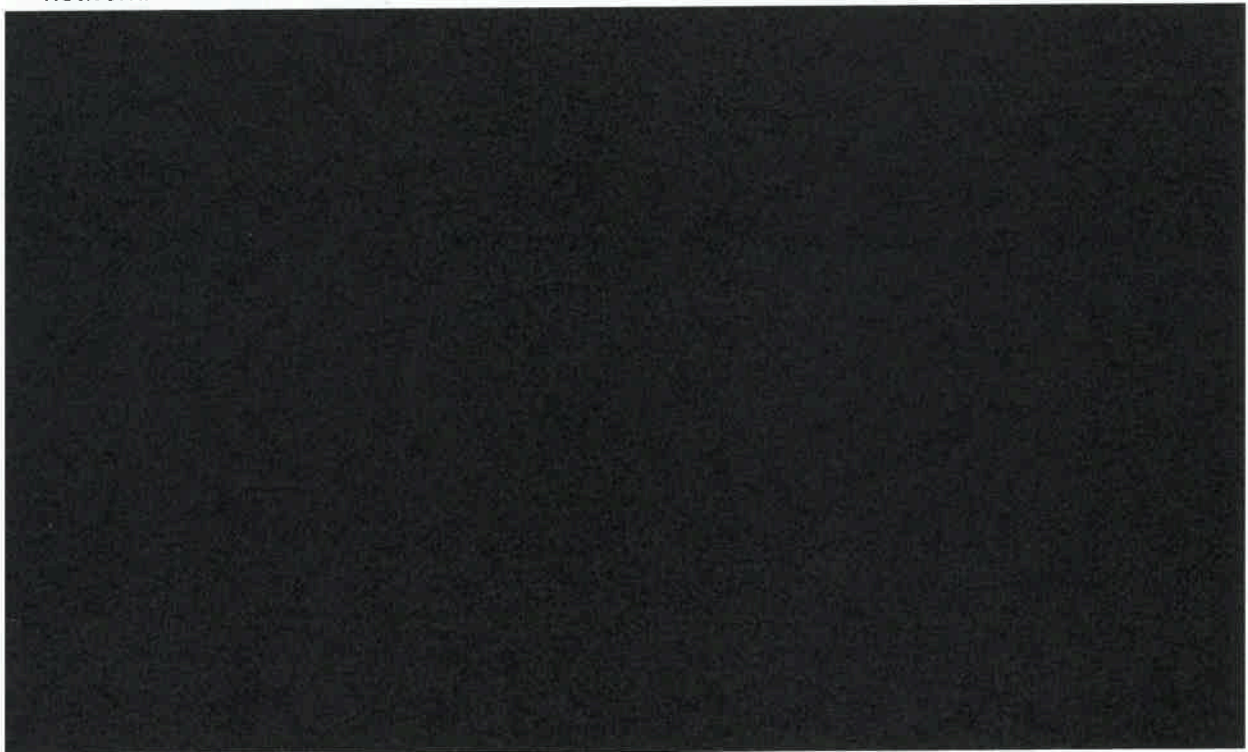
- to discuss potential collaboration with those identified and agreed by the CoA as part of the AICPL development, consistent with the FSM Technical Strategy and of direct benefit to the Program;
- continuation of the Australian Supplier Qualification and development of the AICPL; and
- raising topics, in collaboration with the CoA, resulting from the identification of DGA and DST Group collaborative priorities, and taking into consideration any GtoG agreements.

A pre-requisite for some of the planned activities early in the Program will be DCNS receiving advice of CoA endorsement of the proposed industrial scheme. Areas to be considered in regard to AIC will include:

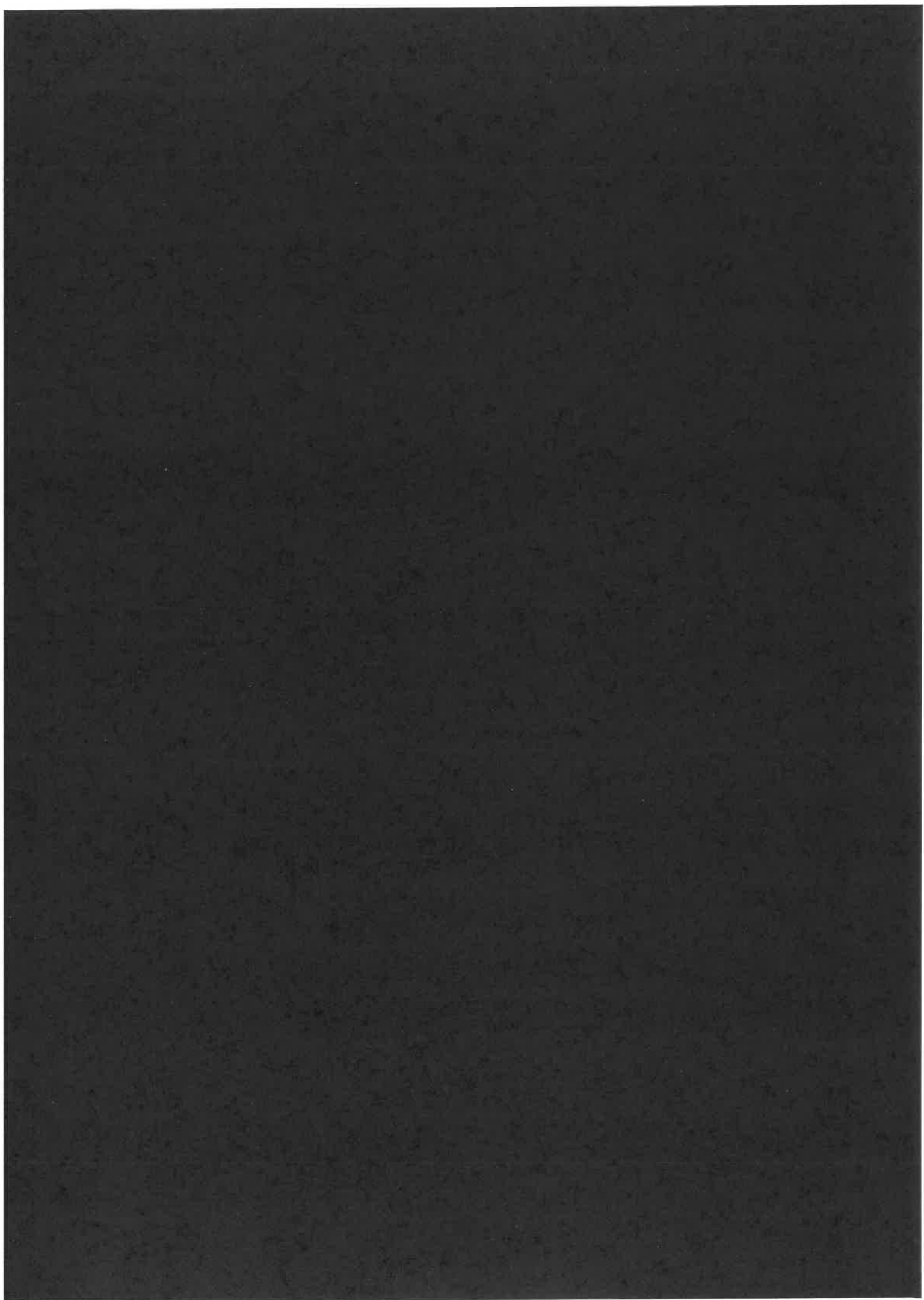
- target activities derived from the AICPL;
- further development of the GtoG and DST Group/DGA approach;
- commencement of the development of DCNS Research Australia approach depicted in Figure 18; and
- further development of the various Australian based R&D initiatives, including consideration of CoE imperatives.

## 8.4.3 Elaboration of Roadmaps

New collaborative R&T plans are likely to emerge in relation to the identification of critical and other selected areas of research. These would take into account any roadmaps which already exist in France and Australia or in the broader DCNS global maritime innovation network.

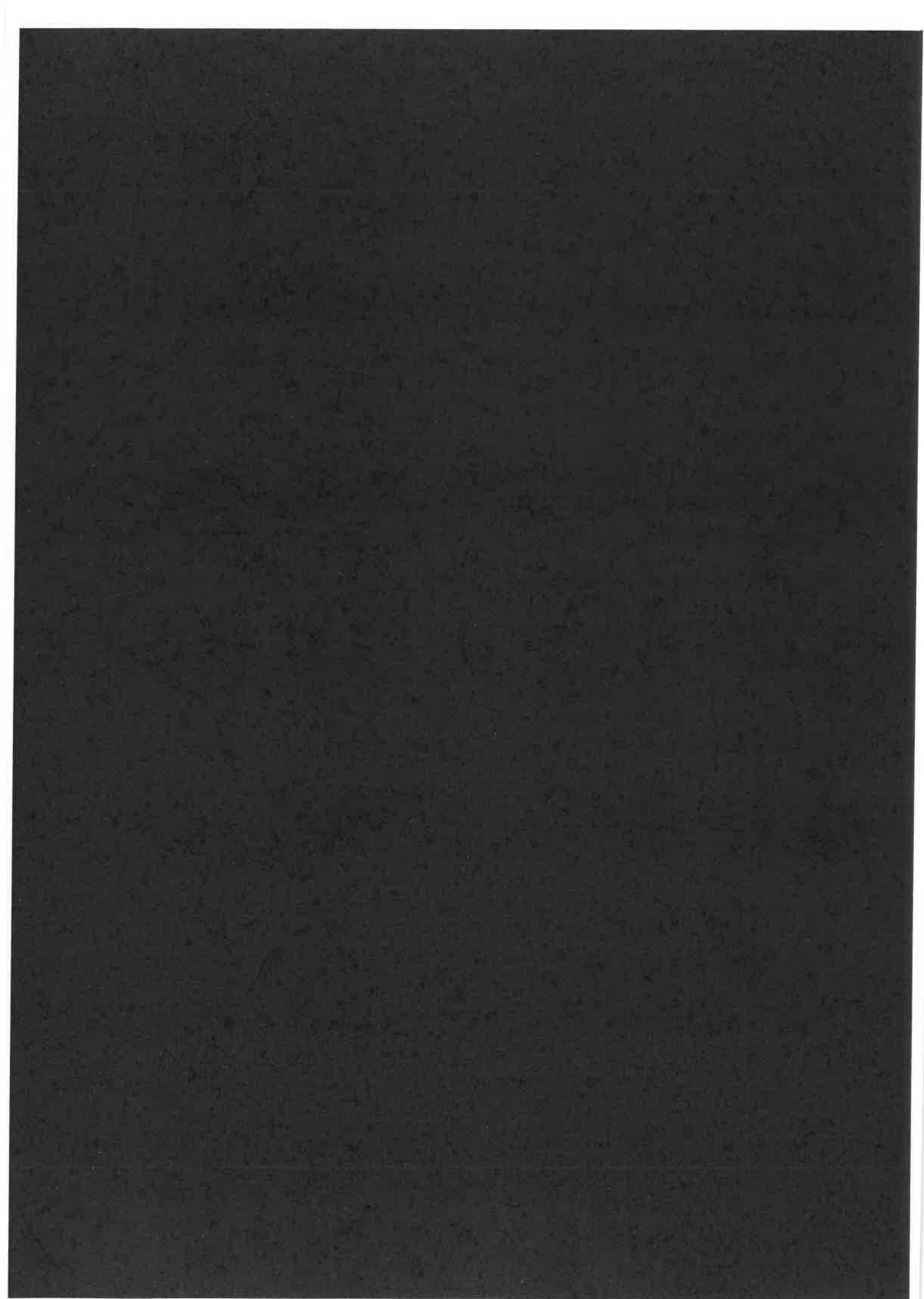




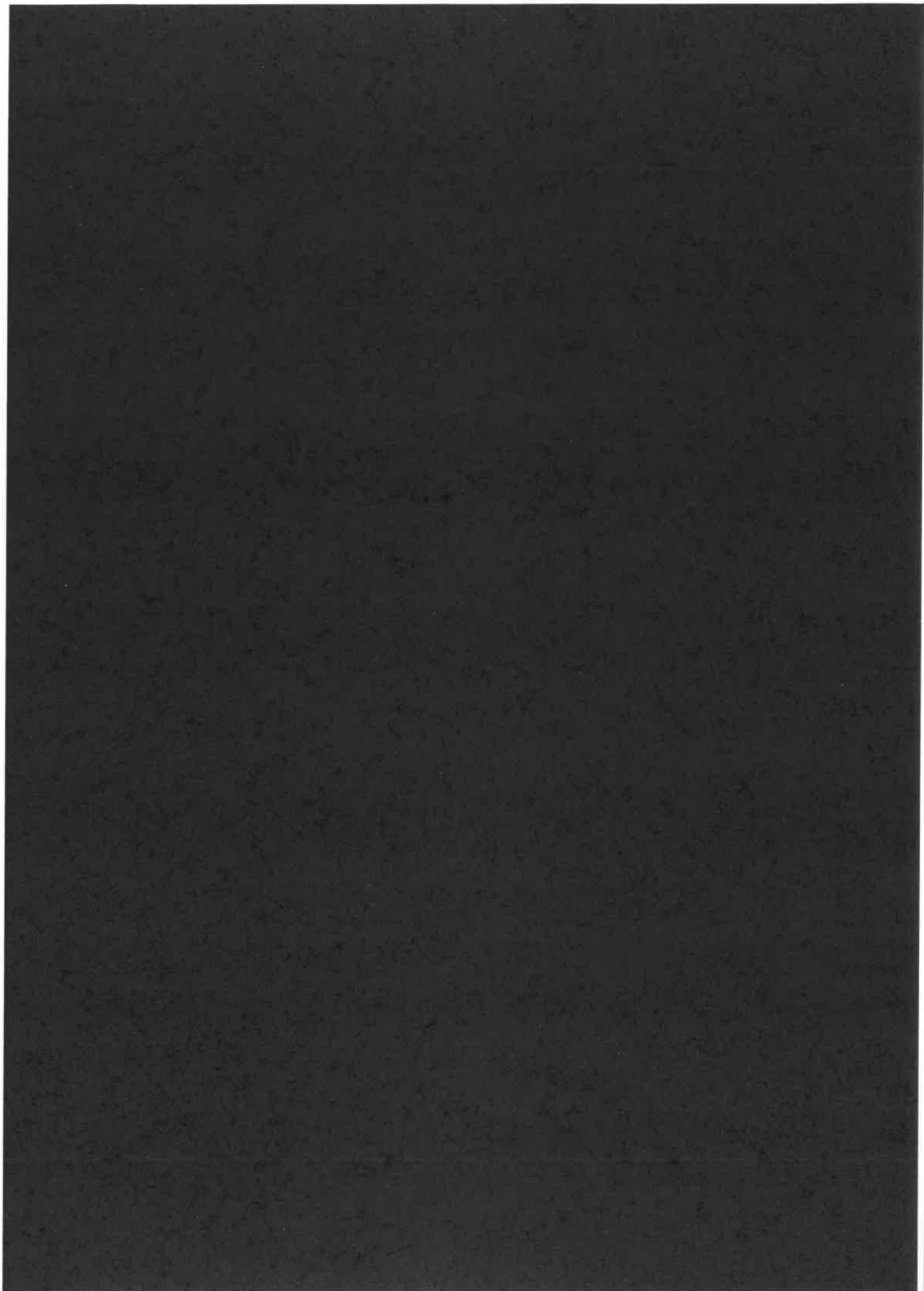






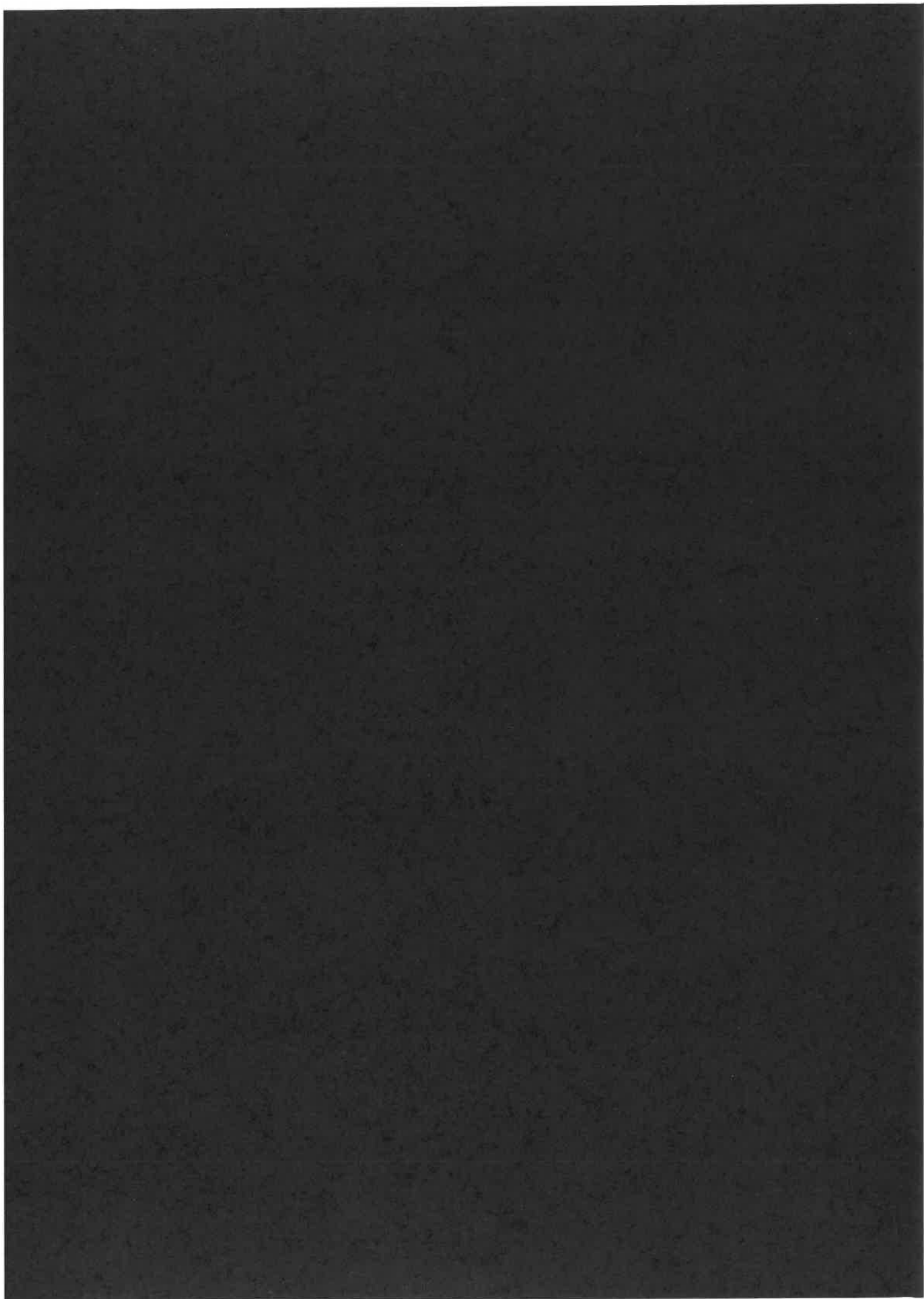




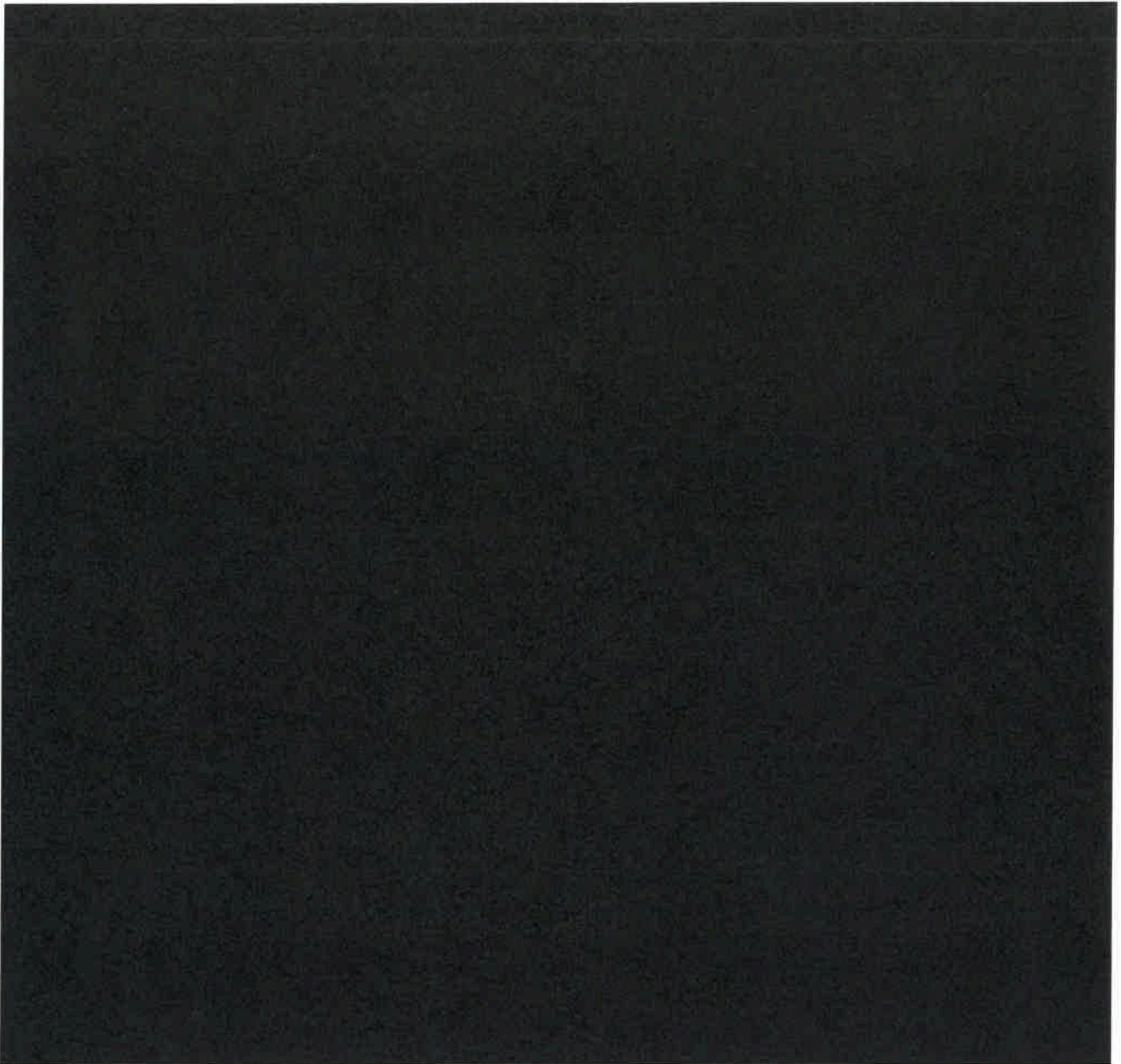












#### 8.4.5 Australian Industry Studies – Sensitive Technologies

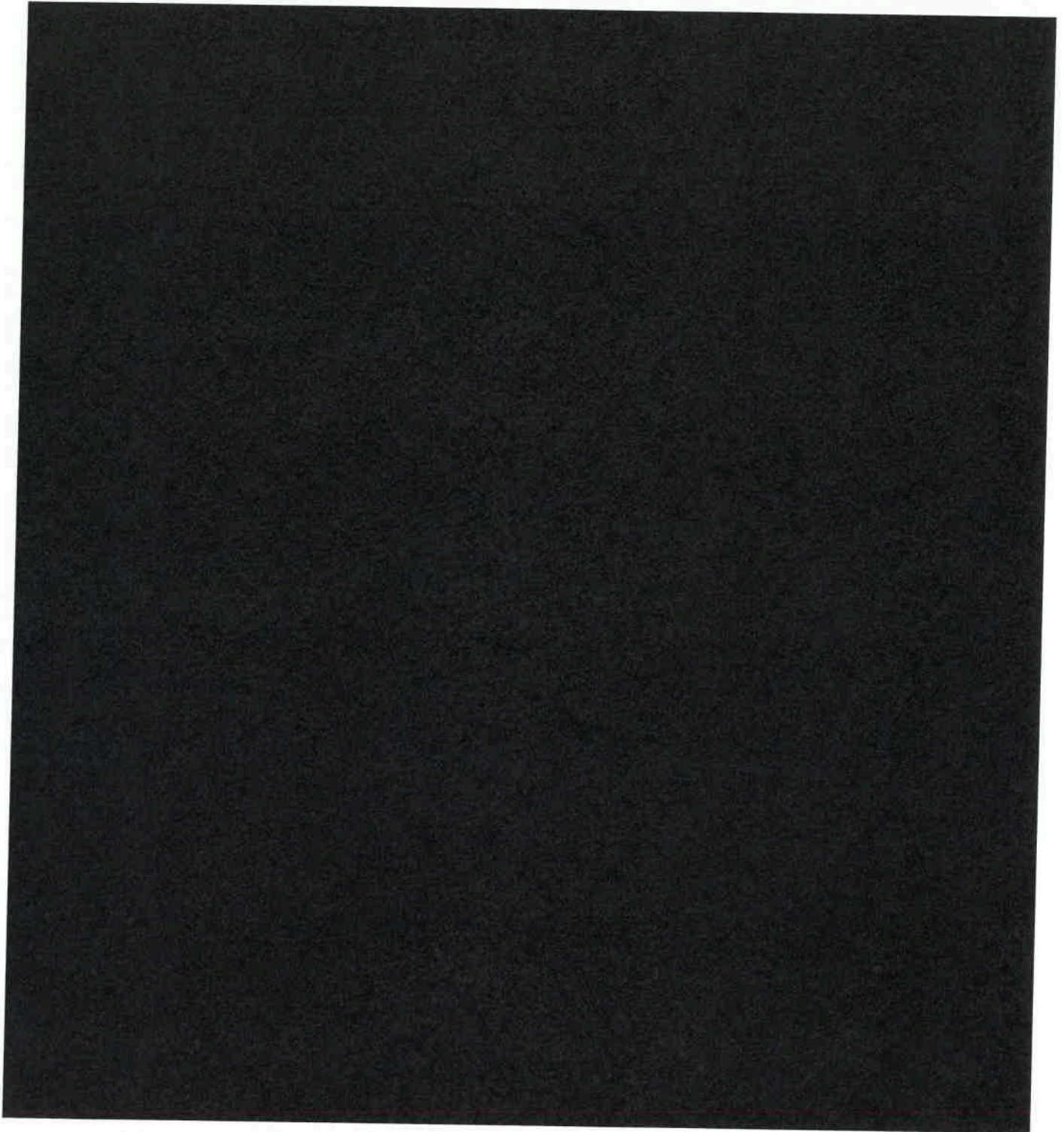
It is of the utmost importance to ensure that collaborative research activities with civil universities or industry take into consideration the security of information associated with any capability related information which might risk the confidentiality of submarine capability and regional superiority imperatives.

When establishing collaborative research arrangements with Australian civil institutions (or DST Group for that matter), and there is the likelihood that such arrangements might be linked to submarine capability (current or future), amongst the issues for consideration are:

- vetting requirements for participants (e.g. citizenship implications for existing or future security clearance requirements);
- accreditation of facilities where required and security clearance implications;



- protocols on publication of research where the release of confidential information is an issue;
- Intellectual Property;
- Export controls as required; and
- Additional transversal Program aspects (e.g. Technical Data Management Plan - [R7]).





## 9 Public AIC Plan

### 9.1 Overview

The Public AIC Plan is designed to facilitate transparency and promote opportunities for Australian companies to compete on merit.

Following approval of the AIC Plan in accordance with [R5] - CDRL, the Public AIC Plan will be published on a Commonwealth internet website and the Public AIC Plan will be maintained in accordance with [R5] - CDRL to ensure it reflects the industry arrangements.

DCNS notes that individual system and subsystem procurements will be provided in accordance with the procurement processes when those systems and subsystem subcontracts are identified. The AIC Plan, in this section includes the content of the Public AIC Plan. On Approval of the Final AIC Plan, the Public AIC Plan will be prepared on company letterhead, signed by a duly authorised officer of DCNS, in a form such that it can be published on a Commonwealth internet website. The Public AIC Plan will comply with the Commonwealth's adoption and implementation of Web Content Accessibility Guidelines (WCAG).

### 9.2 Company Details

Company Name: DCNS Australia

Location: Level 2, Equinox 4, Equinox Business Park  
70 Kent Street, Deakin ACT 2600

Website Address: [www.dcnsgroup.com.au/suppliers](http://www.dcnsgroup.com.au/suppliers) - complete the Supplier Pre-Qualification Questionnaire and email as instructed on the questionnaire.

### 9.3 Executive Summary

The FSP will be Australia's largest ever defence program and is critical to Australia's national security for the next five decades. DCNS was selected by the CoA as its international partner to deliver a regionally superior and sovereign submarine capability to the RAN. DCNS will work with LMA which is separately contracted to the CoA as the CSI.

Submarines are the most complex, sensitive and expensive Defence capability acquisition Government can make. They are of strategic importance to Australia and a critical element in the nation's maritime security planning, with Australia's national security and \$1.6 trillion economy depend on secure sea lanes. As such, Australia needs the best possible submarine to protect its trade and support our maritime security.

The FSP will deliver for Australia an affordable, regionally superior, conventional submarine capability, sustainable into the foreseeable future. It will be the largest Defence procurement program in Australia's history and represents an investment in the order of \$50 billion in Australia's security.

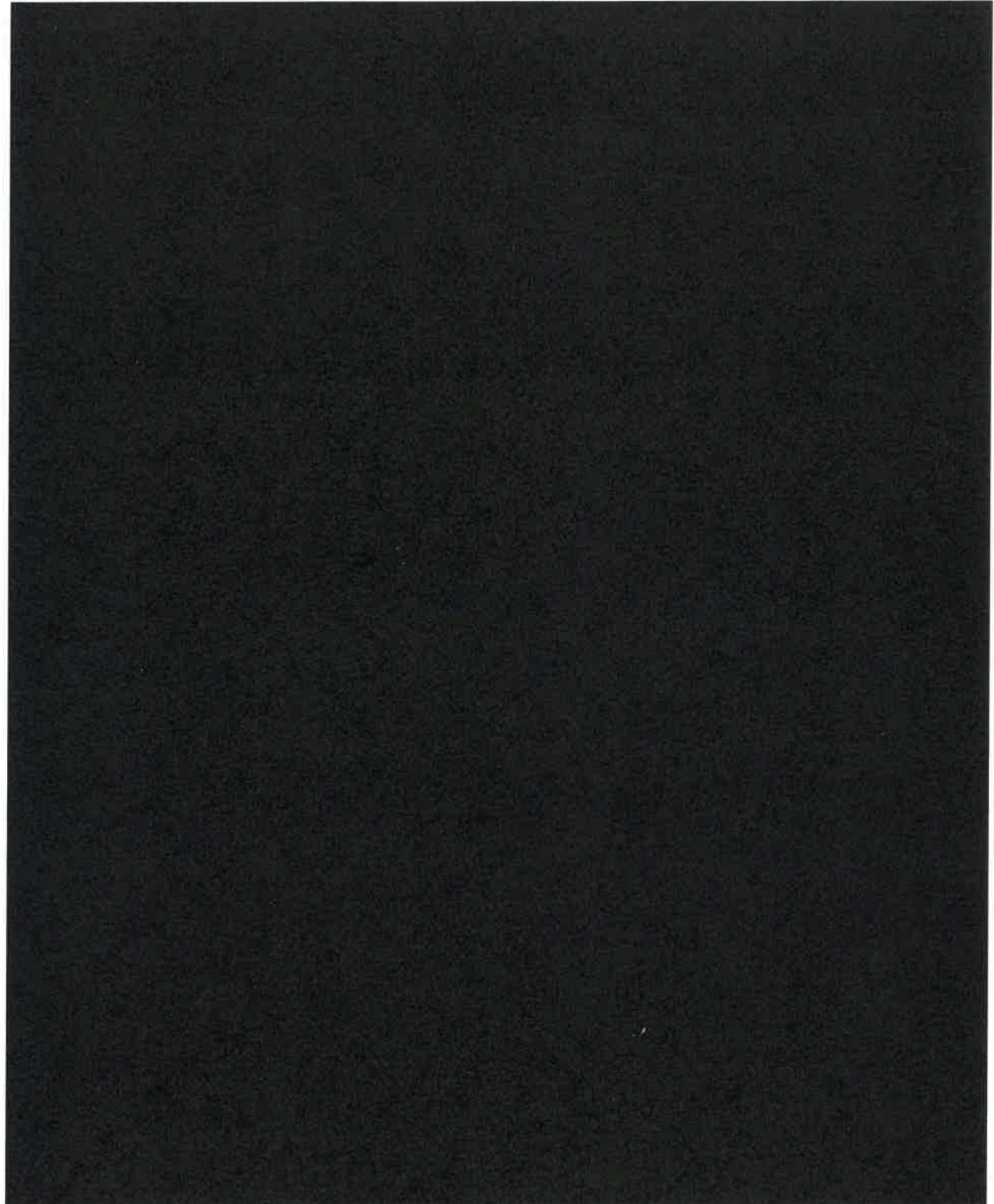
It will also be defined by a capability design, construction and sustainment challenge of unprecedented scale and complexity, and will span decades. There are, however, no off-the-shelf submarine options that meet Australia's unique submarine capability requirements.

The Program will involve Federal and State governments, Defence, industry and universities and Australia's international partners – working together for generations to come. At its



conclusion, the Program will provide Australia with twelve regionally superior submarines of similar range and superior sensor performance, stealth and endurance to the CCSM.

The Government of Australia has decided that all twelve submarines will be built in Australia.





## 9.4 Scope of Future Work Opportunities

A strong Australian supply chain is fundamental to sovereign sustainment and to maximise Australian Industry Involvement. DCNS will use its experience with developing and executing international programs which will be enhanced by a clear understanding of the Commonwealth's requirements. The approach will be reinforced through a comprehensive technology transfer regime designed to deliver operational independence and independent sustainment.

From an Australian industry perspective, this means an indigenous Australian capacity to meet operational needs of performance, safety and reliability while also supporting the capability to sustain through upkeep, update and upgrade.

It is therefore important that systems in the submarines are developed with these sustainment imperatives in mind from the very outset. This requires a mapping of Australian capabilities and the identification of potential of gaps, by:

- qualifying the reliable suppliers (companies with skills, experience, tools, process, performance, etc.); and
- comparing with overseas suppliers to identify any Risks and Opportunities.

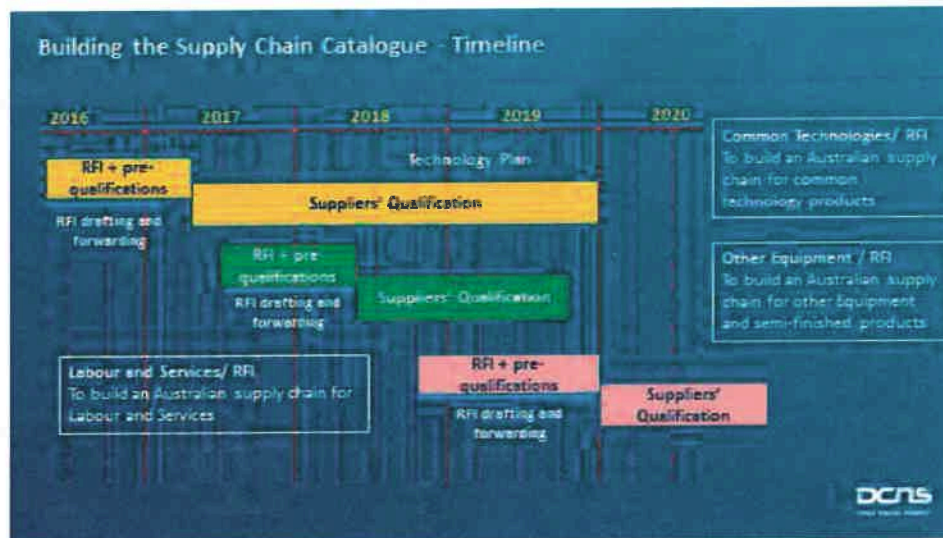
A technology roadmap is being developed to identify technical development activities required to deliver the design or support needs throughout the lifecycle of the submarine. It will also describe arrangements agreed between DCNS, the CoA and LMA regarding technology evolutions to be integrated into the FSM development path.

Opportunities exist for Australian industry as follows:

- inclusion into the planning and design work (including undertaking preliminary, concept and detailed design) to develop facilities and infrastructure for the build, test and integration of the FSM and its associated systems;
- provision of equipment and services throughout the Program for a considerable range of the systems and equipment, commencing with Pre-Qualification of potential Australian Suppliers by DCNS and LMA; and
- production of equipment can occur anywhere in Australia for delivery to the Australian shipyard.

## 9.5 Future Opportunities/Industry Engagement

DCNS is currently examining the pre-registration and RFI packs to determine the certainty of supply by Australian industry for equipment that would be procured by the shipyard in several years' time. In parallel, key decisions are being taken to identify partners for critical equipment around which the submarine is shaped. Future activities will include solicitation from Australian companies for the provision of equipment, systems and services. The indicative timetable for these activities is depicted below.



As a key aspect of engaging with Australian industry, DCNS will progressively inform industry about selected partners across the whole range of industry engagement to assist business certainty in the marketplace.

As part of the early design process for the FSM, DCNS has implemented some early procurement strategies for larger components which will have a significant effect on the dimensioning of the FSM. Referred to as the 'TOP5', the specific equipment are as shown below. The procurement process for them has formally commenced involving procurement plans and the list of potential suppliers has been agreed with the CoA.

### TOP 5 Equipment

- Main Electric Motor
- Weapon Launching System
- Main DC Switchboard
- Diesel Generator Rectifier
- Battery

DCNS has commenced detailed discussions with these potential suppliers.

100+ technologies are assessed in the frame of our Technology survey. The list of potential suppliers will be built next.

In concert with design evolution, further important equipment (known as the TOP40) will be subjected to evaluation using the DCNS procurement process.

In the context of the infrastructure requirements of the overall Program, some contracts have already been awarded to Australian companies to support the first design activities of the future Shipyard.

DCNS will continue to conduct briefings to update Australian industry of the current and future opportunities for their involvement. One of the methods used for this is through a national roadshow program, details of which are posted on the DCNS Australia website.

An industry portal has been established by DCNS Australia for interested Australian companies to pre-register on its website ([www.dcnsgroup.com.au/suppliers](http://www.dcnsgroup.com.au/suppliers)). To register:

- download and complete the Supplier Pre-Qualification Questionnaire; and
- send the completed document and associated attachments by email to DCNS in accordance with the instructions in the Questionnaire.

Companies with competitive products, proven technologies, innovative ideas or new technologies wishing to participate in the FSP are encouraged to contact DCNS using the email address [industry@au.dcnsgroup.com](mailto:industry@au.dcnsgroup.com) to arrange confidential discussions.

## A Acronyms and Abbreviations

### A

|       |                                                |
|-------|------------------------------------------------|
| ABN   | Australian Business Number                     |
| ADF   | Australian Defence Force                       |
| AERI  | Australian Energy Research Institute           |
| AIC   | Australian Industry Capability                 |
| AICP  | Australian Industry Capability Plan            |
| AICPL | Australian Industry Capability Priority List   |
| AICPR | AIC Progress Reports                           |
| AICSG | Australian Industry Involvement Steering Group |
| AII   | Australian Industry Involvement                |
| AMC   | Australian Maritime College                    |
| AMIC  | Australian Maritime Innovation Centre          |
| AMOG  | Australian Marine and Offshore Group           |
| ARC   | Australian Research Council                    |
| ASDQ  | Australian Steel Development & Qualification   |
| ASO   | Australian Sustainment Organisation            |
| ATO   | Australian Taxation Office                     |

### B

|       |                                                           |
|-------|-----------------------------------------------------------|
| BAFO  | Best And Final Offer                                      |
| BPG   | Better Practice Guide                                     |
| BS    | Build Strategy                                            |
| BTIFI | Build, Test and Integration Facilities and Infrastructure |

### C

|      |                                        |
|------|----------------------------------------|
| CCSM | Collins Class Submarine                |
| CDIC | Centre for Defence Industry Capability |
| CDR  | Contractual Data Requirement           |
|      |                                        |
| CEO  | Chief Executive Officer                |
| CEP  | Competitive Evaluation Process         |

|      |                                   |
|------|-----------------------------------|
|      |                                   |
|      |                                   |
| CMS  | Contract Master Schedule          |
| CoA  | Commonwealth of Australia         |
| COC  | Conditions of Contract            |
| CoE  | Centre of Excellence              |
| COP  | Construction and Occupation Plan  |
| CRC  | Cooperative Research Centre       |
| CSI  | Combat System Integrator          |
| CWBS | Contract Work Breakdown Structure |

### D

|      |                                                   |
|------|---------------------------------------------------|
| DA   | Design Authority                                  |
| DAB  | Development of the Australian Build               |
|      |                                                   |
| DCEO | Deputy Chief Executive Officer                    |
|      |                                                   |
| DGA  | Direction Générale de l'Armement (French acronym) |
| DICP | Defence Industrial Capability Plan                |
| DID  | Data Item Description                             |
| DIPS | Defence Industry Policy Statement                 |
| DLM  | Depot Level of Maintenance                        |
| DMC  | Design Mobilisation Contract                      |
| DMTC | Defence Maritime Technology Centre                |
| DOD  | Department of Defence                             |
|      |                                                   |
| DST  | Defence Science & Technology                      |
| DWP  | Defence White Paper                               |

### E

|     |                              |
|-----|------------------------------|
| ERP | Enterprise Resource Planning |
|-----|------------------------------|



**F**

|      |                          |
|------|--------------------------|
| ■    | ■                        |
| FoC  | First of Class           |
| FOUO | For Official Use Only    |
| ■    | ■                        |
| FSM  | Future Submarine         |
| FSP  | Future Submarine Program |
| FTE  | For Time Equivalent      |

**G**

|      |                          |
|------|--------------------------|
| GtoG | Government-to-Government |
| GRP  | Glass Reinforced Plastic |
| GSC  | Global Supply Chain      |

**H**

|      |                                          |
|------|------------------------------------------|
| HP   | High Pressure                            |
| HVAC | Heating Ventilation and Air Conditioning |

**I**

|       |                                                        |
|-------|--------------------------------------------------------|
| ICT   | Information Communication Technology                   |
| ILM   | Intermediate Level of Maintenance                      |
| IP    | Intellectual Property                                  |
| IPDSE | Integrated Product Development and Support Environment |
| IPR   | Intellectual Property Right                            |
| IR    | Industry Requirements                                  |
| ITAR  | International Traffic In Arms Regulations              |

**L**

|     |                                   |
|-----|-----------------------------------|
| LIA | Local Industry Activity           |
| LMA | Lockheed Martin Australia Pty Ltd |

**M**

|     |                                   |
|-----|-----------------------------------|
| MLM | Manufacturer Level of Maintenance |
| MoU | Memorandum of Understanding       |

**N**

|     |                          |
|-----|--------------------------|
| N/A | Not Applicable           |
| NDA | Non-Disclosure Agreement |

## NGTF

Next Generation Technology Fund

**O**

|      |                                          |
|------|------------------------------------------|
| ODID | Overall Dimensions and Interface Drawing |
| OEM  | Original Equipment Manufacturer          |
| OLM  | Organisational Level of Maintenance      |

**P**

|     |                              |
|-----|------------------------------|
| PBS | Product Breakdown Structure  |
| PDS | Price & Delivery Schedule    |
| PIC | Priority Industry Capability |
| ■   | ■                            |
| PMP | Project Management Plan      |
| PPP | Program Procurement Plan     |
| PSI | Platform Systems Integrator  |

**Q**

|     |                           |
|-----|---------------------------|
| QMP | Quality Management Plan   |
| QMS | Quality Management System |

**R**

|     |                           |
|-----|---------------------------|
| R&D | Research and Development  |
| R&T | Research and Technology   |
| RAN | Royal Australian Navy     |
| RFI | Request For Information   |
| RFP | Request For Proposal      |
| RMP | Risk Management Plan      |
| RP  | Resident Personnel        |
| RPP | Rapid Prototyping Project |
| ■   | ■                         |

**S**

|       |                                                      |
|-------|------------------------------------------------------|
| SADI  | Skilling Australia's Defence Industry                |
| SEL   | Standard Equipment List                              |
| SICAF | Strategic Industrial Capability Assessment Framework |
| SME   | Small to Medium Enterprises                          |
| SOW   | Statement Of Work                                    |
| ■     | ■                                                    |
| SPQQ  | Supplier Pre-Qualification Questionnaire             |

SQA Supplier Quality Assurance

**T**

|      |                                 |
|------|---------------------------------|
| TAA  | Technical Assistance Agreement  |
| █    | █                               |
| TD   | Technical Data                  |
| TDMP | Technical Data Management Plan  |
| TDP  | Technical Data Package          |
| TNA  | Training Needs Analysis         |
| ToT  | Transfer of Technology          |
| TOTS | Transfer of Technology Strategy |
| TP   | Training Plan                   |
| TRL  | Technology Readiness Level      |

**U**

|   |   |
|---|---|
| █ | █ |
| █ | █ |

**W**

|      |                                        |
|------|----------------------------------------|
| WBS  | Work Breakdown Structure               |
| WCAG | Web Content Accessibility<br>Guideline |
| WG   | Working Group                          |
| WLS  | Weapon Launching System                |

|   |   |
|---|---|
| █ | █ |
|---|---|

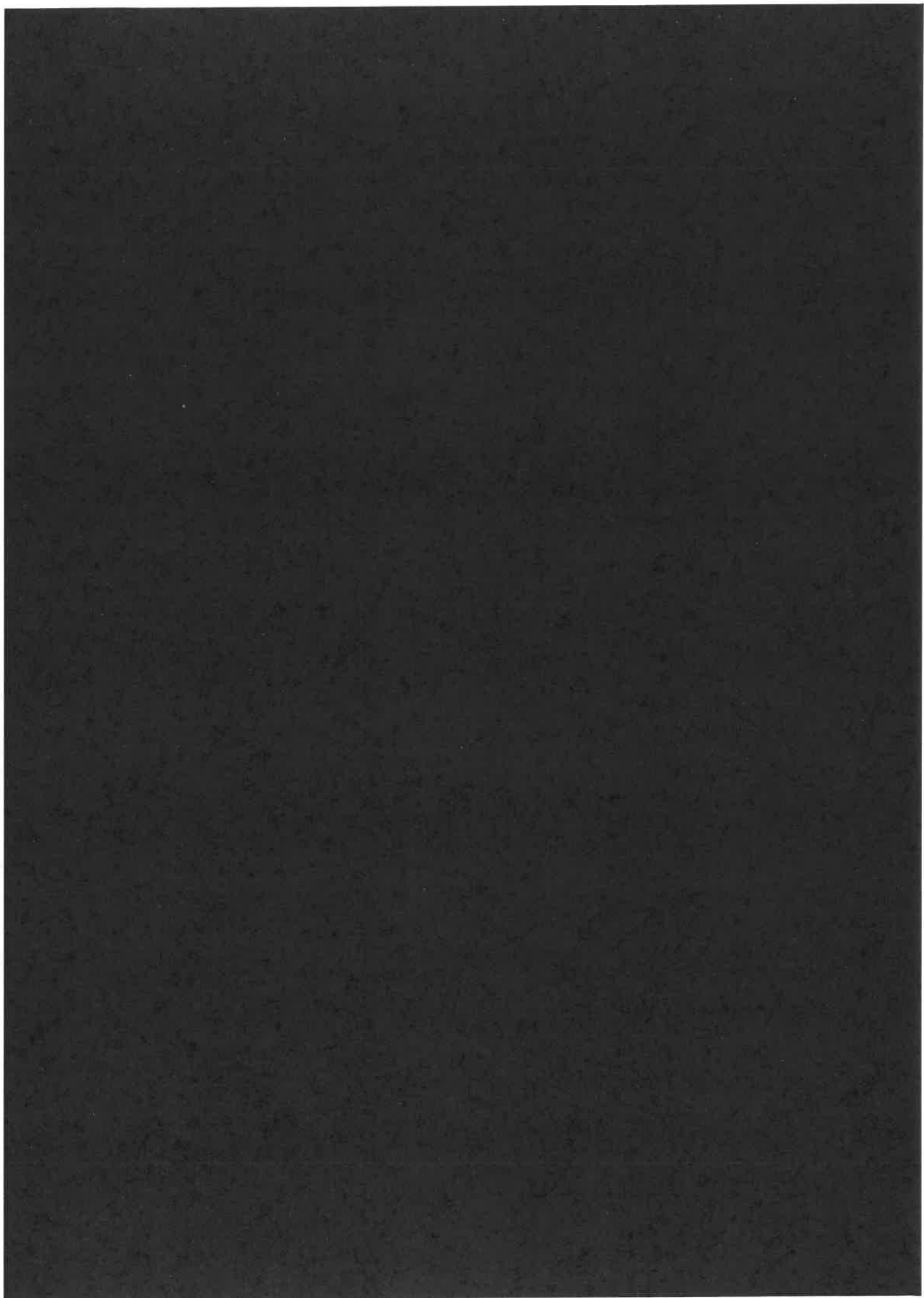
**B AIC Reporting Schedule**

Table 9. AIC Reporting Schedule Template

| LIA Serial<br>Number 1<br>(1) | LIA<br>Description<br>(2) | Subcontractor<br>(3) | Australian<br>company<br>name (4) | Contract<br>Number | Work<br>Package<br>Identification<br>(5) | PDS Line<br>Item<br>Number (6) | PDS Line<br>Item Value<br>(AUD) (7) | Imported<br>Content<br>(AUD) (8) | LIA Value<br>(AUD) (9) | Location<br>(10) | PIC/SIC<br>(11) |
|-------------------------------|---------------------------|----------------------|-----------------------------------|--------------------|------------------------------------------|--------------------------------|-------------------------------------|----------------------------------|------------------------|------------------|-----------------|
|-------------------------------|---------------------------|----------------------|-----------------------------------|--------------------|------------------------------------------|--------------------------------|-------------------------------------|----------------------------------|------------------------|------------------|-----------------|

Note: This minimum format will be used to report Australian Industrial content during each and all phases of the FSP. Each Line Item in this Schedule should correspond to a Line Item in the Price and Delivery Schedule (PDS). If necessary, break the AIC Schedule Line Item into sub line items to better describe the LIAs. All prices are to be expressed in Base Date dollars.

1. Identification number for the LIA.
2. Description of the LIA undertaken.
3. The name of the Company subcontracting to the Contractor if different to the Australian Company at 4
4. Australian company undertaking the LIA ("various" is not an acceptable response).
5. Contractor generated Identifier for supplier base.
6. PDS Line Item Number is the cross reference to the Line Item in the Price and Delivery Schedule in Attachment B.
7. Value of the Contract PDS Line Item.
8. Value of foreign work and/or inputs used in delivering a LIA.
9. Value of work performed by Australian industry.
10. Australian location including postcode where the work is performed.
11. Priority Industry Capability (PIC) or Strategic Industry Capability (SIC) met by activity if applicable. To be updated after release of SICAF in 2017







## c Local Industry Activity Description Sheet

The LIA description sheet provides a detailed explanation of the summary information contained in the AIC Schedule. Table 11 indicates the generic content of the LIA description sheet.

Table 11. Generic LIA Description Sheet

| LIA Serial Number |                                                       | LIA Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A                 | Industry Requirement(s)                               | Identify all Industry Requirements addressed by this LIA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| B                 | Benefit(s)                                            | <p>Describe the benefits of the LIA to the Australian company undertaking the LIA (identified in Appendix 1 for this LIA) in terms of the following:</p> <ul style="list-style-type: none"> <li>the significance of the work that the LIA will contribute to the Contract;</li> <li>the skills and knowledge that will be transferred, improved or created in the Australian company, including how these skills and knowledge will be developed, shared, maintained and retained by the company beyond the life of the LIA contracted activity;</li> <li>the new technologies or innovations that will be introduced or will result from the LIA;</li> <li>the contribution to the Australian company's future competitiveness; and</li> <li>training to be provided including mentoring, up-skilling and trade training sponsorship.</li> </ul> <p>Describe the benefits of the LIA to the Contractor in terms of broadened Global Supply Chains that the Contractor will now access from the Australian company that it did not previously access.</p> <p>Describe the options (if any) that the Contractor had to perform the scope of work covered by the LIA outside of Australia including any price difference (increase or decrease) when comparing Australian to overseas performance.</p> |
| C                 | Details of Prime/Subcontractor Relationship           | Provide details of the relationship with the party/subcontractor selected to deliver the LIA (eg. number of projects/contracts, length of commercial partnering, success stories, status of MoUs, teaming agreements, status of Technical Assistance Agreements (TAA) and Non-Disclosure Agreements (NDA)).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| D                 | Intellectual Property and Technical Data Arrangements | Identify Technical Data and the associated Intellectual Property rights required to be provided to Australian industry for the delivery of the LIA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| E                 | Approvals                                             | Provide details of all actions, processes, accreditations and approvals required (ie. International Traffic in Arms Regulations, import controls, security and facility clearances etc.) or to be performed (including timing), and by whom, that will enable Australian industry to deliver this LIA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| F                 | Risks                                                 | <p>Identify all risks known to potentially impact upon the delivery of this LIA.</p> <p>Provide a cross-reference to the individually identified risk recorded in the Risk Register. The Risk Register must reference the LIA serial number, title and description.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



